UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM 10-K

X	ANNUAL REPORT PUR	SUANT TO SECT	ION 13 OR 15(d) OF THE SEC	URITIES EX	CHANGE ACT OF 1934	
			For the fiscal year ende	ed December 3	1, 2020	
			OI	r		
	TRANSITION REPORT	PURSUANT TO S	ECTION 13 OR 15(d) OF THE	SECURITIES	S EXCHANGE ACT OF 1	934
			For the transition Commission file no			
		THE PN	C FINANCIAL S			NC.
		ъ .	(Exact name of registrant a	as specified in it		17070
	(State or other juri	Pennsylvania sdiction of incorporati	on or organization)		(I.R.S. Employer Id	
	(State of other juris	•	,			dentification 10.)
		The To	wer at PNC Plaza, 300 Fifth Avenu (Address of principal executiv			
			Registrant's telephone number, incl		. ,	
			Securities registered pursuant	_		
		Title of Eac	h Class		Trading Symbol(s)	Name of Each Exchange on Which Registered
Comi	non Stock, par value \$5.00				PNC	New York Stock Exchange
Depo Float	sitary Shares Each Representi ing Rate Non-Cumulative Perp	ng a 1/4,000 Interest petual Preferred Stoo	in a Share of Fixed-to- ck, Series P		PNC P	New York Stock Exchange
			Securities registered pursuant \$1.80 Cumulative Convertible Preferr			
ndica	te by check mark if the registrant is		issuer, as defined in Rule 405 of the Se			
	,		orts pursuant to Section 13 or Section 15			
ndica	te by check mark whether the regist	trant: (1) has filed all re	•	or 15(d) of the Se	curities Exchange Act of 1934 du	uring the preceding 12 months (or for such shorter
reced	te by check mark whether the registing 12 months (or for such shorter Yes 🗵 No 🗌			quired to be subm	uitted pursuant to Rule 405 of Reg	gulation S-T (§232.405 of this chapter) during the
			ed filer, an accelerated filer, a non-accelerated filer, and a non-accelerated filerated f			nerging growth company. See the definitions of
arge	accelerated filer	\boxtimes	Accelerated filer		Emerging growth compa	any \square
lon-a	ccelerated filer		Smaller reporting company			
	merging growth company, indicate nt to Section 13(a) of the Exchange		gistrant has elected not to use the extend	led transition peri	iod for complying with any new o	or revised financial accounting standards provided
		-	n and attestation to its management's ass accounting firm that prepared or issued			l over financial reporting under Section 404(b) of the
ndica	te by check mark whether the regist	trant is a shell company	(as defined in Rule 12b-2 of the Act). Y	es □ No ⊠		
			common stock held by nonaffiliates on no non-voting common equity of the reg			sing price on that date on the New York Stock
Jumb	er of shares of registrant's common	stock outstanding at Fe	bruary 5, 2021: 424,020,492			
			DOCUMENTS INCORPOR	RATED BY REF	ERENCE	
Porti	ons of the definitive Proxy Stateme	ent of The PNC Financia	al Services Group, Inc. to be filed pursua			g of shareholders (Proxy Statement) are incorporated

THE PNC FINANCIAL SERVICES GROUP, INC. Cross-Reference Index to 2020 Form $10\text{-}\mathrm{K}$

TABLE OF CONTENTS

		rage
PART I		
Item 1	Business.	<u>1</u>
Item 1A	Risk Factors.	<u>16</u>
Item 1B	Unresolved Staff Comments.	<u>34</u>
Item 2	Properties.	<u>34</u>
Item 3	<u>Legal Proceedings.</u>	<u>34</u>
Item 4	Mine Safety Disclosures.	<u>34</u>
Information	about our Executive Officers	<u>35</u>
PART II		
Item 5	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.	<u>36</u>
	Common Stock Performance Graph	<u>38</u>
Item 6	Selected Financial Data.	<u>39</u>
Item 7	Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A).	<u>41</u>
	Executive Summary	<u>41</u>
	Consolidated Income Statement Review	44
	Consolidated Balance Sheet Review	<u>48</u> <u>52</u>
	Business Segments Review	<u>52</u>
	Risk Management	<u>60</u>
	Critical Accounting Estimates and Judgments	<u>87</u>
	Off-Balance Sheet Arrangements and Variable Interest Entities Cautionary Statement Regarding Forward-Looking Information	89
Itam 7A		90
Item 7A Item 8	Quantitative and Qualitative Disclosures about Market Risk. Financial Statements and Supplementary Data.	<u>91</u> 92
item o	Report of Independent Registered Public Accounting Firm	
		92
	Consolidated Income Statement	94
	Consolidated Statement of Comprehensive Income	<u>95</u>
	Consolidated Balance Sheet	<u>96</u>
	Consolidated Statement of Changes in Equity	<u>97</u>
	Consolidated Statement of Cash Flows	98
	Notes To Consolidated Financial Statements	<u>100</u>
	Note 1 Accounting Policies	<u>100</u>
	Note 2 Acquisition and Divestiture Activity	<u>117</u>
	Note 3 Investment Securities	<u>118</u>
	Note 4 Loans and Related Allowance for Credit Losses	<u>122</u>
	Note 5 Loan Sale and Servicing Activities and Variable Interest Entities	<u>133</u>

Cross-Reference Index to 2020 Form 10-K (continued)

TABLE OF CONTENTS (Continued)

		<u>Page</u>
Item 8	Financial Statements and Supplementary Data. (continued)	
	Note 6 Goodwill and Mortgage Servicing Rights	<u>136</u>
	Note 7 Leases	<u>138</u>
	Note 8 Premises, Equipment and Leasehold Improvements	<u>140</u>
	Note 9 Time Deposits	<u>141</u>
	Note 10 Borrowed Funds	<u>141</u>
	Note 11 Commitments	<u>142</u>
	Note 12 Equity	<u>143</u>
	Note 13 Other Comprehensive Income	<u>145</u>
	Note 14 Earnings Per Share Note 15 Fair Value	146 147
	Note 16 Financial Derivatives	147 159
	Note 17 Employee Benefit Plans	165
	Note 18 Stock Based Compensation Plans	171
	Note 19 Income Taxes	172
	Note 20 Regulatory Matters	<u>174</u>
	Note 21 Legal Proceedings	<u>175</u>
	Note 22 Parent Company	<u>180</u>
	Note 23 Segment Reporting	<u>182</u>
	Note 24 Fee-based Revenue from Contracts with Customers	<u>185</u>
	Statistical Information (Unaudited)	<u>188</u>
	Glossary	<u>196</u>
	Defined Terms	<u>196</u>
	<u>Acronyms</u>	<u>200</u>
Item 9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.	<u>201</u>
Item 9A	Controls and Procedures.	<u>201</u>
Item 9B	Other Information.	<u>201</u>
PART III		
Item 10	Directors, Executive Officers and Corporate Governance.	<u>201</u>
Item 11	Executive Compensation.	<u>202</u>
Item 12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.	<u>202</u>
Item 13	Certain Relationships and Related Transactions, and Director Independence.	<u>202</u>
Item 14	Principal Accounting Fees and Services.	<u>203</u>
PART IV		
Item 15	Exhibits, Financial Statement Schedules.	<u>203</u>
Item 16	Form 10-K Summary	<u>208</u>
SIGNATU	<u>RES</u>	<u>209</u>

Cross-Reference Index to 2020 Form 10-K (continued)

MD&A TABLE REFERENCE

Table	<u>Description</u>	Page
1	Summarized Average Balances and Net Interest Income	<u>45</u>
2	Noninterest Income	46 46
3	Noninterest Expense	<u>46</u>
4	Provision for Credit Losses	<u>47</u>
5	Discontinued Operations	<u>47</u>
6	Summarized Balance Sheet Data	47 48 49 50 50 51 53 56 59
7	<u>Loans</u>	49
8	Investment Securities	<u>50</u>
9	Weighted-Average Expected Maturities of Mortgage and Asset-Backed Debt Securities	<u>50</u>
10	Details of Funding Sources	<u>51</u>
11	Retail Banking Table	<u>53</u>
12	Corporate & Institutional Banking Table	<u>56</u>
13	Asset Management Group Table	<u>59</u>
14	Details of Loans	<u>64</u>
15	Commercial and Industrial Loans by Industry	<u>65</u>
16	Commercial Real Estate Loans by Geography and Property Type	<u>66</u>
17	Home Equity Loans by Geography and by Lien Type	<u>67</u>
18	Residential Real Estate Loans by Geography	<u>68</u>
19	Auto Loan Key Statistics	<u>68</u>
20	Nonperforming Assets by Type	<u>69</u>
21	Change in Nonperforming Assets	<u>70</u>
22	Accruing Loans Past Due	<u>71</u>
23	Summary of Troubled Debt Restructurings	<u>71</u>
24	Consumer Loans in Active Hardship Relief Programs	<u>73</u>
25	Allowance for Credit Losses by Loan Class	<u>75</u>
26	Loan Charge-Offs and Recoveries	<u>76</u>
27	Senior and Subordinated Debt	<u>77</u>
28	PNC Bank Notes Issued	<u>77</u>
29	PNC Bank Notes Redeemed	<u>78</u>
30	Contractual Obligations	<u>79</u>
31	Other Commitments	<u>79</u>
32	Credit Ratings for PNC and PNC Bank	
33	Basel III Capital	80 81 83
34	Interest Sensitivity Analysis	<u>83</u>
35	Net Interest Income Sensitivity to Alternative Rate Scenarios	<u>83</u>
36	Alternate Interest Rate Scenarios: One Year Forward	<u>83</u>
37	Equity Investments Summary	<u>85</u>

Cross-Reference Index to 2020 Form 10-K (continued)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS TABLE REFERENCE

<u>Table</u>	<u>Description</u>	Page
38	Impact of the CECL Standard Adoption	<u>102</u>
39	Consolidated Income Statement - Discontinued Operations	<u>117</u>
40	Consolidated Statement of Cash Flows - Discontinued Operations	<u>118</u>
41	Investment Securities Summary	<u>119</u>
42	Gross Unrealized Loss and Fair Value of Securities Available for Sale Without an Allowance for Credit Losses	<u>120</u>
43	Gross Unrealized Loss and Fair Value of Debt Securities	<u>120</u>
44	Gains (Losses) on Sales of Securities Available for Sale	<u>120</u>
45	Contractual Maturity of Debt Securities	<u>121</u>
46	Fair Value of Securities Pledged and Accepted as Collateral	<u>121</u>
47	Analysis of Loan Portfolio	<u>123</u>
48	Nonperforming Assets	<u>124</u>
49	Commercial Credit Quality Indicators	<u>126</u>
50	Home Equity and Residential Real Estate Credit Quality Indicators	<u>127</u>
51	Credit Quality Indicators for Automobile, Credit Card, Education and Other Consumer Loan Classes	<u>129</u>
52	Financial Impact and TDRs by Concession Type	<u>130</u>
53	Rollforward of Allowance for Credit Losses	<u>131</u>
54	Analysis of Changes in the Allowance for Credit Losses	<u>131</u>
55	Rollforward of Allowance for Loan and Lease Losses and Associated Loan Data	<u>132</u>
56	Cash Flows Associated with Loan Sale and Servicing Activities	<u>134</u>
57	Principal Balance, Delinquent Loans and Net Charge-offs Related to Serviced Loans For Others	<u>134</u>
58	Non-Consolidated VIEs	<u>135</u>
59	Goodwill by Business Segment	<u>136</u>
60	Commercial Mortgage Servicing Rights	<u>136</u>
61	Residential Mortgage Servicing Rights	<u>137</u>
62	Commercial Mortgage Servicing Rights – Key Valuation Assumptions	<u>138</u>
63	Residential Mortgage Servicing Rights – Key Valuation Assumptions	<u>138</u>
64	<u>Lease Income</u>	<u>138</u>
65	Sales-Type and Direct Financing Leases	<u>139</u>
66	Future Minimum Lease Payments of Lessor Arrangements	<u>139</u>
67	Operating Lease Costs and Cash Flows	<u>139</u>
68	Operating Lease Assets and Liabilities	<u>140</u>
69	Operating Lease Term and Discount Rates of Lessee Arrangements	<u>140</u>
70	Future Lease Payments of Operating Lease Liabilities	<u>140</u>
71	Premises, Equipment and Leasehold Improvements	<u>140</u>
72	Depreciation and Amortization Expense	<u>141</u>
73	<u>Time Deposits</u>	<u>141</u>
74	Borrowed Funds	<u>141</u>

Cross-Reference Index to 2020 Form 10-K (continued)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS TABLE REFERENCE (Continued)

Table	<u>Description</u>	Page
75	FHLB Borrowings, Senior Debt and Subordinated Debt	<u>141</u>
76	Commitments to Extend Credit and Other Commitments	142
77	Preferred Stock - Authorized, Issued and Outstanding	<u>143</u>
78	Terms of Outstanding Preferred Stock	<u>144</u>
79	Dividends Per Share	<u>144</u>
80	Other Comprehensive Income (Loss)	<u>145</u>
81	Accumulated Other Comprehensive Income (Loss) Components	<u>146</u>
82	Basic and Diluted Earnings Per Common Share	<u>146</u>
83	Fair Value Measurements – Recurring Basis Summary	<u>151</u>
84	Reconciliation of Level 3 Assets and Liabilities	<u>152</u>
85	Fair Value Measurements - Recurring Quantitative Information	<u>154</u>
86	Fair Value Measurements – Nonrecurring	<u>156</u>
87	Fair Value Option - Fair Value and Principal Balances	<u>156</u>
88	Fair Value Option - Changes in Fair Value	<u>157</u>
89	Additional Fair Value Information Related to Other Financial Instruments	<u>158</u>
90	Total Gross Derivatives	<u>159</u>
91	Gains (Losses) Recognized on Fair Value and Cash Flow Hedges in the Consolidated Income Statement	<u>161</u>
92	Hedged Items - Fair Value Hedges	<u>161</u>
93	Gains (Losses) on Derivatives Not Designated for Hedging	<u>162</u>
94	Derivative Assets and Liabilities Offsetting	<u>164</u>
95	Reconciliation of Changes in Projected Benefit Obligation and Change in Plan Assets	<u>166</u>
96	Asset Strategy Allocations	<u>167</u>
97	Pension Plan Assets - Fair Value Hierarchy	<u>168</u>
98	Estimated Cash Flows	<u>169</u>
99	Components of Net Periodic Benefit Cost	<u>169</u>
100	Net Periodic Costs - Assumptions	<u>170</u>
101	Other Pension Assumptions	<u>170</u>
102	Nonvested Incentive/Performance Unit Awards and Restricted Share/Restricted Share Unit Awards - Rollforward	<u>171</u>
103	Components of Income Tax Expense	<u>172</u>
104	Deferred Tax Assets and Liabilities	<u>172</u>
105	Reconciliation of Statutory and Effective Tax Rates	<u>173</u>
106	Net Operating Loss Carryforwards	<u>173</u>
107	Change in Unrecognized Tax Benefits	<u>173</u>
108	IRS Tax Examination Status	<u>173</u>
109	Basel Regulatory Capital	<u>174</u>
110	Parent Company - Income Statement	<u>180</u>
111	Parent Company - Balance Sheet	<u>181</u>
112	Parent Company - Interest Paid and Income Tax Refunds (Payments)	<u>182</u>
113	Parent Company - Statement of Cash Flows	<u>182</u>
114	Results of Businesses	<u>184</u>
115	Retail Banking Noninterest Income Disaggregation	<u>186</u>
116	Corporate & Institutional Banking Noninterest Income Disaggregation	<u>187</u>
117	Asset Management Group Noninterest Income Disaggregation	<u>187</u>

PART I

Forward-Looking Statements: From time to time, The PNC Financial Services Group, Inc. has made and may continue to make written or oral forward-looking statements regarding our outlook for earnings, revenues, expenses, capital and liquidity levels and ratios, asset levels, asset quality, financial position and other matters regarding or affecting us and our future business and operations or the impact of legal, regulatory or supervisory matters on our business operations or performance. This Annual Report on Form 10-K (the Report or Form 10-K) also includes forward-looking statements. With respect to all such forward-looking statements, you should review our Risk Factors discussion in Item 1A, our Risk Management, Critical Accounting Estimates and Judgments, and Cautionary Statement Regarding Forward-Looking Information sections included in Item 7, and Note 21 Legal Proceedings in the Notes To Consolidated Financial Statements included in Item 8 of this Report. In this Report, "PNC", "we", "us", "the Company" or "the Corporation" refers to The PNC Financial Services Group, Inc. and its subsidiaries on a consolidated basis (except when referring to PNC as a public company, its common stock or other securities issued by PNC, which just refer to The PNC Financial Services Group, Inc.). References to The PNC Financial Services Group, Inc. or to any of its subsidiaries are specifically made where applicable.

See page 196 for a glossary of certain terms and acronyms used in this Report.

ITEM 1 – BUSINESS

Business Overview

Headquartered in Pittsburgh, Pennsylvania, we are one of the largest diversified financial services companies in the U.S. We have businesses engaged in retail banking, including residential mortgage, corporate and institutional banking and asset management, providing many of our products and services nationally. Our retail branch network is located primarily in markets across the Mid-Atlantic, Midwest and Southeast. We also have strategic international offices in four countries outside the U.S. At December 31, 2020, our consolidated total assets, total deposits and total shareholders' equity were \$466.7 billion, \$365.3 billion and \$54.0 billion, respectively.

We were incorporated under the laws of the Commonwealth of Pennsylvania in 1983 with the consolidation of Pittsburgh National Corporation and Provident National Corporation. Since 1983, we have diversified our geographical presence, business mix and product capabilities through organic growth, strategic bank and non-bank acquisitions and equity investments, and the formation of various non-banking subsidiaries.

Pending Acquisition of BBVA USA Bancshares, Inc.

On November 16, 2020, PNC announced a definitive agreement with BBVA, S.A. to acquire BBVA, a U.S. financial holding company conducting its business operations primarily through its U.S. banking subsidiary, BBVA USA, for a fixed purchase price of \$11.6 billion in cash. BBVA USA has over 600 branches in Texas, Alabama, Arizona, California, Florida, Colorado and New Mexico. The transaction is expected to add approximately \$102 billion in total assets, \$86 billion of deposits and \$66 billion of loans to PNC's Consolidated Balance Sheet and to close in mid-2021, subject to customary closing conditions, including receipt of regulatory approvals. Note 2 Acquisition and Divestiture Activity in the Notes to Consolidated Financial Statements in Item 8 of this Report and our Current Reports on Form 8-K dated November 16, 2020 and November 19, 2020 contain additional information regarding this pending acquisition.

Second Quarter Sale of Equity Investment in BlackRock, Inc.

In the second quarter of 2020, PNC divested its entire 22.4% equity investment in BlackRock. Net proceeds from the sale were \$14.2 billion. The after-tax gain on the sale of \$4.3 billion, and donation expense and BlackRock's historical results for all periods presented, are reported as discontinued operations. For additional details on the divestiture of our equity investment in BlackRock, see Note 2 Acquisition and Divestiture Activity in the Notes to Consolidated Financial Statements in Item 8 of this Report.

Coronavirus (COVID-19) Pandemic

The COVID-19 pandemic and public health response to contain it led to a severe recession in the first half of 2020, after the U.S. economy reached a peak in economic activity in February 2020. There is still a great deal of uncertainty about the length and severity of the pandemic and the strength or reversal of the economic rebound, including whether there will be additional fiscal stimulus from the federal government and, if so, its size, scope and effectiveness.

PNC is committed to putting our resources to work to support our customers, communities and the broader financial system. PNC participated in funding PPP loans under the CARES Act and, at December 31, 2020, had \$12.0 billion of PPP loans outstanding, down from the \$13.7 billion funded during the second quarter of 2020 as a result of loan forgiveness and repayments. PNC also is participating in funding new and second draw PPP loans in 2021 under the Consolidated Appropriations Act. PNC continues to grant

loan modifications for customers in need through various hardship relief programs. We analyze and make decisions on these modifications based on each individual borrower's situation. PNC is also assisting customers with the PPP loan forgiveness process. See the Troubled Debt Restructurings and Loan Modifications in the Credit Risk Management portion of the Risk Management section of Item 7 for details on our commercial and consumer loan modifications.

Our retail branches have largely reopened as we continue to prioritize the safety and well-being of our customers and employees, while complying with all state and local health mandates and managing in accordance with Center for Disease Control guidelines. As of February 16, 2021, approximately 98% of PNC branch lobbies were fully opened.

Our technology infrastructure and systems are designed for business resiliency and security. We have leveraged these capabilities and our business continuity plans to execute a work-from-home strategy, which has resulted in many of our employees working from home during 2020 and into 2021. PNC has also implemented various strategies that are designed to promote the health and safety of our employees who need to be on-site to execute their job responsibilities.

See the Supervision and Regulation section of this Item 1 for additional detail on the CARES Act and other governmental responses to the pandemic and its economic and financial impacts. Also see Risk Factors in Item 1A of this Report for a description of the associated risks related to the COVID-19 pandemic.

Subsidiaries

Our corporate legal structure at December 31, 2020 consisted of one domestic subsidiary bank, including its subsidiaries, and 51 active non-bank subsidiaries, in addition to various affordable housing investments and historic rehabilitation investments. Our bank subsidiary is PNC Bank, a national bank headquartered in Pittsburgh, Pennsylvania. For additional information on certain of our subsidiaries, see Exhibit 21 to this Report.

Statistical Disclosure By Bank Holding Companies

The following statistical information is included on the indicated pages of this Report and is incorporated herein by reference:

	Form 10-K page
Average Consolidated Balance Sheet And Net Interest Analysis	189
Analysis Of Year-To-Year Changes In Net Interest Income	190
Book Values Of Securities	50 and 118-121
Maturities And Weighted-Average Yield Of Securities	50 and 121
Loan Types	49, 64, 123-124 and 191
Selected Loan Maturities And Interest Sensitivity	192
Nonaccrual, Past Due And Restructured Loans And Other Nonperforming Assets	64-76, 104-111, 122-132 and 191
Potential Problem Loans	64-76 and 126
Summary Of Loan Loss Experience	73-76, 131-132 and 193
Allocation Of Allowance For Loan And Lease Losses	73-76 and 193
Average Amount And Average Rate Paid On Deposits	189
Time Deposits Of \$100,000 Or More	194
Selected Consolidated Financial Data	39-41
Short-term Borrowings – not included as average balances during 2020, 2019 and 2018 were less than 30% of total shareholders' equity at the end of each period.	

Supervision and Regulation

The PNC Financial Services Group, Inc. is a BHC registered under the BHC Act and a financial holding company under the GLB Act.

We are subject to numerous governmental regulations, some of which are highlighted below. See Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional information regarding our regulatory matters. Applicable laws and regulations restrict our permissible activities and investments, impose conditions and requirements on the products and services we offer and the manner in which they are offered and sold, and require compliance with protections for loan, deposit, brokerage, fiduciary, investment management and other customers, among other things. They also restrict our ability to repurchase stock or pay dividends, or to receive dividends from our bank subsidiary, and impose capital adequacy and liquidity requirements. The consequences of noncompliance with these, or other applicable laws or regulations, can include substantial monetary and nonmonetary sanctions.

In addition, we are subject to comprehensive supervision and periodic examination by, among other regulatory bodies, the Federal Reserve and the OCC. These examinations consider not only compliance with applicable laws, regulations and supervisory policies of

2 The PNC Financial Services Group, Inc. - 2020 Form 10-K

the agency, but also capital levels, asset quality, risk management effectiveness, the ability and performance of management and the board of directors, the effectiveness of internal controls and internal audit function, earnings, liquidity and various other factors.

The results of examination activity by any of our federal bank regulators potentially can result in the imposition of significant limitations on our activities and growth. These regulatory agencies generally have broad discretion to impose restrictions and limitations on the operations of a regulated entity and take enforcement action, including the imposition of substantial monetary penalties and nonmonetary requirements, against a regulated entity where the relevant agency determines, among other things, that the operations of the regulated entity or any of its subsidiaries fail to comply with applicable law or regulations, are conducted in an unsafe or unsound manner, or represent an unfair or deceptive act or practice. This supervisory framework, including the examination reports and supervisory ratings (which are not publicly available) of the agencies, could materially impact the conduct, growth and profitability of our operations.

The CFPB is responsible for examining us for compliance with most federal consumer financial protection laws, including the laws relating to fair lending and prohibiting unfair, deceptive or abusive acts or practices in connection with the offer, sale or provision of consumer financial products or services, and for enforcing such laws with respect to PNC Bank and its affiliates. The results of the CFPB's examinations (which are not publicly available) also can result in restrictions or limitations on the operations of a regulated entity as well as enforcement actions against a regulated entity, including the imposition of substantial monetary penalties and nonmonetary requirements.

We also are subject to regulation by the SEC by virtue of our status as a public company and by the SEC and the CFTC due to the nature of some of our businesses. Our businesses with operations outside the U.S. also are subject to regulation by appropriate authorities in the foreign jurisdictions in which they do businesse.

As a regulated financial services firm, our relationships and good standing with regulators are of fundamental importance to the operation and growth of our businesses. The Federal Reserve, OCC, CFPB, SEC, CFTC and other domestic and foreign regulators have broad enforcement powers, and certain of the regulators have the power to approve, deny, or refuse to act upon our applications or notices to conduct new activities, acquire or divest businesses, assets or deposits, expand our operations geographically, or reconfigure existing operations.

Among the areas that have been receiving a high level of regulatory focus are compliance with the BSA and anti-money laundering laws, capital and liquidity management (including stress testing), the structure and effectiveness of enterprise risk management frameworks, the management of risks associated with the COVID-19 pandemic, the protection of confidential customer information, cyber security, the oversight of arrangements with third-party vendors and suppliers, and compliance with fair lending and other consumer protection laws and regulations, including those governing retail sales practices, fee disclosures, unfair, deceptive or abusive acts or practices, collection practices, and protections for military service members and individuals in bankruptcy.

New legislation, changes in rules promulgated by federal financial regulators, other federal and state regulatory authorities and self-regulatory organizations, or changes in the interpretation or enforcement of existing laws and rules, may directly affect the operations and profitability of our businesses. We anticipate new legislative and regulatory initiatives over the next several years, focused specifically on banking and other financial services in which we are engaged. Legislative and regulatory developments to date, as well as those that come in the future, have had and are likely to continue to have an impact on the conduct of our business. The more detailed description of the significant regulations to which we are subject included in this Report is based on current laws and regulations and is subject to potentially material change. See also the additional information included as Risk Factors in Item 1A of this Report discussing the impact of financial regulatory initiatives on the regulatory environment for us and the financial services industry.

The profitability of our businesses could also be affected by rules and regulations that impact the business and financial sectors in general, including changes to the laws governing taxation, antitrust regulation, electronic commerce, data security and privacy.

There are numerous rules governing the regulation of financial services institutions and their holding companies. Accordingly, the following discussion is general in nature and does not purport to be complete or to describe all of the laws, regulations and policies that apply to us. To a substantial extent, the purpose of the regulation and supervision of financial services institutions and their holding companies is not to protect our shareholders and our non-customer creditors, but rather to protect our customers (including depositors) and the financial markets and financial system in general.

COVID-19 Relief

Since the outbreak of COVID-19, the U.S. Government has taken a wide variety of actions in order to aid businesses and consumers financially impacted by COVID-19, facilitate the orderly functioning of financial markets, and assist banking organizations in being able to meet the credit and other banking needs of their customers and communities.

The CARES Act, as subsequently amended by the PPP and Health Care Enhancement Act and the Consolidated Appropriations Act, authorizes the SBA and the Treasury Department to expend up to \$943 billion to support the issuance by SBA-approved lenders of first-draw loans of up to \$10 million and second-draw loans of up to \$2 million to small and medium-sized businesses that meet certain size and other eligibility requirements under the PPP. Borrowers may use the proceeds of a PPP loan only for specified purposes (such as meeting payroll) and borrowers can have the loan partially or fully forgiven (and repaid by the SBA) to the extent the borrower expends funds during a limited period following receipt of the loan proceeds for payroll costs or other specified expenses. Eligible businesses may apply for a first-or second-draw PPP loan until March 31, 2021. Borrowers and lenders are required to provide certain certifications and documentation, and conduct certain reviews, in connection with PPP loan applications as specified in the PPP rules and associated guidance, which are subject to change and further clarification by the SBA and Treasury. PNC Bank is participating in the PPP.

The CARES Act also permits residential and multifamily mortgage borrowers with federally backed mortgages to request payment forbearance for up to six months or 30 days, respectively, under a streamlined process if the borrower is experiencing a financial hardship due to the COVID-19 national emergency. The borrower may request an extension of these forbearance periods, for up to an additional six months for residential borrowers and 60 days for multifamily borrowers. Residential mortgage borrowers with federally backed mortgages, and tenants of multifamily borrowers that receive forbearance under these provisions, also benefit from certain foreclosure and eviction protections. For these purposes, federally backed mortgages include those guaranteed or insured by the FNMA, FHLMC, FHA or VA. Under revised Federal Housing Finance Agency policies, servicers of FNMA and FHLMC-guaranteed residential mortgages, such as PNC Bank, will no longer have an obligation to advance scheduled payments on a mortgage loan that is in a mortgage-backed security once the servicer has advanced four months of missed payments on the loan. Various states and municipalities also have imposed new foreclosure and eviction limitations of varying scope and degree in response to the COVID-19 pandemic. The CARES Act also provides consumers certain temporary protections up to 120 days after the termination of the COVID-19 national emergency against the reporting of negative credit information to a credit reporting agency as a result of loan accommodations provided.

The CARES Act, as modified by the Consolidated Appropriations Act, permits financial institutions to temporarily suspend the requirements under GAAP to categorize loan modifications related to the COVID-19 pandemic as a TDR through the earlier of 60 days after the national emergency termination or January 2, 2022, and the determination of such a loan modification as being a TDR. The federal banking agencies, along with the CFPB and the National Credit Union Administration, and separately the FFIEC, released statements that, among other things, clarify the agencies' and FFIEC's views on TDRs, including the interaction between agency guidance on TDRs and the CARES Act, and prudent risk management and consumer protection principles. We are following the provisions within the CARES Act, as amended, and the agencies' and FFIEC's statements when evaluating our COVID-19 related loan modification requests.

<u>Federal Reserve Liquidity Facilities.</u> To help promote the flow of credit and the orderly functioning of financial markets, the Federal Reserve in 2020 established a number of new lending or liquidity facilities using its emergency lending authority under section 13(3) of the Federal Reserve Act. Many of these facilities are or were supported by funding provided by the Treasury Department, either from the Emergency Stabilization Fund or under the CARES Act. Certain of these facilities (the Primary Market Corporate Credit Facility, Secondary Market Corporate Credit Facility, Municipal Liquidity Facility, Term Asset-Backed Securities Loan Facility and Main Street Lending Facility) have ceased making or purchasing new extensions of credit. The following emergency facilities continue to make or purchase new extensions of credit:

- · Commercial Paper Funding Facility, which purchases highly rated unsecured and asset-backed commercial paper issued by eligible U.S. issuers;
- Paycheck Protection Program Lending Facility, which provides lenders funding secured by SBA-guaranteed loans made under the PPP described above;
- Primary Dealer Credit Facility, which provides secured funding to broker-dealers that are registered as primary dealers with the Federal Reserve in exchange for a broad range of collateral; and
- Money Market Mutual Fund Liquidity Facility, which provides liquidity to money market mutual funds by lending to U.S. banking entities in exchange for highly-rated collateral acquired from money market mutual funds.

In October 2020, the Federal banking agencies finalized rules to encourage banking organizations to use the Money Market Mutual Fund Liquidity Facility and Paycheck Protection Program Liquidity Facility. Under the rules, banking organizations may exclude from leverage and risk-based capital requirements any eligible assets sold or pledged to the Federal Reserve on a non-recourse basis as part of these programs, and they are required to neutralize the effect under the LCR of participating in these programs. The banking

4 The PNC Financial Services Group, Inc. -2020 Form 10-K

agencies also clarified that, consistent with the CARES Act, covered loans originated by a banking organization under the PPP will receive a zero percent risk weight for regulatory capital purposes, even if not pledged to the Federal Reserve.

In addition, in March 2020, the Federal Reserve announced changes to its discount window lending for insured depository institutions, such as PNC Bank. These changes permit insured depository institutions to borrow from the discount window, on a fully collateralized basis, for periods of up to 90 days, with such loans being prepayable and renewable by the borrowing institution on a daily basis. These changes, which will remain in effect until the Federal Reserve announces otherwise, provide insured depository institutions additional tools for managing their liquidity profile, including for purposes of the LCR. The Federal Reserve must publicly disclose the details (including the name of the borrower or counterparty) of discount window transactions and transactions conducted by facilities established by the Federal Reserve on a delayed basis.

The Federal banking agencies, CFPB, SEC, and CFTC have issued other rules, guidance, statements, orders or other actions to, among other things, facilitate the continued provision of financial services, encourage financial institutions to work with customers affected by the pandemic, and reduce operational or regulatory challenges resulting from the pandemic and the private-sector and governmental actions designed to mitigate its effects. These actions and statements, among others, clarified when appraisals or evaluations are required for real estate-secured transactions and allowed required appraisals and evaluations to be deferred in certain circumstances, encouraged banking organizations to use their capital and liquidity buffers to continue to provide credit to customers and support the smooth functioning of markets, and encouraged financial institutions to make available small-dollar loans to consumers and small businesses affected by COVID-19.

Banking Regulation and Supervision

Reserve and the OCC, respectively. The foundation of the agencies' regulatory capital rules is the international regulatory capital framework developed by the Basel Committee, the international body responsible for developing global regulatory standards for banking organizations for consideration and adoption by national jurisdictions. The regulatory capital rules establish minimum requirements for the ratio of a banking organization's regulatory capital to its risk-weighted assets, referred to as risk-based capital requirements, as well as for the ratio of its regulatory capital to measures of assets and other exposures, referred to as leverage capital requirements. The agencies' regulatory capital rules have undergone significant change since 2013, when the agencies adopted final rules to implement the Basel Committee's international regulatory capital framework, known as "Basel III", as well as certain provisions of the Dodd-Frank Act.

In 2019, the federal banking agencies adopted rules to better tailor the application of their capital, liquidity and enhanced prudential requirements for banking organizations to the asset size and risk profile (as measured by certain regulatory metrics) of the banking organization (the "2019 Tailoring Rules"). Effective January 1, 2020, the agencies' capital and liquidity rules classify all BHCs with \$100 billion or more in total assets into one of four categories (Category I, Category II, Category III and Category IV), with the most stringent capital and liquidity requirements applying to Category I firms and the least restrictive requirements applying to Category IV firms. The classification of any bank subsidiary of a BHC generally follows that of its parent BHC. PNC and PNC Bank currently are Category III firms because PNC (i) has more than \$250 billion, but less than \$700 billion, in consolidated total assets, (ii) is not designated as a GSIB, and (iii) has less than \$75 billion in cross-jurisdictional activity. PNC and PNC Bank would consolidated assets, be designated as a GSIB, or have \$75 billion or more in cross-jurisdictional activity. As of December 31, 2020, PNC had cross-jurisdictional activities for these purposes of \$13.3 billion. PNC does not expect the pending acquisition of BBVA, if consummated, would affect its classification as a Category III institution.

The regulatory capital rules generally divide regulatory capital into three components: CET1 capital, additional Tier 1 capital (which, together with CET1 capital, comprises Tier 1 capital) and Tier 2 capital. CET1 capital is generally common stock, retained earnings, and qualifying minority interest less required deductions. Prior to January 1, 2020, CET1 capital for PNC and PNC Bank also included AOCI related to both available for sale securities and pension and other post-retirement plans. Effective January 1, 2020, and as permitted by the 2019 Tailoring Rules, PNC and PNC Bank elected to exclude AOCI related to these items from CET1 capital. Additional Tier 1 capital generally includes, among other things, perpetual preferred stock and qualifying minority interests, less required deductions. Tier 2 capital generally comprises qualifying subordinated debt and, subject to certain quantitative limits, ACL, less any required deductions from Tier 2 capital. The regulatory capital rules limit the extent to which minority interests in consolidated subsidiaries may be included in regulatory capital. Total capital is the sum of Tier 1 capital and Tier 2 capital, less the deductions required from Total capital.

Under the regulatory capital rules effective as of January 1, 2020, PNC and PNC Bank must deduct investments in unconsolidated financial institutions, MSRs and deferred tax assets (in each case, net of associated deferred tax liabilities) from CET1 capital to the extent such items individually exceed 25% of the institution's adjusted CET1 capital. As of December 31, 2020, PNC and PNC Bank's investments in unconsolidated financial institutions, MSRs and deferred tax assets did not exceed this threshold.

The agencies' capital rules also permit banking organizations to elect to phase-in, on a straight-line basis over a three-year period, the day-one regulatory capital effects of implementing the FASB's ASU 2016-13 Financial Instruments - Credit Losses (Topic 326), commonly referred to as the CECL standard. PNC implemented the CECL standard effective January 1, 2020, but elected not to implement the phase-in of the day-one regulatory capital effects of the standard. See Note 1 Accounting Policies in the Notes to Consolidated Financial Statements in Item 8 of this Report for more detail on the CECL standard. Separately, the Federal banking agencies adopted a rule that permits banking organizations that are subject to CECL during 2020 to delay CECL's estimated impact on CET1 capital. CECL's estimated impact on CET1 capital is the change in retained earnings at adoption plus or minus 25% of the change in CECL ACL at the balance sheet date compared to CECL ACL at transition. For institutions electing to utilize this CECL transition rule for regulatory capital, the estimated CECL impact is added to CET1 through December 31, 2021, then phased-out over the following three years. PNC and PNC Bank have elected this five-year transition period effective March 31, 2020, which impacts regulatory capital ratios disclosed in this Report.

PNC and PNC Bank are required to use the standardized approach for determining a banking organization's risk-weighted assets for purposes of calculating the risk-based capital ratios. The standardized approach for risk-weighted assets takes into account credit and market risk. To calculate risk-weighted assets under the standardized approach for credit risk, the nominal dollar amounts of assets and credit equivalent amounts of off-balance sheet items are generally multiplied by risk weights set forth in the rules, with the risk weights increasing as the perceived credit risk of the relevant asset or exposure increases. For certain types of exposures, such as securitization exposures, the standardized approach establishes one or more methodologies that are to be used to calculate the risk-weighted asset amount for the exposure. High volatility commercial real estate, past due, securitization and equity exposures, as well as MSRs and deferred tax assets that are not deducted from capital, are generally subject to higher risk weights than other types of exposures. Under the market risk capital rule, risk-weighted asset amounts for covered trading positions are determined based on the calculation of VAR (including stressed value-at-risk), specific risk, incremental risk and comprehensive risk amounts, as specified in the capital rules.

We refer to the capital ratios calculated using the definition of capital under the agencies' Basel III capital rules and, for the risk-based ratios, standardized risk-weighted assets, as our Basel III regulatory capital ratios.

The risk-based capital rules establish certain minimum standards for the capital ratios of banking organizations, including PNC and PNC Bank. Banking organizations must maintain a minimum CET1 ratio of 4.5%, a Tier 1 capital ratio of 6.0%, and a Total capital ratio of 8.0%, in each case in relation to risk-weighted assets, to be considered "adequately capitalized." In 2020, the Federal Reserve introduced a CET1 SCB for BHCs subject to the Federal Reserve's CCAR process, such as PNC. The SCB is calculated based on the difference between a firm's starting and minimum CET1 ratio (as projected by the Federal Reserve) in the Supervisory Severely Adverse scenario during the CCAR process, plus four quarters of the organization's planned common stock dividends (expressed as a percentage of risk-weighted assets), subject to a floor of 2.5%. Based on PNC's performance under the Federal Reserve's supervisory stress tests as part of CCAR 2020, PNC's SCB for the period from the fourth quarter of 2020 through the third quarter of 2021 was set at 2.5%. While PNC Bank is not subject to a SCB, PNC Bank is required to maintain a capital conservation buffer in the form of CET1 equal to a fixed 2.5% of risk-weighted assets.

PNC and PNC Bank must maintain risk-based capital above the minimum risk-based capital ratio requirements plus its SCB (in the case of PNC) or capital conservation buffer (in the case of PNC Bank) in order to avoid limitations on capital distributions, including dividends and repurchases of any Tier 1 capital instrument, such as common and qualifying preferred stock, and certain discretionary incentive compensation payments. As a result, PNC and PNC Bank must maintain a CET1 capital ratio of at least 7.0%, a Tier 1 capital ratio of at least 8.5%, and a Total capital ratio of at least 10.5% to avoid limitations on capital distributions and certain discretionary incentive compensation payments. Because PNC's SCB is established as part of the CCAR process, and is based on PNC's projected performance (as determined by the Federal Reserve) under the relevant Supervisory Severely Adverse scenario (which can change, potentially materially, from stress test to stress test), PNC's SCB may vary, potentially materially, over time and, thus, PNC may be required to maintain capital above these levels to avoid limitations on capital distributions and certain discretionary incentive compensation payments. In addition, while a firm's SCB is typically determined as part of the Federal Reserve's annual CCAR process, the Federal Reserve has reserved the right to conduct supervisory stress tests, require a firm to submit a revised capital plan, and calculate a firm's SCB, more frequently. BHCs subject to a SCB, such as PNC, generally may increase their capital distributions without seeking prior Federal Reserve approval, provided the BHC otherwise complies with its SCB and any other applicable capital or capital distribution requirements. However, in light of ongoing economic uncertainty related to the COVID-19 pandemic, the Federal Reserve has imposed special limitations on dividends and share repurchases by CCAR-participating BHCs during the first quarter of 2021 and these restrictions may be continued in future quarters, potent

For Category III banking organizations (such as PNC and PNC Bank), these higher SCB or capital conservation buffer levels above the regulatory minimums could be supplemented by a countercyclical capital buffer of up to an additional 2.5% of risk-weighted assets. This buffer is currently set at zero in the U.S. A Federal Reserve policy statement establishes the framework and factors the Federal Reserve would use in setting and adjusting the amount of the U.S. countercyclical capital buffer. Covered banking

6 The PNC Financial Services Group, Inc. – 2020 Form 10-K

organizations would generally have 12 months after the announcement of any increase in the countercyclical capital buffer to meet the increased buffer requirement, unless the Federal Reserve determines to establish an earlier effective date. If the full countercyclical buffer amount is implemented, PNC and PNC Bank would be required to maintain a CET1 capital ratio of at least 9.5%, a Tier 1 capital ratio of at least 11%, and a Total capital ratio of at least 13% to avoid limitations on capital distributions and certain discretionary incentive compensation payments.

The regulatory capital rules also require that banking organizations maintain a minimum amount of Tier 1 capital as compared to average consolidated assets, referred to as the leverage ratio, and require Category III banking organizations to maintain a minimum amount of Tier 1 capital as compared to total leverage exposure, referred to as the SLR. Total leverage exposure takes into account on-balance sheet assets as well as certain off-balance sheet items, including loan commitments and potential future exposure under derivative contracts. Banking organizations are required to maintain a minimum leverage ratio of Tier 1 capital to total assets of 4.0%, and Category III banking organizations must maintain a minimum SLR of 3.0%. As of December 31, 2020, the leverage and SLR ratios of PNC and PNC Bank were above the required minimum level.

PNC and PNC Bank are not subject to the additional CET1 capital surcharge, minimum long-term debt requirement, minimum TLAC, or enhanced SLR requirements that apply to U.S. GSIBs.

Failure to meet applicable capital requirements could subject a banking organization to a variety of enforcement remedies available to the federal banking agencies, including a limitation on the ability to pay dividends or repurchase shares, the issuance of a capital directive to increase capital and, in severe cases, the termination of deposit insurance by the FDIC and the appointment of a conservator or receiver. In some cases, the extent of these powers depends upon whether the institution in question is considered "well capitalized," "undercapitalized," "significantly undercapitalized." The thresholds at which an insured depository institution is considered "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" or "critically undercapitalized" are based on (i) the institution's CET1, Tier 1 and total risk-based capital ratios; (ii) the institution's leverage ratio; and (iii) for the definitions of "adequately capitalized" and "undercapitalized", the institution's SLR (if applicable). Generally, the smaller an institution's capital base in relation to its risk-weighted or total assets, the greater the scope and severity of the agencies' powers. Business activities may also be affected by an institution's capital classification. For example, as a financial holding company, PNC and PNC Bank must remain "well capitalized."

At December 31, 2020, PNC and PNC Bank exceeded the required ratios for classification as "well capitalized." For additional discussion of capital adequacy requirements, including the levels of capital required to be considered "well capitalized," see the Liquidity and Capital Management portion of the Risk Management section of Item 7 of this Report and Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report.

In addition to regulatory capital requirements, we are subject to the Federal Reserve's capital plan rule, capital stress testing requirements and CCAR process, as well as the DFAST requirements of the Federal Reserve and the OCC.

As part of the CCAR process, the Federal Reserve undertakes a supervisory assessment of the capital planning process of BHCs, including PNC, that have \$100 billion or more in total consolidated assets. For us, this capital planning assessment is based on a review of a comprehensive capital plan submitted to the Federal Reserve that describes the company's planned capital actions, such as plans to pay or increase common stock dividends, engage in common stock repurchase programs, or issue or redeem preferred stock or other regulatory capital instruments, during the nine quarter review period, as well as the results of stress tests conducted by both the company and the Federal Reserve under different hypothetical macro-economic scenarios, including a supervisory severely adverse scenario provided by the Federal Reserve. The Federal Reserve's capital plan rule provides that a BHC must resubmit a new capital plan prior to the next annual submission date if, among other things, there has been or will be a material change in the BHC's risk profile, financial condition or corporate structure since its last capital plan submission. In light of the economic uncertainty presented by the COVID-19 pandemic, the Federal Reserve required large BHCs like PNC to resubmit their capital plans and additional stress test results in December 2020. The Federal Reserve has indicated that it expects to complete the review of these resubmitted capital plans in early 2021.

In evaluating PNC's capital plan, the Federal Reserve also considers a number of qualitative factors. In assessing a BHC's capital planning and stress testing processes, the Federal Reserve considers whether the BHC has sound and effective governance to oversee these processes. The Federal Reserve's evaluation focuses on whether a BHC's capital planning and stress testing processes are supported by a strong risk management framework to identify, measure and assess material risks and that provides a strong foundation to capital planning. The Federal Reserve also considers the comprehensiveness of a BHC's control framework and evaluates a BHC's policy guidelines for capital planning and assessing capital adequacy. A BHC's stress testing scenario design processes and approaches for estimating the impact of stress on its capital position, including stress testing models and non-model qualitative approaches, are comprehensively reviewed to ensure that projections reflect the impact of appropriately stressful conditions, as well as risks idiosyncratic to the BHC, on its capital position. Significant deficiencies in a BHC's capital planning and stress testing processes

may result in supervisory directives that require the firm to address the identified deficiencies and, potentially, a downgrade in the BHC's supervisory capital positions and planning rating.

In connection with the 2021 CCAR exercise, we must file our capital plan and stress testing results using financial data as of December 31, 2020, with the Federal Reserve by April 6, 2021. We expect to receive the Federal Reserve's response to the capital plan submitted as part of the 2021 CCAR, as well as PNC's preliminary SCB for the period from the fourth quarter of 2021 through the third quarter of 2022, in June 2021. The Federal Reserve must provide firms their final SCB for this period by August 31, 2021, which would reflect any changes made to the firm's planned common stock dividends to remain in compliance with the firm's SCB.

As part of the annual CCAR and DFAST processes, the Federal Reserve releases certain revenue, loss and capital results for each participating firm from its supervisory stress testing exercises. As a Category III institution, PNC must conduct a company-run DFAST stress test biennially in even numbered years and release PNC's projections of certain revenue, loss and capital results from the exercise under the agencies' hypothetical supervisory severely adverse macro-economic scenario and applying the agencies' DFAST capital action assumptions.

Regulatory Liquidity Standards and Liquidity Risk Management Requirements. The Basel Committee's Basel III framework also includes short-term liquidity standards (LCR) and long-term funding standards (NSFR).

The U.S. banking agencies' LCR rules are designed to ensure that covered banking organizations maintain an adequate level of cash and HQLA to meet estimated net liquidity needs in a short-term stress scenario using liquidity inflow and outflow assumptions prescribed in the rules (net cash outflow). A company's LCR is the amount of its HQLA, as calculated in accordance with the haircuts and limitations in the rule, divided by its net cash outflows, with the quotient expressed as a percentage. The regulatory minimum LCR that covered banking organizations are required to maintain is 100%. PNC and PNC Bank are required to calculate the LCR on a daily basis. If either institution's LCR is below the minimum requirement for three consecutive business days, the institution must promptly provide its regulator with a plan for achieving compliance with the minimum LCR requirement. At December 31, 2020, the LCR for PNC and PNC Bank exceeded the required minimum levels.

The NSFR is designed to promote a stable maturity structure of assets and liabilities of banking organizations over a one-year time horizon. In 2020, the federal banking agencies finalized rules that would implement the NSFR in the U.S., which become effective July 1, 2021. The rules require a covered BHC to calculate its NSFR as the ratio of its ASF to its RSF amount over a one-year horizon. The regulatory minimum ratio for all covered banking organizations (expressed as a percentage) is 100%. PNC and PNC Bank are required to calculate the NSFR on an ongoing basis. If either institution's NSFR falls, or is likely to fall below, the minimum requirement, the institution must provide its regulator with a plan for achieving compliance with the minimum NSFR requirement. We expect PNC and PNC Bank to be in compliance with the NSFR when it becomes effective.

As Category III institutions with less than \$75 billion in weighted short-term wholesale funding, PNC and PNC Bank are subject to reduced LCR and NSFR requirements, with each company's LCR net outflows and RSF (as calculated under the rules) reduced by 15%, thereby reducing the amount of HQLA or ASF each institution must hold to meet the LCR and NSFR minimum requirements, respectively. As of December 31, 2020, PNC had weighted short-term wholesale funding for these purposes of \$31.4 billion.

The Federal Reserve requires large BHCs, including PNC, to publicly disclose certain quantitative and qualitative measures of their LCR- and NSFR-related liquidity profile. These disclosures include major components used to calculate the LCR and NSFR (e.g., HQLA, cash outflows and inflows for the LCR, and ASF and RSF for the NSFR, at the consolidated parent company), and a qualitative discussion of the BHC's LCR and NSFR results, including, among other things, key drivers of the results, composition of HQLA and ASF, and concentration of funding sources.

As a Category III institution, PNC also is subject to Federal Reserve rules that require PNC to, among other things, conduct internal liquidity stress tests over a range of time horizons, maintain a buffer of highly liquid assets sufficient to meet projected net outflows under the BHC's 30-day liquidity stress test, and maintain a contingency funding plan that meets certain requirements.

For additional discussion of regulatory liquidity requirements, refer to the Liquidity and Capital Management portion of the Risk Management section of Item 7 of this Report.

Source of Parent Company Liquidity and Dividends. The principal source of our liquidity at the parent company level is dividends from PNC Bank. PNC Bank is subject to various restrictions on its ability to pay dividends to PNC Bancorp, Inc., its direct parent, which is a wholly-owned direct subsidiary of The PNC Financial Services Group, Inc. PNC Bank is also subject to federal laws limiting extensions of credit to its parent holding company and non-bank affiliates as discussed in Note 20 Regulatory Matters in the

Notes To Consolidated Financial Statements in Item 8 of this Report. Further information on bank level liquidity and parent company liquidity is also available in the Liquidity and Capital Management portion of the Risk Management section of Item 7 of this Report.

Federal Reserve rules provide that a BHC is expected to serve as a source of financial strength to its subsidiary banks and to commit resources to support such banks if necessary. Dodd-Frank requires that the Federal Reserve jointly adopt new rules with the OCC and the FDIC to implement this source of strength requirement. These joint rules have not yet been proposed. Consistent with this source of strength policy for subsidiary banks, the Federal Reserve has stated that, as a matter of prudent banking, a BHC generally should not maintain a rate of cash dividends unless its net income available to common shareholders has been sufficient to fully fund the dividends and the prospective rate of earnings retention appears to be consistent with the corporation's capital needs, asset quality and overall financial condition. Further, in providing guidance to the large BHCs participating in the CCAR exercise, discussed above, the Federal Reserve has expected capital plans to reflect conservative dividend payout ratios.

Enhanced Prudential Requirements. Under Federal Reserve rules, PNC and other BHCs with total consolidated assets of \$100 billion or more are subject to various enhanced prudential standards related to liquidity risk management and overall risk management. For PNC, these rules, among other things, establish liquidity stress testing requirements (discussed above), limitations on PNC's aggregate net credit exposures to any single, unaffiliated company (referred to as the SCCL), and certain oversight and governance responsibilities for PNC's Chief Risk Officer, the Board of Directors, and the Risk Committee of the Board of Directors. Under the Federal Reserve's SCCL rules, PNC's aggregate net credit exposure (including exposure resulting from, among other transactions, extensions of credit, repurchase and reverse repurchase transactions, investments in securities and derivative transactions) to any unaffiliated counterparty may not exceed 25% of PNC's Tier 1 capital.

The Federal Reserve is required to impose a maximum 15-to-1 debt to equity ratio on a BHC if the federal agencies that comprise the FSOC determine that the company poses a grave threat to the financial stability of the U.S. and that the imposition of such a debt-to-equity requirement would mitigate such risk. The Federal Reserve also is required to establish early remediation requirements for BHCs with more than \$250 billion in total assets and continues to work towards finalizing these requirements.

The Federal Reserve may continue to develop the set of enhanced prudential standards that apply to large BHCs in order to further promote the resiliency of such firms and the U.S. financial system. For additional information, see Item 1A Risk Factors of this Report.

Additional Powers Under the GLB Act. The GLB Act permits a qualifying BHC, such as PNC, to become a "financial holding company" and thereby engage in, or affiliate with companies engaging in, a broader range of financial activities than would otherwise be permitted for a BHC. Permitted affiliates include securities underwriters and dealers, insurance companies, insurance agents and companies engaged in other activities that are determined by the Federal Reserve, in consultation with the Secretary of the Treasury, to be "financial in nature or incidental thereto" or are determined by the Federal Reserve unilaterally to be "complementary" to financial activities. We became a financial holding company in 2000. A BHC qualifies to become a financial holding company it is subsidiary depository institutions are "well capitalized" and "well managed" and its subsidiary depository institutions have a rating under the CRA of Satisfactory or better. Among other activities, we currently rely on our status as a financial holding company to conduct merchant banking activities and securities underwriting and dealing activities. As subsidiaries of a financial holding company under the GLB Act, our non-bank subsidiaries are generally allowed to conduct new financial activities, and we generally are permitted to acquire non-bank financial companies that have less than \$10 billion in assets, with after-the-fact notice to the Federal Reserve.

In addition, the GLB Act permits qualifying national banks to engage in expanded activities through a "financial subsidiary." PNC Bank has filed a financial subsidiary certification with the OCC and currently engages in insurance agency activities through financial subsidiaries. PNC Bank may also generally engage through a financial subsidiary in any activity that is determined to be financial in nature or incidental to a financial activity by the Secretary of the Treasury, in consultation with the Federal Reserve (other than insurance underwriting activities, insurance company investment activities and merchant banking). In order to establish a financial subsidiary, a national bank and each of its depository institution affiliates must be "well capitalized" and "well managed" and the national bank and each of its depository institution affiliates must have a CRA rating of Satisfactory or better.

If a financial holding company or a national bank with a financial subsidiary fails to continue to meet the applicable "well capitalized" or "well managed" criteria, the financial holding company or national bank must enter into an agreement with the Federal Reserve or the OCC, respectively, that, among other things, identifies how the capital or management deficiencies will be corrected. Until such deficiencies are corrected, the relevant agency may impose limits or conditions on the activities of the company or bank, and the company or bank may not engage in, or acquire a company engaged in, the types of expanded activities only permissible for a financial holding company or financial subsidiary without prior approval of the relevant agency.

In addition, a financial holding company generally may not engage in a new financial activity authorized by the GLB Act, or acquire a company engaged in such a new activity, if any of its insured depository institutions receives a CRA rating of less than Satisfactory. A national bank's financial subsidiary generally may not engage in a new financial activity authorized by the GLB Act, or acquire a company engaged in such a new financial activity, if the national bank or any of its insured depository institution affiliates received a CRA rating of less than Satisfactory. At December 31, 2020, PNC Bank had an Outstanding rating with respect to CRA.

In 2020, the OCC finalized rules to modernize its regulations implementing the CRA. The rules significantly alter what activities by a bank qualify for CRA credit, where such activities must be conducted to receive credit, how the agencies measure a bank's CRA performance, and how a bank must document and report its CRA qualifying activities. The new rules would go into effect for PNC Bank on January 1, 2023.

<u>Volcker Rule</u>. The Volcker Rule and its implementing regulations prohibit banking entities from engaging in short-term trading as principal and having certain ownership interests in and relationships with hedge funds, private equity funds, and certain other private funds (together, "covered funds"), unless an exemption or exception applies. For example, the exemptions under the Volcker Rule allow banking entities to trade as principal for securities underwriting, market making and risk-mitigating hedging purposes, subject to a variety of conditions. As a result of rule changes adopted in 2019, PNC and PNC Bank are subject to simplified and tailored compliance program requirements because each entity has trading assets and liabilities of less than \$20 billion.

To date, the prohibitions under the final Volcker Rule regulations have not had a material effect on our businesses or revenue; however it is possible that the regulations may be modified in the future. Moreover, the conditions for engaging in exempted trading activities and having permissible relationships with a private fund under the regulations could, depending on the agencies' approach to interpreting them, cause us to forego engaging in hedging or other transactions that we would otherwise undertake in the ordinary course of business and, thus, to some extent, may limit our ability to most effectively hedge our risks, manage our balance sheet or provide products or services to our customers. We also have divested prohibited investments in covered funds and received extensions allowing an extended conformance period for our remaining \$0.1 billion interests in illiquid covered funds.

Other Federal Reserve and OCC Regulation and Supervision. The federal banking agencies possess broad powers to take corrective action as deemed appropriate based on the actions, operations or risk management programs of a BHC, an insured depository institution or their subsidiaries, and the Federal Reserve and the OCC have the ability to take enforcement action against PNC and PNC Bank, respectively, to prevent and remedy acts and practices that the agencies determine to be unfair or deceptive. A finding that we have engaged in a deceptive act or practice may have collateral consequences on our ability to rely on certain exemptions, or take advantage of certain provisions of, the securities laws absent a government waiver of such restrictions.

Moreover, less than satisfactory examination ratings, lower capital ratios than peer group institutions, or regulatory concerns regarding management, controls, assets, operations or other factors can all potentially result in practical limitations on the ability of a bank or BHC to engage in new activities, grow, acquire new businesses, repurchase its stock or pay dividends, or continue to conduct existing activities. Furthermore, the OCC has established certain heightened risk management and governance standards for large banks, including PNC Bank. The guidelines, among other things, establish minimum standards for the design and implementation of a risk governance framework, describe the appropriate risk management roles and responsibilities of front line units, independent risk management, internal audit, and the board of directors, and provide that a covered bank should have a comprehensive written statement that articulates its risk appetite and serves as a basis for the framework. If the OCC determines that a covered national bank is not in compliance with these or other enforceable guidelines (including guidelines relating to information security standards), the OCC may require the bank to submit a corrective action plan and may initiate enforcement action against the bank if an acceptable plan is not submitted or the bank fails to comply with an approved plan.

Sections 23A and 23B of the Federal Reserve Act and the Federal Reserve's implementing regulation, Regulation W, place quantitative and qualitative restrictions on covered transactions between a bank and its affiliates (for example between PNC Bank, on the one hand, and The PNC Financial Services Group, Inc. and its nonbank subsidiaries, on the other hand). In general, Section 23A and Regulation W limit the total amount of covered transactions between a bank and any single affiliate to 10% of the bank's capital stock and surplus, limit the total amount of covered transactions between a bank and surplus, prohibit a bank from purchasing low-quality assets from an affiliate, and require certain covered transactions to be secured with prescribed amounts of collateral. Section 23B generally requires that transactions between a bank and its affiliates be on terms that are at least as favorable to the bank as the terms that would apply in comparable transactions between the bank and a third party. Dodd-Frank amended Section 23A of the Federal Reserve Act to include as a covered transaction the credit exposure of a bank to an affiliate arising from a derivative transaction with the affiliate. The Federal Reserve has yet to propose rules to implement these revisions.

The Federal Reserve Act and Federal Reserve regulations also place quantitative limitations and conditions on extensions of credit by a bank to its executive officers, directors, or principal shareholders and their related interests (including any company controlled by such persons). Generally, extensions of credit by a bank to such individuals, companies, and related interests must comply with certain individual and aggregate lending limits, as well as procedural and qualitative requirements. As a result of the amount of PNC common stock held by its advised mutual funds and other accounts, the Vanguard Group is considered a principal shareholder of PNC Bank for purposes of these regulations. The federal banking agencies have issued an interagency statement addressing the application of these insider lending restrictions to the other portfolio companies owned or controlled by the advised funds and accounts of a fund complex that could be considered a principal shareholder of a bank, which is effective through January 1, 2022.

The Federal Reserve and the OCC have provided guidance regarding incentive and other elements of compensation provided to executives and other employees at banking organizations they regulate, both as general industry-wide guidance and guidance specific to select larger companies, including PNC. These guidelines are intended to ensure that the incentive compensation practices of covered banking organizations do not encourage excessive risk-taking. Dodd-Frank requires the Federal Reserve, the OCC, the FDIC, the SEC and two other regulatory agencies to adopt regulations governing incentive compensation provided by regulated financial services companies to their executives and other employees. These agencies jointly proposed regulations in 2011 and again in 2016 to implement these requirements. Final regulations have not been adopted.

The trust, investment advisory and other fiduciary activities conducted by PNC Bank also are subject to the OCC's regulations governing the fiduciary activities of national banks, as well as applicable state fiduciary laws. The OCC's regulations, among other things, set standards for the administration of fiduciary accounts, prohibit or govern potential conflicts of interests, and establish recordkeeping requirements for fiduciary accounts.

The Federal Reserve's prior approval is required whenever we propose to acquire all or substantially all of the assets of any bank, to acquire direct or indirect ownership or control of more than 5% of any class of voting securities of any bank or BHC, or to merge or consolidate with any other BHC. The BHC Act and other federal law enumerates the factors the Federal Reserve must consider when reviewing the merger of BHCs, the acquisition of banks or the acquisition of voting securities of a bank or BHC. These factors include the competitive effects of the proposal in the relevant geographic markets; the financial and managerial resources and future prospects of the companies and banks involved in the transaction; the effect of the transaction on the financial stability of the U.S.; the organizations' compliance with anti-money laundering laws and regulations; the convenience and needs of the communities to be served; and the records of performance under the CRA of the insured depository institutions involved in the transaction.

The Federal Reserve's prior approval also is required, and similar factors are considered, for a BHC to acquire direct or indirect ownership or control of more than 5% of any class of voting securities of a savings association or savings and loan holding company, or to merge or consolidate with a savings and loan holding company. In cases involving interstate bank acquisitions, the Federal Reserve also must consider the concentration of deposits nationwide and in certain individual states. A BHC is generally prohibited from merging or consolidating with, or acquiring, another company or bank if upon consummation the resulting company would control 10% or more of deposits in the U.S. or a state, or if the resulting company's liabilities would exceed 10% of the aggregate liabilities of the U.S. financial sector (including the U.S. liabilities of foreign financial companies). In extraordinary cases, the FSOC, in conjunction with the Federal Reserve, could order the break-up of financial firms that are deemed to present a grave threat to the financial stability of the U.S.

OCC prior approval is required for PNC Bank to acquire another insured bank or savings association by merger or to acquire deposits or substantially all of the assets of such institutions. In deciding whether to approve such a transaction, the OCC is required to consider factors similar to those that must be considered by the Federal Reserve in connection with the acquisition of a bank or BHC. Approval of the OCC and the FDIC is required to merge a nonbank entity into PNC Bank. PNC and PNC Bank have requested the prior approval of the Federal Reserve and the OCC, respectively, to acquire BBVA and BBVA USA, and to merge BBVA with and into PNC and BBVA USA with and into PNC Bank.

In 2020, the Federal Reserve finalized rules governing when a BHC is presumed to "control" another company for purposes of the BHC Act, thereby causing the company to be considered a subsidiary for purposes of the BHC Act. The rules establish a set of presumptions identifying when a BHC would be deemed to control another company, with the nature and scope of relationships a BHC may have with a non-controlled company (e.g., director or officer representatives, scope of business relationships, etc.) declining as the BHC's voting ownership percentage in the company increases.

FDIC Insurance and Related Matters. PNC Bank is insured by the FDIC and subject to deposit premium assessments. Regulatory matters could increase the cost of FDIC deposit insurance premiums are "risk based." Therefore, higher fee percentages would be charged to banks that have lower capital ratios or higher risk profiles. These risk profiles take into account, among other things, weaknesses that are found by the primary federal banking regulator through its

examination and supervision of the bank and the bank's holdings of assets or liabilities classified as higher risk by the FDIC, including brokered deposits. A negative evaluation by the FDIC or a bank's primary federal banking regulator could increase the costs to a bank and result in an aggregate cost of deposit funds higher than that of competing banks in a lower risk category.

PNC Bank is subject to certain enhanced deposit insurance recordkeeping requirements adopted by the FDIC, which are designed to assist the FDIC to promptly determine whether, or to what extent, a large bank's deposits are covered by deposit insurance if the bank were to fail. These requirements became effective on April 1, 2020. Banks may request an extension of this compliance date in certain circumstances for up to one year.

Federal banking laws and regulations also apply a variety of requirements or restrictions on insured depository institutions with respect to brokered deposits. For instance, only a "well capitalized" insured depository institution may accept brokered deposits without prior regulatory approval. In addition, brokered deposits are generally subject to higher outflow assumptions than other types of deposits for purposes of the LCR. In December 2020, the FDIC finalized rules that establish a new framework for determining whether deposits are considered "brokered."

Resolution and Recovery Planning. BHCs that have \$100 billion or more in assets, such as PNC, are required to periodically submit to the Federal Reserve and the FDIC a resolution plan (including a public summary) that includes, among other things, an analysis of how the company could be resolved in a rapid and orderly fashion if the company were to fail or experience material financial distress. The Federal Reserve and the FDIC may jointly impose restrictions on a covered BHC, including additional capital requirements or limitations on growth, if the agencies jointly determine that the company's plan is not credible or would not facilitate a rapid and orderly resolution of the company under the U.S. Bankruptcy Code (or other applicable resolution framework), and additionally could require the company to divest assets or take other actions if the company did not submit an acceptable resolution plan within two years after any such restrictions were imposed. PNC generally must file a resolution plan with the Federal Reserve and FDIC at least once each three-year period, with submissions alternating between a full plan and a plan targeted on certain areas or subjects identified by the agencies.

PNC's next resolution plan is scheduled to be a targeted plan and is due to be filed by December 17, 2021. The agencies, however, have reserved the ability to alter the scheduled filing date for a covered company, request an interim update before a covered company's next scheduled filing date and require a covered company to submit a full resolution plan in lieu of a scheduled targeted plan.

The FDIC also requires large insured depository institutions, including PNC Bank, to periodically submit a resolution plan (including a public summary) to the FDIC that includes, among other things, an analysis of how the institution could be resolved under the FDI Act in a manner that protects depositors and limits losses or costs to creditors of the bank in accordance with the FDI Act. In January 2021, the FDIC lifted the moratorium that it had instituted on resolution plan filings by insured depository institutions, but it is unclear at this time when PNC Bank's next resolution plan will be due. Depending on how the agencies conduct their review of the resolution plans submitted by PNC and PNC Bank, these requirements could affect the ways in which PNC structures and conducts its business and result in higher compliance and operating costs.

PNC Bank also is subject to OCC guidelines that establish standards for recovery planning. These guidelines require a covered bank to develop and maintain a recovery plan that is evaluated and updated annually that, among other things, identifies a range of options that could be undertaken by the covered bank to restore its financial strength and viability should identified triggering events occur. The recovery plan guidelines are enforceable in the same manner as the other guidelines the OCC has established.

<u>CFPB Regulation and Supervision</u>. The CFPB examines PNC and PNC Bank for compliance with a broad range of federal consumer financial laws and regulations, including the laws and regulations that relate to deposit products, credit card, mortgage, automobile, student and other consumer loans, and other consumer financial products and services that we offer. The consumer financial protection laws that are subject to the CFPB's supervision and enforcement powers include, among others, the Truth in Lending Act, Truth in Savings Act, Home Mortgage Disclosure Act, Fair Credit Reporting Act, Electronic Funds Transfer Act, Real Estate Settlement Procedures Act, Fair Debt Collections Practices Act, Equal Credit Opportunity Act and Fair Housing Act. The CFPB also has authority to take enforcement actions to prevent and remedy acts and practices relating to consumer financial products and services that it deems to be unfair, deceptive or abusive, and to impose new disclosure requirements for any consumer financial product or service.

The CFPB may issue regulations that impact products and services offered by PNC or PNC Bank. The regulations could reduce the fees that we receive, require that we provide additional consumer disclosures, alter the way we provide our products and services, impair our ability to compete with other providers of financial products or services, or expose us to greater risk of private litigation or regulatory enforcement action. The CFPB has engaged in rulemakings that affect, among other things, consumer remittance transfers, the qualified mortgage definition under the Truth in Lending Act, the Home Mortgage Disclosure Act, the Fair Debt Collection

Practices Act, and payday, vehicle title, and certain high-cost installment loans and may establish, or modify, rules governing other aspects of consumer financial products or services in the future.

Securities and Derivatives Regulation

Our registered broker-dealer and investment adviser subsidiaries are subject to the Exchange Act, and the Investment Advisers Act of 1940, respectively, and related rules and regulations promulgated by the SEC. These rules, for example, require that broker-dealers and investment advisers act in a customer's best interest when making investment recommendations to retail customers, which includes managing conflicts of interest, providing required disclosures and exercising a duty of care in making investment recommendations. FINRA is the primary self-regulatory organization for our registered broker-dealer subsidiaries. Our broker-dealer and investment adviser subsidiaries also are subject to additional regulation by states or local jurisdictions.

The SEC and FINRA have active enforcement functions that oversee broker-dealers and investment advisers and can bring actions that result in fines, restitution, a limitation on permitted activities, disqualification to continue to conduct certain activities and an inability to rely on certain favorable exemptions. Certain types of infractions and violations also can affect our ability to expeditiously issue new securities into the capital markets. In addition, certain changes in the activities of a broker-dealer require approval from FINRA, and FINRA takes into account a variety of considerations in acting upon applications for such approval, including internal controls, capital levels, management experience and quality, prior enforcement and disciplinary history and supervisory concerns.

PNC Bank is provisionally registered as swap dealer with the CFTC. Because of the limited volume of our security-based swap dealing activities, PNC Bank has not registered (and currently does not intend to register) with the SEC as a security-based swap dealer.

PNC Bank's derivatives and foreign exchange businesses are subject to the regulations and requirements imposed on CFTC-registered swap dealers, and the CFTC (and for certain delegated responsibilities, the National Futures Association) has a meaningful supervisory role with respect to PNC Bank's derivatives and foreign exchange businesses. The CFTC's comprehensive and significant regulations are intended to (i) address systemic risk issues, (ii) bring greater transparency to the derivatives and foreign exchange markets, (iii) provide enhanced disclosures and protections to customers and (iv) promote market integrity. Among other things, these regulations (i) require that, absent certain specified exemptions, most standardized swaps be centrally cleared through a regulated clearing house and be traded on a centralized exchange or swap execution facility; (ii) subject PNC Bank to capital requirements in excess of historical practice; (iii) subject PNC Bank to comprehensive recordkeeping, regulatory reporting and real-time public reporting requirements; (iv) subject PNC Bank to various business conduct requirements, including the provision of daily marks to counterparties and disclosing to counterparties (pre-execution) the material risks, material incentives, and any conflicts of interest associated with their swap; (v) impose special duties on PNC Bank when transacting a swap with a "special entity" (e.g., governmental agency (federal, state or local) or political subdivision thereof, pension plan or endowment); and (vi) impose margin requirements on certain swaps that are not centrally cleared through a regulated clearing house.

The regulations and requirements applicable to PNC Bank, as a provisionally registered CFTC swap dealer, have and will continue to impose compliance burdens on PNC Bank and introduce additional legal risks (including as a result of applicable anti-fraud and anti-manipulation provisions and private rights of action). In addition, failure to comply with the "pay-to-play" regulations that govern our swap and municipal securities businesses could result in limitations on PNC Bank's ability to conduct swap and municipal securities business with state or local governments and their authorities.

Regulations of Other Agencies

In addition to regulations issued by the federal banking, securities and derivatives regulators, we also are subject to regulations issued by other federal agencies with respect to certain financial products and services we offer. For example, certain of our fiduciary, brokerage and investment management activities are subject to regulations issued by the Department of Labor under ERISA and related provisions of the Internal Revenue Code and certain of our student lending and servicing activities are subject to regulation by the Department of Education.

Competition

We are subject to intense competition from other regulated banking organizations, as well as various other types of financial institutions and non-bank entities that can offer a number of similar products and services without being subject to bank regulatory supervision and restrictions.

PNC Bank competes for deposits and/or loans with:

- · Other commercial banks,
- Savings banks,
- Credit unions,
- Consumer finance companies,

The PNC Financial Services Group, Inc. - 2020 Form 10-K 13

- Leasing companies,
- · Other non-bank lenders,
- · Financial technology companies,
- · Treasury management service companies,
- · Insurance companies, and
- Issuers of commercial paper and other securities, including mutual funds.

In providing asset management services, our businesses compete with:

- · Investment management firms,
- Large banks and other financial institutions,
- · Brokerage firms,
- Financial technology companies,
- · Mutual fund complexes, and
- Insurance companies.

Our various non-bank businesses engaged in investment banking and alternative investment activities compete with:

- · Commercial banks,
- · Investment banking firms,
- · Collateralized loan obligation managers,
- · Hedge funds,
- Mutual fund complexes,
- Merchant banks.
- · Insurance companies,
- · Private equity firms, and
- · Other investment vehicles.

Competition is based on a number of factors including pricing, product structure, the range of products and services offered and the quality of customer service. Loan pricing, structure and credit standards are extremely important as we seek to achieve appropriate risk-adjusted returns. Deposit-taking activities are also subject to pricing pressures and to customer migration as a result of intense competition for deposits and investments. Competitors may seek to compete with us through traditional channels such as physical locations or through digital channels such as the internet or mobile applications. We include here by reference the additional information regarding competition and factors affecting our competitive position included in Item 1A Risk Factors of this Report.

Human Capital

Employees totaled 51,257 at December 31, 2020. This total included 49,549 full-time and 1,708 part-time employees, of which 27,621 full-time and 1,611 part-time employees were employed in our Retail Banking business.

Part of PNC's ability to compete effectively depends on our ability to attract new employees and retain and develop our existing employees. In support of our employees, our strategic human capital goals include:

- Advancing PNC's talent-focused culture by developing strong leaders who exemplify our Leadership Standards, a set of standards designed to hold managers
 accountable for intentional inclusion, living our Corporate Values, enabling change, achieving results and developing the best talent and providing them with the tools
 and insights to effectively manage our people.
- Focusing on the development and retention of diverse, high performing talent and providing employees with opportunities for professional growth, career mobility and health and financial wellness.
- · Supporting a strong, ethical culture anchored in our Corporate Values and doing the right thing for our employees, customers and shareholders.
- · Continuing to focus on improving workforce diversity and creating an equitable and inclusive work place.

In managing our employees, we focus on these key factors:

Recruiting, developing and retaining talent. We believe recruiting, developing and retaining talent starts with our leaders and we measure our managers against our
Leadership Standards. Our talent acquisition priority is to invest in the development of our internal talent and to provide career advancement opportunities to our
employees. We measure how many open requisitions we fill with internal candidates, participation in early career development programs and turnover. At our first-level
and above career bands we fill approximately 62% of our open requisitions with internal candidates, which has a direct impact on our ability to retain and develop our
people. In addition, we hire approximately 500 interns and 500 full-time development program associates each year from our 11 early career development programs that
support each of our lines of business and support areas.

- Diversity, equity and inclusion. We focus on attracting, developing and retaining a diverse workforce that reflects and is equipped to meet the needs of our diverse customer base. We measure representation of LGBTQ+, people with disabilities, veterans, women and across all races and certain ethnicities as self-disclosed by our employees. As of December 31, 2020, approximately 59% of PNC's workforce and 50% of PNC's employees in managerial roles were women. People of color represented approximately 29% of PNC's workforce, including 22% of our employees in managerial roles, as of December 31, 2020.
- Total rewards. We design our compensation and benefits programs to focus on three key aspects of employee well-being: health, money and quality of life. These programs include competitive base salaries and, depending on eligibility, cash incentive or stock-based award opportunities, an Employee Stock Purchase Plan, a 401(k) Plan with employer match, a pension plan, healthcare, life insurance and disability benefits, health savings and dependent care flexible spending accounts, paid time off, paid maternity and parental leave, family care resources, flexible work schedules, a robust wellness program with incentives, adoption assistance, employee assistance programs, educational assistance and on-site health care and child care services, among others. Additionally, we conduct pay equity analyses to determine if employees are being compensated fairly and consistently across roles.
- Employee engagement. Twice a year, PNC conducts employee surveys to measure employee engagement because we believe that engaged employees have lower attrition rates and improved customer outcomes.

PNC continues to recognize the impacts that the COVID-19 pandemic has had and will likely continue to have on our Human Capital. For more information on COVID-19 related impacts to our Human Capital, see the "Coronavirus (COVID-19) Pandemic" section of this Item 1.

SEC Reports and Corporate Governance Information

We are subject to the informational requirements of the Exchange Act and, in accordance with the Exchange Act, we file annual, quarterly and current reports, proxy statements, and other information with the SEC. Our SEC File Number is 001-09718.

The SEC maintains a website at www.sec.gov that contains reports, including exhibits, proxy and information statements, and other information about issuers, like us, who file electronically with the SEC. You can also inspect reports, proxy statements and other information about us at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

We make our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed with or furnished to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act available free of charge on our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our corporate internet address is www.pnc.com and you can find this information at www.pnc.com/secfilings. Shareholders and bondholders may obtain copies of these filings without charge by contacting Shareholder Services at 800-982-7652 or via the online contact form at www.computershare.com/contactus for copies without exhibits, or via e-mail to investor.relations@pnc.com for copies of exhibits, including financial statement and schedule exhibits where applicable. The interactive data file (XBRL) exhibit is only available electronically.

Information about our Board of Directors and its committees and corporate governance, including our PNC Code of Business Conduct and Ethics (as amended from time to time), is available on our corporate website at www.pnc.com/corporategovernance. In addition, any future waivers from a provision of the PNC Code of Business Conduct and Ethics covering any of our directors or executive officers (including our principal executive officer, principal financial officer, and principal accounting officer or controller) will be posted at this internet address.

Shareholders who would like to request printed copies of the PNC Code of Business Conduct and Ethics or our Corporate Governance Guidelines or the charters of our Board's Audit, Nominating and Governance, Personnel and Compensation, or Risk Committees (all of which are posted on our corporate website at www.pnc.com/corporategovernance) may do so by sending their requests to our Corporate Secretary at corporate headquarters at The Tower at PNC Plaza, 300 Fifth Avenue, Pittsburgh, Pennsylvania 15222-2401. Copies will be provided without charge.

Internet Information

The PNC Financial Services Group, Inc.'s financial reports and information about its products and services are available on the internet at www.pnc.com. We provide information for investors on our corporate website under "About Us – Investor Relations." We use our Twitter account, @pncnews, as an additional way of disseminating to the public information that may be relevant to investors.

We generally post the following under "About Us – Investor Relations" shortly before or promptly following its first use or release: financially-related press releases, including earnings releases and supplemental financial information, various SEC filings, including annual, quarterly and current reports and proxy statements, presentation materials associated with earnings and other investor conference calls or events, and access to live and recorded audio from earnings and other investor conference calls or events. In some

cases, we may post the presentation materials for other investor conference calls or events several days prior to the call or event. For earnings and other conference calls or events, we generally include in our posted materials a cautionary statement regarding forward-looking and non-GAAP financial information, and we provide GAAP reconciliations when we include non-GAAP financial information. Such GAAP reconciliations may be in materials for the applicable presentation, in materials for prior presentations or in our annual, quarterly or current reports.

When warranted, we will also use our website to expedite public access to time-critical information regarding PNC instead of using a press release or a filing with the SEC for first disclosure of the information. In some circumstances, the information may be relevant to investors but directed at customers, in which case it may be accessed directly through the home page rather than "About Us - Investor Relations."

We are required to provide additional public disclosure regarding estimated income, losses and pro forma regulatory capital ratios under supervisory and PNC-developed hypothetical severely adverse economic scenarios, as well as information concerning our capital stress testing processes, pursuant to the stress testing regulations adopted by the Federal Reserve and the OCC. We are also required to make certain additional regulatory capital-related public disclosures about our capital structure, risk exposures, risk assessment processes, risk-weighted assets and overall capital adequacy, including market risk-related disclosures, under the regulatory capital rules adopted by the Federal banking agencies. Similarly, the Federal Reserve's rules require quantitative and qualitative disclosures about our LCR and, beginning in 2023, our NSFR. Under these regulations, we may satisfy these requirements through postings on our website, and we have done so and expect to continue to do so without also providing disclosure of this information through filings with the SEC.

Other information posted on our corporate website that may not be available in our filings with the SEC includes information relating to our corporate governance and annual communications from our chairman to shareholders.

Where we have included internet addresses in this Report, such as our internet address and the internet address of the SEC, we have included those internet addresses as inactive textual references only. Except as specifically incorporated by reference into this Report, information on those websites is not part hereof.

ITEM 1A - RISK FACTORS

We are subject to a number of risks potentially impacting our business, financial condition, results of operations and cash flows. As a financial services company, certain elements of risk are inherent in what we do and the business decisions we make. Thus, we encounter risk as part of the normal course of our business, and we design risk management processes to help manage these risks.

Our success is dependent on our ability to identify, understand and manage the risks presented by our business activities so that we can appropriately balance revenue generation and profitability. We discuss our principal risk management oversight and processes and, in appropriate places, related historical performance and other metrics in the Risk Management section included in Item 7 of this Report.

The following are the material risk factors that affect us of which we are currently aware. Any one or more of these risk factors could have a material adverse impact on our business, financial condition, results of operations or cash flows. In addition, these risks present other possible adverse consequences, including those described below. These risk factors and other risks we face are also discussed further in other sections of this Report. Thus, the risk factors below should not be considered a complete list of potential risks that we may face.

Summary

The following is a summary of the Risk Factors disclosure in this Item 1A:

- The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance.
- Our business and financial performance are vulnerable to the impact of adverse economic conditions.
- The policies of the Federal Reserve and other governmental agencies and the impact of government legislation, regulation and policy and other political factors on the economy, interest rates, overall financial market performance and banking organizations could have an adverse effect on our business and financial performance and our ability to pay dividends or otherwise return capital to shareholders.
- The likely discontinuance of the submission of rates for the calculation of LIBOR presents risks to the financial instruments originated, held or serviced by PNC that use LIBOR as a reference rate.
- Societal responses to climate change could adversely affect our business and performance, including indirectly through impacts on our customers.
- We are subject to risks related to the use of technology which is critical to our ability to maintain or enhance the competitiveness of our businesses and is dependent on having the right to use the underlying intellectual property. We could

- also suffer a material adverse impact from interruptions in the effective operation of our information systems and other technology, including as a result of third party breaches of data security either at PNC or at third parties handling PNC information.
- Our business and financial results are subject to risks associated with the creditworthiness of our customers and counterparties, by market interest rates and movements in those rates and changes in the values of financial assets.
- We are subject to risks related to inaccurate estimates and assumptions, such as those used in our asset and liability valuations and the determination of the amount of loss allowances and impairments, and to risks related to poorly designed and implemented models that are extensively used in our business.
- We operate in a highly competitive environment and our success depends on our ability to attract and retain customers and talented employees and we are at risk for an adverse impact on our business due to damage to our reputation.
- We are subject to operational risks as a result of our dependence on the effectiveness and integrity of our employees and on third party vendors, service providers and other counterparties over whom we do not have direct control.
- We are subject to risks related to growing our business in part by acquiring other financial services business from time to time as these acquisitions, including the pending acquisition of BBVA, present a number of risks and uncertainties related both to the acquisition transactions themselves and to the integration of the acquired businesses into PNC after closing.

Risks Related to the COVID-19 Pandemic

The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance.

Starting in early 2020 and continuing into 2021, federal, state and local governments have responded to the COVID-19 pandemic by enacting a variety of measures to manage the related public health effects, including restricting travel, limiting the conduct of businesses and controlling individual interactions such as through required social distancing measures. Collectively, these measures, together with voluntary changes in behavior, led to a substantial decrease in economic activity and a dramatic increase in unemployment in the second quarter of 2020. Governmental bodies also enacted laws designed to stabilize the economy and provide relief to businesses and individuals to mitigate the consequences of COVID-19 and the policies restricting the operation of businesses and the movement of individuals.

While economic conditions have improved, economic activity remains below its pre-pandemic level, with the partial recovery inconsistent across different geographic regions, sectors, companies and individuals and subject to setbacks as conditions related to the pandemic fluctuate. If efforts to contain COVID-19 are unsuccessful and restrictions on businesses and activities continue in place for extended periods or are increased, the recovery would likely be much weaker and the economy could fall back into recession. While several vaccines have been approved for use and others remain in development or clinical trials, significant uncertainty remains regarding the speed with which effective vaccines can be manufactured and widely distributed and the willingness of individuals to get vaccinated. As a result, there is still a great deal of uncertainty about the length and severity of the pandemic and the strength or reversal of the economic rebound, including whether there will be additional fiscal stimulus from the federal government and, if so, its size, scope and effectiveness. Accordingly, the outbreak and its consequences, including responsive measures to manage it, had and are likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance. The longer the public health crisis lasts and the greater its severity, the greater the likely adverse impact on the economy, our customers and our business and financial performance. The following are examples of the most likely impacts on PNC:

- The deterioration of national and global economic conditions and elevated levels of unemployment have negatively affected and are likely to continue to negatively affect, possibly materially, our financial performance and operations. The following are the key factors contributing to this risk:
 - There is a greater likelihood that more of our commercial and consumer customers or counterparties will become delinquent on their loans or other obligations to us, which, in turn, will result in a higher level of non-performing loans and net charge-offs, particularly in the sectors most adversely impacted by the pandemic. Even if a loan returns to full performing status, it may be on modified terms that result in, for example, a term extension, interest rate reduction or principal deferral or forgiveness. Increases in loan delinquencies or modifications will also result in increased administrative costs. In addition, given the uncertainty about the length and severity of the pandemic and the strength or reversal of the economic rebound, our provision for credit losses may be more volatile period-to-period with a corresponding increase in period-to-period volatility in our net income.
 - There has been and there is likely to continue to be a decrease in the demand for certain of our products and services which could be further exacerbated if customers lose confidence due to concerns regarding the economy. We have also waived certain fees associated with our products and services for customers affected by the pandemic and may continue to do so. In addition, while customer deposits have grown aiding our liquidity, future changes in behavior resulting in declining deposit balances would likely increase our funding costs and reduce our net interest income and liquidity resources.
 - These rapidly changing and unprecedented market conditions have impacted and may continue to impact the valuation of assets as reported within our
 consolidated financial statements, as well as causing substantial reductions

- in the value of our assets under management, all with the possible effects described in the Risk Factor headed "Our business and financial performance are vulnerable to the impact of changes in the values of financial assets."
- Although PNC's capital levels continue to be strong, the degradation in economic conditions also has and is likely to continue to negatively affect our capital position, possibly materially, which is critical to our ability to operate and grow our business. In addition, continued or accelerated disruption and volatility in the financial markets or long-lasting or deeper recessionary conditions may diminish our access to the capital markets or result in or contribute to downgrades of our credit ratings. We have suspended our discretionary common share repurchase program and may take further actions that would limit a return of capital to shareholders, including potentially a reduction or suspension of the dividend payable to common shareholders, as a result of these conditions and their effect on our financial performance and position or as a result of regulatory guidance.
- Some of the legislation responsive to the outbreak, including the CARES Act and the Consolidated Appropriations Act, provides for certain commercial and consumer protections which have altered and may continue to alter the profitability of the transactions in which we engage, such as by allowing borrowers to delay payments on loans or other obligations and imposing other costs on us. These laws have also delayed and restricted and may continue to delay or restrict our ability to realize the value of collateral by, for example, providing temporary foreclosure protection and eviction protection even when customers are in breach of their obligations to us. These laws may be extended or increased in scope, and other laws may be enacted in response to the pandemic that have similar or broader effects on us. We may also be limited in our ability to realize the value of collateral as a result of court closures and related delays. Moreover, collateral may be liquidated at prices insufficient to recover the full amount of exposure to us as a result of deteriorating economic conditions and volatile markets. See Supervision and Regulation in Item 1 of this Report for more information on PNC's implementation of these programs.
- Other laws related to employee benefits and the treatment of employees have negatively impacted and may continue to negatively impact us by increasing administrative, compensation and benefits costs by, for example, mandating coverage of certain COVID-19 related testing and treatment or mandating additional paid or unpaid leave. Further governmental action that is taken to mitigate the economic effects of the pandemic, as well as additional compensation or benefit actions taken by PNC, could adversely affect our financial condition and results of operations, possibly materially, in other ways that are not known now.
- In response to the outbreak and its economic consequences, the Federal Reserve lowered its target for the federal funds rate to a range of 0% to 0.25% and has signaled that it expects to keep interest rates at a low level for through at least 2023. As a result of the high percentage of our assets and liabilities that are in the form of interest-bearing or interest-related instruments, this change in interest rates has had and likely will continue to have a negative impact on our net interest income and net interest margin, which could be material and which could materially adversely affect our profitability. The effects of a low interest rate environment are further described in the Risk Factor headed "Our business and financial performance are impacted significantly by market interest rates and movements in those rates."
- To protect our employees, customers and the communities in which we operate, we modified the operations of many of our retail branches, including temporarily closing some branches, limiting operations to drive-through only in other locations, and otherwise implemented work-from-home policies for a significant portion of our workforce. While our retail operations have largely re-opened, we cannot guarantee that our branches will continue to remain open if the outbreak worsens or there is an increase in governmental restrictions. Our non-branch based workforce continues to work primarily remotely. We believe we are capable of substantially meeting the needs of our customers despite these modifications. However, these efforts may result in the loss of customers, impede our ability to perform certain transactions, and impair our ability to effectively identify, manage and control risk. For example, customers may be unwilling or unable to conduct transactions with us via online channels or through a local branch that is operating only in a drive-through mode. Another example is the infrastructure needed to provide products and services via online channels or to work effectively in a work-from-home environment, such as internet, telecommunications and internal information technology systems, may fail to perform as anticipated, resulting in our inability to deliver products or services or effectively manage the risks arising from our businesses. In addition, we rely on our employees, third party vendors and service providers and other counterparties, both domestically and abroad, to support many aspects of our business. Reduced workforces which may be caused by, but not limited to, illness, quarantine, stay at home or other government mandates, or difficulties transitioning back to an in office environment, could result in an adverse impact to our operations and financial performance. Redeployment of employees from current positions and of technology from current uses to support products and services responsive to t
- In support of our employees, customers and communities, we may take steps beyond or in addition to those required by governmental or regulatory minimums which may further adversely impact our profitability. For example, we have provided and may continue to provide additional relief or forbearance to customers, health and wellness benefits to employees (including significant company approved leave) or financial support for community initiatives to assist those in need as a result of the outbreak. The actual or perceived failure to provide sufficient services, support or relief to those businesses or individuals in need or properly implement legislation responsive to the outbreak or our voluntary commitments could negatively impact our reputation with adverse consequences to our business. In addition, such actual or perceived failure, or

operational and other issues that arise in connection with the implementation of government-mandated or other financial assistance or relief programs present elevated levels of legal and reputational risk, including governmental and regulatory inquiries, investigations and enforcement actions, as well as private lawsuits. Participation by PNC in governmental programs designed to provide liquidity to the financial system or impacted businesses, such as borrowing through the Federal Reserve discount window or borrowing from, or selling financial assets to, facilities established by the Federal Reserve or participation in programs under the CARES Act and the Consolidated Appropriations Act, such as the PPP, also have exposed and may continue to expose us to governmental investigation and action or public scrutiny and criticism, either at the time we participate in the program or subsequently.

Refer to our other Risk Factors in this Item 1A for information regarding other factors that have and are likely to continue to affect our business and financial performance as a result of the pandemic.

Risks Related to the Economy and Other External Factors, Including Regulation

Our business and financial performance are vulnerable to the impact of adverse economic conditions.

As a financial services company, our business and overall financial performance are affected to a significant extent by economic conditions, primarily in the U.S.

Declining or adverse economic conditions and adverse changes in investor, consumer, and business sentiment generally result in reduced business activity, which may decrease the demand for our products and services or reduce the number of creditworthy borrowers. The ability of borrowers to repay loans is often weakened as a result of economic downturns and higher unemployment. Such economic conditions also may lead to turmoil and volatility in financial markets, often with at least some financial asset categories losing value. Any of these effects would likely have an adverse impact on financial institutions such as PNC, with the significance of the impact generally depending on the nature and severity of the adverse economic conditions.

Even when economic conditions are relatively good or stable, specific economic factors can negatively affect our business and performance. This can be especially true when the factors relate to particular segments of the economy. For example, shifting consumer behavior with respect to retail purchases being made over the internet rather than in physical stores has negatively impacted performance by some retailers. This likely decreases demand for financial services in that sector, possibly harming the creditworthiness of some shopping mall operators, retail companies and others with whom we do business. As another example, dislocations in international trade, such as increased tariffs and interruptions in international supply chains likely adversely affect companies that are relatively dependent on imports or exports, impacting prices and demand for goods or services. Affected companies may experience lower levels of business and possible declining creditworthiness as compared to companies less dependent on international trade.

Given the geographic scope of our business and operations, we are most exposed to issues within the U.S. economy and financial markets. Within the U.S., we are currently most exposed to issues primarily within markets located in the Mid-Atlantic, Midwest and Southeast. Following the proposed acquisition of BBVA, including its U.S. banking subsidiary, BBVA USA, this footprint will expand particularly to include a larger presence in the Southwest and West Coast, thereby increasing our exposure to regional economic issues in those areas.

Our foreign business activities continue to be a relatively small part of our overall business. As a result, the direct impact on our business and performance from economic conditions outside the U.S. is not likely to be significant, although the impact would increase if we expand our foreign business more than nominally. We are, however, susceptible to the risk that such economic conditions could negatively affect our business and financial performance. Primarily, this risk results from the possibility that poor economic conditions or financial market disruptions affecting other major economies would also affect the U.S.

Throughout the remainder of this Risk Factors section, we address specific ways in which economic issues could create risk for us and result in adverse impacts on our business and financial performance. In particular, the COVID-19 pandemic has led to economic issues of the types described here and presents the risk of further such impacts. See the immediately preceding Risk Factor for a discussion of risks associated with the COVID-19 pandemic.

The impact of government legislation, regulation and policy and other political factors on the economy could have an adverse effect on our business and financial performance.

Changes in law or governmental policy affecting the economy, business activity, or personal spending, investing or saving activities may cause consumers and businesses to alter behavior in ways that impact demand for our products and services. Such changes may also alter the profitability of the transactions in which we engage or result in increased regulatory burden and associated costs. PNC may alter the types or terms of the products and services we offer to reflect such changes. Uncertainty regarding future law or policy may have similar impacts. The recent election of a new U.S. President, together with some changes in the membership of Congress,

including change in control of the Senate, will likely lead to changes in law or policy, including the level of regulation of financial institutions and the enforcement environment. Moreover, a change in regulatory practices that increases the time frames to obtain regulatory approvals for acquisitions and other activities or makes them more difficult to obtain could affect our ability to make acquisitions or introduce new products and services.

Concern regarding the ability of Congress and the President, which increases to the extent government is divided, collectively to reach agreement on federal budgetary matters (including the debt ceiling), or prolonged stalemates leading to total or partial governmental shutdowns, also can have adverse economic consequences and create the risk of economic instability or market volatility, with potential adverse consequences to our business and financial performance.

The policies of the Federal Reserve and other governmental agencies have a significant impact on interest rates and overall financial market performance, which are important to our business and financial performance.

The monetary policies of the Federal Reserve have a significant impact on interest rates and overall financial market performance. These policies can thus affect the activities and results of operations of financial companies such as PNC. An important function of the Federal Reserve is to monitor the national supply of bank credit and set certain interest rates. The actions of the Federal Reserve influence the rates of interest that we charge on loans and that we pay on borrowings and interest-bearing deposits. Rates of interest can also affect the value of our on-balance sheet and off-balance sheet financial instruments. We cannot predict the nature or timing of future changes in monetary policies or the precise effects that they may have on our activities and financial results.

In addition, monetary policy actions by governmental authorities in the European Union or other countries could have an impact on global interest rates, which could affect rates in the U.S. as well as rates on instruments denominated in currencies other than the U.S. dollar, any of which could have one or more of the potential effects on us described above.

Some of the potential impacts on our business and results of governmental monetary policy are described in Risk Factors under the heading "Risks Related to the Business of Banking." The Federal Reserve has lowered its benchmark rates to historically low levels as a result of the COVID-19 pandemic. See the Risk Factor headed "The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance."

As a regulated financial services firm, we are subject to numerous governmental regulations and comprehensive oversight by a variety of regulatory agencies and enforcement authorities. These regulations and the manner in which they are implemented can have a significant impact on our businesses and operations and our ability to grow and expand.

The PNC Financial Services Group, Inc. is a BHC and a financial holding company, with the Federal Reserve as its primary regulator. PNC Bank is a federally chartered bank, with the OCC as its primary regulator. In addition, our businesses are subject to regulation by multiple other banking, consumer protection, securities and derivatives regulatory bodies. We are also subject to the jurisdiction of criminal and civil enforcement authorities.

As a result, we are subject to numerous laws and regulations involving both our business and organization, with multiple regulators or agencies having supervisory or enforcement oversight over aspects of our business. These laws, regulations and supervisory activities are intended to promote the safety and soundness of financial institutions, financial market stability, the transparency and liquidity of financial markets, and consumer and investor protection and prevent money laundering and terrorist financing. In addition to regulation in the U.S., we are also subject to foreign regulation to a limited extent as a result of our business activities outside the U.S.

Applicable laws and regulations restrict our permissible activities and investments and require compliance with provisions designed to protect loan, deposit, brokerage, fiduciary, and other customers, and for the protection of customer information, among other things. We also are subject to laws and regulations designed to combat money laundering, terrorist financing, and transactions with persons, companies or foreign governments designated by U.S. authorities.

Over time, the scope of the laws and regulations affecting our businesses, as well as the number of requirements or limitations imposed by legislative or regulatory actions, has increased, and we expect to continue to face substantial regulatory oversight and new or revised regulatory requirements or initiatives. Legislative or regulatory actions can result in increased compliance costs, reduced business opportunities, or new requirements and limitations on how we conduct our business.

The Federal Reserve requires a BHC to act as a source of financial and managerial strength for its subsidiary banks. The Federal Reserve could require PNC to commit resources to PNC Bank when doing so is not otherwise in the interests of PNC or its shareholders or creditors.

The results of routine and non-routine supervisory or examination activities by our regulators, including actual or perceived compliance failures, could result in limitations on our ability to enter into certain transactions, engage in new activities, expand geographically, make acquisitions, or obtain necessary regulatory approvals in connection therewith. These activities also could result

in significant fines, penalties, or required corrective actions, some of which could be expensive and difficult to implement. As we expand our product and service offerings into additional states or countries, either through organic growth or acquisition, we will face increases in state or foreign regulation affecting our operations. Different approaches to regulation by different jurisdictions could materially increase our compliance costs or risks of non-compliance.

A failure to comply, or to have adequate policies and procedures designed to comply, with regulatory requirements and expectations exposes us to the risk of damages, fines and regulatory penalties and other regulatory or enforcement actions or consequences, such as limitations on activities otherwise permissible for us or additional requirements for engaging in new activities, and could also injure our reputation with customers and others with whom we do business.

See the immediately following Risk Factor for a discussion of risks associated with capital and liquidity regulation. Also see Supervision and Regulation in Item 1 of this Report for more information concerning the regulation of PNC, including those areas that have been receiving a high level of regulatory focus. Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report also discusses some of the regulation applicable to us.

We are subject to regulatory capital and liquidity standards that affect our business, operations and ability to pay dividends or otherwise return capital to shareholders.

PNC and PNC Bank are subject to regulatory capital and liquidity requirements established by the Federal Reserve and the OCC, respectively. These regulatory capital and liquidity requirements are typically developed at an international level by the Basel Committee and then applied, with adjustments, in each country by the appropriate domestic regulatory bodies. Domestic regulatory agencies have the ability to apply stricter capital and liquidity standards than those developed by Basel Committee. In several instances, the U.S. banking agencies have done so with respect to U.S. banking organizations.

Requirements to maintain specified levels of capital and liquidity, and regulatory expectations as to the quality of our capital and liquidity, impact our business activities and may prevent us from taking advantage of opportunities in the best interest of shareholders or force us to take actions contrary to their interests. For example, PNC's ability to pay or increase dividends or otherwise return capital to shareholders is subject to PNC's compliance with its SCB, which is determined at least annually through the Federal Reserve's CCAR process. The Federal Reserve also has imposed additional limitations on capital distributions through the first quarter of 2021 by CCAR participating BHCs (including PNC) and may extend these limitations, potentially in modified form. In addition, capital and liquidity requirements may impact the amount and type of loans we make. We may be constrained in our ability to expand, either organically or through acquisitions. We may be forced to sell or refrain from acquiring assets where the capital requirements appear inconsistent with the assets' underlying risks. In addition, liquidity standards require us to maintain holdings of highly liquid short-term investments, thereby reducing our ability to invest in longer-term or less liquid assets, even if more desirable from an earnings, balance sheet or interest rate risk management perspective.

The Basel Committee continues to engage in capital- and liquidity-related initiatives. For example, the Basel Committee in 2017 finalized additional, significant changes to the international capital framework for banking organizations. See the Supervision and Regulation section included in Item 1 of this Report. As it is unclear, at this time, whether or how these initiatives will be implemented in the U.S., we are unable to estimate what potential impact such initiatives may have on us.

In 2020, the regulatory agencies issued a rule permitting banks to delay the estimated impact on regulatory capital stemming from implementing the CECL accounting standard. PNC elected to adopt this optional transition provision effective March 31, 2020. As a result, our regulatory capital does not currently reflect the full impact of CECL.

Regulatory capital and liquidity requirements are subject to regular review and revision by the Basel Committee and the U.S. banking agencies. Future changes to the capital and liquidity rules may require PNC or PNC Bank to maintain more or higher quality capital or greater liquidity, which would likely increase some of the potential adverse effects described above.

The regulatory capital and liquidity frameworks as well as certain other prudential requirements and standards that are applicable to PNC are discussed in the Supervision and Regulation section included in Item 1 of this Report and the Liquidity and Capital Management portion of the Risk Management section of Item 7 of this Report.

The likely discontinuance of the submission of rates for the calculation of LIBOR presents risks to the financial instruments originated, held or serviced by PNC that use LIBOR as a reference rate.

As a large financial institution, a significant portion of our transactions involve variable or adjusting interest rates that are calculated by adding a contractually defined credit spread to a base or reference rate. For many years, LIBOR has been used as a reference rate for a substantial majority of our transactions involving variable or adjustable interest, including those in which we lend money, issue securities, or purchase and sell securities issued by others, as well as many derivative transactions that we enter into to manage our or our customers' risk. We also service financial instruments entered into by others that use LIBOR as the reference rate.

LIBOR is derived from the rates at which LIBOR panel banks borrow from other global banks. LIBOR is accordingly viewed as a "credit-sensitive" rate as the rates submitted by panel banks on which LIBOR is based reflect the credit risk associated with the submitting banks.

We currently anticipate that non-USD LIBOR will cease to be available after year end 2021 and that the most widely used USD LIBOR tenor settings will cease after June 30, 2023. The Federal Reserve and other official sector representatives have also communicated guidance that supervised institutions should stop entering into new USD LIBOR contracts no later than year end 2021. Accordingly, we are preparing for the likelihood of LIBOR cessation.

At present, SOFR is expected to be the alternative reference rate that will replace LIBOR for most types of transactions.

SOFR is viewed as a "riskless rate" as it is derived from rates on overnight U.S. Treasury repurchase transactions, which are essentially overnight loans secured by U.S. Treasury securities, which are largely viewed as not presenting credit risk. Because SOFR is an overnight rate derived from observations of actual transactions, the rate can be volatile, especially if there are disruptions in the underlying repurchase market, but any daily volatility historically does not create volatility when rates are cumulatively measured over customary LIBOR terms (e.g., one month or three months).

Changing to SOFR or another riskless rate could result in a value transfer between contracting parties to instruments originally based on LIBOR. Historically, in periods of economic or financial industry stress, riskless rates that are analogous to SOFR have been relatively stable. In contrast, LIBOR, which is designed to reflect the credit risk of banks, has widened relative to riskless rates, reflecting increased uncertainty regarding the credit-worthiness of banks. Accordingly, assuming that SOFR will behave like its historical analogs, an instrument that transitions from LIBOR to SOFR may not yield identical economic outcomes for each contracting party to an instrument had the instrument continued to reference LIBOR. Similarly, SOFR, because it is riskless, tends to be a lower rate than LIBOR. To address these differences between LIBOR and SOFR, certain industry recommended LIBOR fallback provisions include a concept of an adjustment spread that is applied when a LIBOR-based contract falls back to SOFR and that is calculated based on a five-year median look-back of the historical spot difference between the applicable LIBOR tenor and the applicable SOFR tenor. However, because any such adjustment spread will be based on a historical median, it is likely that the adjustment spread may not reflect the spot difference between LIBOR and SOFR at certain points in time and there may be a value transfer between the contracting parties over the life of the instrument because the all-in rate applied to a contract, even taking into account the spread adjustment, might have behaved differently over the life of the instrument in the absence of LIBOR cessation.

Any value transfer could be financially adverse or beneficial to us or to our other contracting parties to that instrument (such as a borrower, derivative counterparty, or bond holder). Impacts from a change in reference rate would likely include changes to the yield on, and value of, loans or securities held by us, amounts paid on securities we have issued, amounts received and paid on derivative instruments we have entered into and the trading market for LIBOR-based securities. Any theoretical benefit to us could result in counterparty dissatisfaction, which, in turn could lead to litigation, potentially as class actions, or other adverse consequences, including dissatisfied customers or impaired relationships with financial institution counterparties resulting in loss of business. As a result, over the life of a transaction that transitions from LIBOR to a new reference rate, our monetary obligations to our counterparty (or their obligations to us) and the yield we receive (or pay) from the transaction with that counterparty may change from that which would have resulted from a continuation of LIBOR.

Another set of risks associated with LIBOR cessation relates to how the transition from LIBOR to another rate will be effected. For some instruments, the method of transitioning to a new reference rate may be challenging, especially where the contract does not provide for a transition upon LIBOR cessation or the relevant contractual language relating to a potential transition is ambiguous or inadequate under the circumstances.

For example, the vast majority of LIBOR-based interest rate derivative contracts executed prior to January 25, 2021, do not include adequate fallbacks for LIBOR cessation. In response, the industry trade group for derivatives (ISDA), published a protocol pursuant to which industry participants can agree with any other industry participant that adheres to the protocol to include ISDA's new LIBOR fallback provisions into legacy derivatives contracts. Although we have adhered to the ISDA protocol, it is possible that many "end users" of swaps, i.e., our borrowers who have hedged their interest rate payment obligations, may not adhere. In addition, there are differences between the new ISDA fallback provisions and the fallback provisions that have been proposed for loans, which differences could result in a mismatch between the reference rate or other economics in our borrowers' legacy derivatives contracts and their loans for which such derivatives contracts are intended as a hedge. For these end-user counterparties, one-on-one negotiation with each counterparty will be necessary in order to amend legacy swaps to adequately address LIBOR cessation. If we are unable to agree to appropriate LIBOR cessation provisions with these swaps counterparties, there will be uncertainty as to how to value and effect our rights and obligations under our legacy swap contracts. Although legislative solutions to address LIBOR cessation in derivative contracts have been proposed, there is no assurance such solutions will be implemented, and we may seek to negotiate with impacted counterparties or, if not possible, effect reference rate transition through other means. Addressing transition under these circumstances may be challenging or ineffective, could result in litigation, and in some cases may involve concession on our part that has the effect of reducing the value of the instrument to us.

We have other contracts that do contemplate LIBOR cessation but do so in a manner that may create other risks. For example, some contracts provide for selecting replacement rates in a manner that presents significant challenges (such as by assuming that there would be a rate calculated substantially in the same manner as LIBOR is) or that gives us or another party absolute discretion to select a rate. Some provide for determination of a reference rate without providing for adjustment of the credit spread. In these types of cases, there will likely be uncertainty surrounding transition, with all of the risks described in this Risk Factor.

Transitioning from LIBOR to alternative rates also may result in operational errors during the transition such that the replacement rate is not applied in a timely manner or is incorrectly applied. This is particularly true given the volume of contracts that will require transition and the diversity of potential approaches to transition and given the possibility that the period during which the transition will need to take place may have a short duration.

Similarly, our failure to successfully implement transition from LIBOR to alternative rates could result in regulatory scrutiny and actions by our regulators including fines and other supervisory sanctions.

It is also possible that LIBOR quotes will become unavailable prior to the currently anticipated cessation dates. In that case, the risks associated with the transition to an alternative reference rate will be accelerated and magnified. These risks may also be increased due to the shorter time for preparing for the transition.

In order to address LIBOR cessation and the associated risks, we have established an enterprise LIBOR transition program, described in the Market Risk Management portion of the Risk Management section in Item 7 of this Report. Any failure of this program to appropriately assess and mitigate risk and deliver in a timely manner on operationalizing our ability to transition from LIBOR could magnify the risks previously outlined.

New customer privacy initiatives will impose additional operational burdens on PNC, may limit our ability to pursue desirable business initiatives and increase the risks associated with any future use of customer data.

Recently there has been an increase in legislative and regulatory efforts to protect the privacy of consumer data. Significant examples include the General Data Protection Regulation of the European Union and the California Consumer Privacy Act. These initiatives, among other things, limit how companies can use customer data and impose obligations on companies in their management of such data. Financial services companies such as PNC necessarily gather, maintain and use a significant amount of customer data. These types of initiatives increase compliance complexity and related costs, result in significant financial penalties for compliance failures, and limit our ability to develop new products or respond to technological changes. Such legal requirements also could heighten the reputational impact of perceived misuses of customer data by us, our vendors, or others who gain unauthorized access to our customer data. Other jurisdictions may adopt similar requirements that impose different and potentially inconsistent compliance burdens. The impacts will be greater to the extent requirements vary across jurisdictions.

Societal responses to climate change could adversely affect our business and performance, including indirectly through impacts on our customers.

Concerns over the long-term impacts of climate change have led and will continue to lead to governmental efforts around the world to mitigate those impacts. Consumers and businesses also are changing their behavior as a result of these concerns. PNC and its customers will need to respond to new laws and regulations as well as consumer and business preferences resulting from climate change concerns. We and our customers may face cost increases, asset value reductions, operating process changes, and the like as a result of governmental actions or societal responses to climate change. The impact on our customers will likely vary depending on their specific attributes, including their reliance on or role in carbon intensive activities as well as their exposure to the effects of climate change. Among the impacts to PNC could be a drop in demand for our products and services, particularly in certain sectors. In addition, we could face reductions in creditworthiness on the part of some customers or in the value of assets securing loans, pressure from individuals or groups to cease doing business with certain companies or sectors, or additional regulatory restrictions or costs associated with providing products or services to certain companies or sectors. The Risk Factor headed "We are at risk for an adverse impact on our business due to damage to our reputation" has further discussion of risks associated with activist pressure. Our efforts to take these risks into account in making lending and other decisions, including by increasing our business with climate-friendly companies, may not be effective in protecting us from the negative impact of new laws and regulations or changes in consumer or business behavior, including those resulting from activist pressure.

Risks Related to the Use of Technology

The use of technology is critical to our ability to maintain or enhance the competitiveness of our businesses.

As a large financial services company, we handle a substantial volume of customer and other financial transactions. As a result, we rely heavily on information systems to conduct our business and to process, record and monitor our transactions and those of our customers. Over time, we have seen more customer usage of technological solutions for financial needs as well as higher expectations of customers and regulators regarding effective and safe systems operation. In many cases, the effective use of technology increases

efficiency and enables financial institutions to better serve customers. As a result of these factors, the financial services industry is undergoing rapid technological change with frequent introductions of new technology-driven products and services. Examples include expanded use of cloud computing, artificial intelligence and machine learning, virtual and augmented reality, biometric authentication, voice and natural language, and data protection enhancements, as well as increased online and mobile device interaction with customers. We expect these trends to continue for the foreseeable future. Change is coming both from traditional banking companies and non-bank financial technology companies offering financial products and services, particularly payment services and lending. Our ability to succeed is dependent on the technologies we employ and offer our customers and the extent to which we at least keep pace with, if not exceed, our competitors' progress and our customers' needs and expectations.

In response to actual and anticipated customer behavior and expectations, as well as competitive pressures, we have been investing in technology and connectivity. We are seeking to automate functions previously performed manually, facilitate the ability of customers to engage in financial transactions, and otherwise enhance the customer experience with respect to our products and services. This effort has involved the expenditure of considerable amounts of funds and other resources. A failure to maintain or enhance our competitive position with respect to technology, whether because we fail to anticipate customer expectations or because our technological developments fail to perform as desired or are not rolled out in a timely manner or because we fail to keep pace with our competitors, would likely cause us to lose market share or incur additional expense. Our ability to maintain or enhance our relative technological position is in part dependent on our ability to attract and retain talented employees in these fields, which, due to overall demand, is increasingly difficult.

Our use of technology is dependent on having the right to use the underlying intellectual property.

In some cases, we develop internally the intellectual property embedded in the technology we use. In others, we or our vendors license it from others. Regardless of the source of the intellectual property, if another person or entity were deemed to own intellectual property rights infringed by our activities, we could be responsible for significant damages covering past activities and substantial fees to continue to engage in these types of activities. It also is possible that we could be prevented from using technology important to our business for at least a period of time. In such a circumstance, there may be no alternative technology for us to use or an appropriate alternative technology might be expensive to obtain. Protections offered by those from whom we license technology against these risks may be inadequate to cover fully any losses. Over time, there have been instances where technology used by PNC and other financial institutions has been alleged to have infringed patents held by others, and in some cases we, as well as other financial institutions, have suffered related losses.

We could suffer a material adverse impact from interruptions in the effective operation of our information systems and other technology.

The need to ensure proper functioning and resiliency of our information systems and other technology has become more important and more challenging, and the costs involved in that effort continue to be high. The risks of operational failures in the use of these systems result from a variety of factors. We are vulnerable to the impact of failures of our systems to operate as needed or intended. Failures leading to materially adverse impacts could include those resulting from human error, unexpected transaction volumes, or overall design or performance issues. In addition, our ability to use our technology effectively could be impacted due to bad weather, disasters, bad actors, terrorism and the like. Such events could affect our systems directly or limit our ability to use our technology due to effects on key underlying infrastructure. In some cases, the risk results from the potential for bad acts on the part of others, discussed in more detail in the Risk Factor headed "We are vulnerable to the risk of third party breaches of data security affecting the functioning of systems or the confidentiality of information, either at PNC or at third parties handling PNC information."

We also rely on information systems maintained by other companies. We use other companies both to provide products and services directly to us and to assist in providing products and services to our customers. Others provide the infrastructure that supports, for example, communications, payment, clearing and settlement systems, or information processing and storage. These companies range from those providing highly sophisticated information processing to those that provide fundamental services, such as electric power and telecommunications. In some cases, these other companies themselves utilize third parties to support their delivery of products and services to us and our customers. Systems maintained by or for these other companies are generally subject to many of the same risks we face with respect to our systems and thus their issues could have a negative impact on PNC. We necessarily have less ability to provide oversight over other companies' information systems.

A number of our customers choose to use financial applications (apps) that allow them to view banking and other financial account information, often held at different financial institutions, on a single platform, to monitor the performance of their investments, to compare financial and investment products, to make payments or transfer funds, and otherwise to help manage their finances and investments. Financial apps often ask users to provide their secure banking log-in information and credentials (username and password) so the apps can link to users' accounts at financial institutions. Companies offering these apps frequently use third-party data aggregators – behind-the-scenes technology companies that serve as a data-gathering service provider – to deliver customer financial data that is used by the financial apps. To do this, data aggregators are provided with customers' log-in information and credentials, which allows the aggregators to access the customers' online account and "scrape" the customers' data, often on a daily or even more frequent basis. That same information has the potential to facilitate fraud if it is not properly protected. In fact, the Director of the FinCEN has stated that FinCEN has seen high incidences of fraud, including ACH fraud, credit card fraud, and wire fraud,

enabled through the use of synthetic identities and through account takeovers via these platforms. In some cases, cybercriminals appear to be using such data aggregators and integrators to facilitate account takeovers and fraudulent wires. PNC has and may continue to face increased financial exposure due to fraudulent activity associated with the increased use of these apps and data aggregators. Even where PNC does not have responsibility for fraud losses associated with these apps and data aggregators, PNC could suffer increased reputational harm when such losses occur.

Although we regularly update and replace systems that we depend on as our needs evolve and technology improves, we continue to utilize some older systems that may not be as reliable as newer ones. In addition, the implementation of and transition to new or updated systems creates risks related to associated timing and costs, disruptions in functionality for customers and longer term failures to achieve desired improvements.

The occurrence of any failure, interruption or security breach of any of our information or communications systems, or the systems of other companies on which we rely, could result in a wide variety of adverse consequences to us. This risk is greater if the issue is widespread, extends for a significant period of time, or results in financial losses to our customers. The consequences of failures to operate systems properly can include disruptions to our ability to use our accounting, deposit, loan, payment and other systems. Such events could also cause errors in transactions or impair system functionality with customers, vendors or other parties. Possible adverse consequences also include damage to our reputation or a loss of customer business, which could occur even if the negative impact on customers was de minimis. We also could face litigation or additional regulatory scrutiny. This in turn could lead to liability or other sanctions, including fines and penalties or reimbursement of adversely affected customers. Even if we do not suffer any material adverse consequences as a result of events affecting us directly, information systems issues at other financial institutions could lead to a general loss of customer confidence in financial institutions, including us. Also, system problems, including those resulting from third party attacks, whether at PNC or at our competitors, would likely broadly increase legislative, regulatory and customer concerns regarding the functioning, safety and security of such systems. In that case, we would expect to incur even higher levels of costs with respect to prevention and mitigation of these risks.

We are vulnerable to the risk of third party breaches of data security affecting the functioning of systems or the confidentiality of information, either at PNC or at third parties handling PNC information.

We are faced with ongoing, bordering on continual, efforts by others to breach data security at financial institutions or with respect to financial transactions. Some of these involve efforts to enter our systems directly by going through or around our security protections. Others involve the use of social engineering schemes to gain access to confidential information from our employees, customers or vendors. Most corporate and commercial transactions are now handled electronically, and our retail customers increasingly use online access and mobile devices to bank with us. The ability to conduct business with us in this manner depends on the transmission and storage of confidential information in electronic form. As a result, efforts by bad actors to engage in various types of cyber attacks pose serious risks to our business and reputation. The same risks are presented by attacks potentially affecting information held by third parties on our behalf or accessed by third parties, including those offering financial apps, on behalf of our customers.

In the ordinary course, we maintain and process vast amounts of information about us, our customers and our employees. This information tends to be confidential or proprietary and much of it is highly sensitive. The highly sensitive information includes information sufficient to support identity theft and personal health information, as well as information regarding business plans and financial performance that has not been made public. One way in which bad actors attempt to harm us is by seeking access to some of this confidential or proprietary information, often with the intent of stealing from or defrauding us or our customers. In other cases, they seek to disrupt our ability to conduct our business, including by destroying or impairing our access to information maintained by us.

Our customers often use their own devices, such as computers, smartphones and tablets, to do business with us and may provide their PNC customer information (including passwords) to a third party in connection with obtaining services from the third party, including those offering financial apps. Although we take steps to provide safety and security for our customers' transactions with us and their customer information to the extent they are utilizing their own devices or providing third parties access to their accounts, our ability to assure such safety and security is necessarily limited.

As our customers regularly use PNC-issued credit and debit cards to pay for transactions with retailers and other businesses, there is also the risk of data security breaches at those other businesses covering PNC account information. When our customers use PNC issued cards to make purchases from those businesses, card account information often is provided to the business. If the business's systems that process or store card account information are subject to a data security breach, holders of our cards who have made purchases from that business may experience fraud on their card accounts. We can be responsible for reimbursing our customers for such fraudulent transactions on customers' card accounts, as well as for other costs related to data security compromise events, such as replacing cards associated with compromised card accounts, but to date such losses have not been material to us. In addition, we provide card transaction processing services to some merchant customers under agreements we have with payment networks such as Visa and Mastercard. Under these agreements, we may be responsible for certain losses and penalties if one of our merchant customers suffers a data security breach. Over the last few years, several large companies disclosed that they had suffered substantial data security breaches compromising millions of user accounts and credentials. To date, our losses and costs related to these types of breaches, including those where some of the accounts affected were with PNC, have not been material. Other similar events in the

future could be more significant to us. Moreover, to the extent more consumer confidential information becomes available to bad actors through the cumulative effect of data breaches at companies generally, bad actors may find it easier to use such information to gain access to our customer accounts.

Other cyber attacks are not focused on gaining access to credit card or user credential information, but instead seek access to a range of other types of confidential information, such as internal emails and other forms of customer financial information. Ransomware attacks have sought to deny access to data and possibly shut down systems and devices maintained by target companies. In a ransomware attack, system data is encrypted or access is otherwise denied, accompanied by a demand for ransom to restore access to the data. To date, our losses and costs related to these types of attacks have not been material, but ransomware attacks have increased in recent years and there is no guarantee that future attacks will not be successful.

A number of companies have fallen victim to BEC scams in recent years. BEC scams involve using social engineering to cause employees to wire funds to the perpetrators in the mistaken belief that the requests were made by a company executive or established vendor. While we have not experienced material losses from BEC scams to date, some of our commercial customers have been victimized. Attacks on our customers may put these relationships at risk, particularly if customers' ability to continue operations is impaired due to the losses suffered.

Other attacks in recent years have included DDoS attacks, in which individuals or organizations flood commercial websites with extraordinarily high volumes of traffic with the goal of disrupting the ability of commercial enterprises to process transactions and possibly making their websites unavailable to customers for extended periods of time. We (as well as other financial services companies) have been subject to such attacks.

In addition to threats from external sources, insider threats represent a significant risk to us. Insiders, including those having legitimate access to our systems and the information contained in them, have the easiest opportunity to make inappropriate use of the systems and information. Addressing that risk requires understanding not only how to protect us from unauthorized use and disclosure of data, but also how to engage behavioral analytics and other tools to identify potential internal threats before any damage is

To date, none of these types of attacks have had a material impact on us. Nonetheless, we cannot entirely block efforts by bad actors to harm us. And our efforts to prevent significant harm from attacks may be insufficient. While we maintain insurance coverage that may cover certain aspects of cyber risks, such insurance coverage may be insufficient to cover all losses. As a result, we could suffer material financial and reputational losses in the future from any of these or other types of attacks or the public perception that such an attack on our systems has been successful, whether or not this perception is correct. Attacks on others, some of which have led to serious adverse consequences, demonstrate the risks posed by new and evolving types of cyber attacks. Our ability to protect confidential or proprietary information is even more limited with respect to information held by third parties. We may suffer reputational damage or legal liability for unauthorized access to customer information held by third parties, even if we were in fact not responsible for preventing such access and had no reasonable way of preventing it.

We need effective programs to limit the risk of failures or breaches occurring in our information systems and to mitigate the impact when they do.

We have policies, procedures and systems (including cyber security and business continuity programs) designed to prevent or limit the effect of possible failures, interruptions or breaches in security of information systems. In recent years, we have devoted significant resources towards improving the reliability of our systems and their security against external and internal threats and expect to continue to do so in the future. We design our business continuity and other information and technology risk management programs to manage our capabilities to provide services in the case of an event resulting in material disruptions of business activities affecting our employees, facilities, technology or suppliers. We cannot guarantee the effectiveness of our policies, procedures and systems to protect us in any particular future situation, nor the effectiveness of our oversight of risk at third parties. Our ability to implement policies, procedures and systems designed to prevent or limit the effect of possible failures, interruptions or breaches in security of information systems with respect to third party systems and the financial services industry infrastructure is necessarily limited. Should an adverse event affecting another company's systems occur, we may not have financial protection from the other company sufficient to compensate us or otherwise protect us from the consequences.

Methods used by others to attack information systems change frequently (with generally increasing sophistication). A new method of attack often is not recognized until launched against a target. Attacks in some cases appear to be supported by foreign governments or other well-financed entities and often originate from less regulated and remote areas around the world. As a result, we may be unable to implement adequate preventive measures to address these methods in advance of attacks.

Even with our proactive and defensive measures in place, adverse events are likely to occur and there remains the risk that one or more such events would be material to PNC. Our ability to mitigate the adverse consequences of such occurrences is in part dependent on the quality of our business continuity planning, our ability to understand threats to us from a holistic perspective, and our ability to anticipate the timing and nature of any such event that occurs, with novel or unusual events posing a greater risk. It is also the case that an adverse event can go undetected for a period of time, with the adverse consequences likely greater the longer it takes to discover the

problem. In many cases, it also depends on the preparedness and responses of national or regional governments, including emergency responders, or on the part of other organizations and businesses with which we deal.

Risks Related to the Business of Banking

Our business and financial results are subject to risks associated with the creditworthiness of our customers and counterparties.

Credit risk is inherent in the financial services business. It results from, among other things, extending credit to customers, purchasing securities, and entering into financial derivative transactions and certain guarantee contracts. Credit risk is one of our most significant risks, particularly given the high percentage of our assets represented directly or indirectly by loans and securities and the importance of lending activity to our overall business. We manage credit risk by assessing and monitoring the creditworthiness of our customers and counterparties, by diversifying our loan portfolio and by investing primarily in high quality securities.

A borrower's ability to repay a loan can be adversely affected by many factors. Individual borrowers can be affected, for example, by declines in income, job losses, health issues or family issues. Commercial borrowers can be affected, for example, by poor business performance, changes in customer behavior or catastrophic losses. Weakness in the economy or in financial markets would typically adversely impact the ability of our borrowers to repay outstanding loans. We are exposed to increased credit risk if we fail to evaluate properly at origination the likely ability of a borrower to repay a loan. Properly estimating the current and potential value of any collateral pledged to support the loan also is critical to effectively managing credit risk. A failure to identify declining creditworthiness of a borrower or declining collateral value at a time when remedial actions could reduce our exposure also increases credit risk. Any decrease in our borrowers' ability to repay loans would result in higher levels of nonperforming loans, net charge-offs, provision for credit losses and valuation adjustments on loans held for sale. Managing credit risk effectively also relies on forecasts of future overall economic conditions, which are inherently imperfect.

In addition to credit risk associated with our lending activities, we have credit risk arising from many other types of business relationships. Routine transactions give us credit exposure to brokers and dealers, commercial banks, investment banks, mutual and hedge funds, other institutional clients, as well as vendors and other non-financial entities.

In the ordinary course of business, we often have heightened credit exposure to a particular industry, region or financial market. As an example, loans secured by commercial and residential real estate typically represent a significant percentage of our overall credit portfolio. They also represent a portion of the assets underlying our investment securities. Although there are limitations on the extent of total exposure to an individual or business borrower, we may have outsized exposure to a particular borrower experiencing financial distress. Events adversely affecting specific customers or counterparties, industries, regions or financial markets, including a decline in their creditworthiness or a worsening overall risk profile, could materially and adversely affect us. Declining economic conditions also may impact commercial borrowers more than consumer borrowers, or vice versa. Thus, the concentration and mix of our loan portfolio may affect the severity of the impact of a recession on us.

Our credit risk may be exacerbated when collateral held by us to secure obligations to us cannot be realized upon, including as a result of legal or regulatory changes, or is liquidated at prices that are not sufficient to recover the full amount of the loan or derivative exposure due us.

We reserve for credit losses on our loan and lease portfolio through our ACL estimated under CECL. Under CECL, the ACL reflects expected lifetime losses, which could lead to volatility in the allowance and the provision for credit losses as economic forecasts, actual credit performance and other factors used in the loss estimating process change. We also have reserves for unfunded loan commitments and letters of credit. Changes are reflected in net income through provision for credit losses. An increase in credit risk would likely lead to an increase in provision for credit losses with a resulting reduction in our net income and would increase our allowance. An improvement of economic conditions or our economic outlook, particularly following a period of poor economic conditions, has and could continue to result in a recapture of provision for credit losses for a period of time with a resulting increase in our net income and decrease in our allowance that is not likely to be sustained.

The COVID-19 pandemic has adversely impacted both commercial borrowers and consumers. In addition, the declines in GDP and increases in unemployment associated with the pandemic, and responsive measures to manage it, have significantly impacted the economic and qualitative factors used for purposes of our estimation of credit losses under CECL. For a discussion of the increased credit risk arising from the pandemic and its impact to our estimation of credit losses, see the Risk Factor headed "The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance."

Our business and financial performance are impacted significantly by market interest rates and movements in those rates.

As a result of the high percentage of our assets and liabilities that are in the form of interest-bearing or interest-related instruments, changes in interest rates, in the shape of the yield curve, or in spreads between different market interest rates can have a material effect on our business, our profitability and the value of our financial assets and liabilities. For example:

- Changes in interest rates or interest rate spreads affect the difference between the interest that we earn on assets and the interest that we pay on liabilities, which impacts our overall net interest income and margin as well as our profitability.
- Such changes can affect the ability of borrowers to meet obligations under variable or adjustable rate loans and other debt instruments, and can, in turn, increase our credit losses on those assets.
- · Such changes can decrease the demand for interest rate-based products and services, including loans and deposit accounts.
- Such changes affect our hedging of various forms of market and interest rate risk and may decrease the effectiveness of those hedges in helping to manage such risks.
- Movements in interest rates also affect mortgage prepayment speeds and could result in impairments of mortgage servicing assets or otherwise affect the profitability of such assets.
- · Increases in interest rates likely lower the price we would receive on fixed-rate customer obligations if we were to sell them.

We may also experience spread compression by offering higher than expected deposit rates in order to attract and maintain deposits as a result of increased competition.

The rates on some interest-bearing instruments adjust promptly in accordance with changes in market rates, while others adjust only periodically or are fixed throughout a defined term. As a result, the impact of changes in interest rates can be either increased or diluted due to differences in the relative variability of the rates paid on our liabilities in relation to the rates received on our assets. The extent to which we have elected to hedge interest rate risk through interest rate swaps also affects the impact of rate changes. We attempt to manage the balance sheet to increase our benefit or reduce negative impacts from future movements in interest rates, but failures to anticipate actual movements may have the opposite result.

While in general higher interest rates enhance our ability to grow our net interest income, there are risks associated with a rising interest rate environment. As a general matter, increasing rates tend to decrease the value of fixed-rate financial instruments held on our balance sheet, as discussed in the Risk Factor headed "Our business and financial performance are vulnerable to the impact of changes in the values of financial assets." Also, customers may be less willing overall to borrow at higher rates. Higher interest rates may indirectly affect the value of asset classes such as real estate typically financed through secured loans, with a resulting negative effect on collateral securing such loans. As another example, there may be increased competitive pressures as rates on deposit products rise. The benefits of higher interest rates are best achieved if we can increase the rates on loans and other assets faster than the rates on deposits and other liabilities increase. We may not be able to achieve this result in a rising rate environment.

On the other hand, lower interest rates tend to have a negative impact on our net interest margin, and, unless offset by higher earning assets, on our net interest income. Moreover, a negative interest rate environment, in which interest rates drop below zero either broadly or for some types of instruments, could reduce our net interest margin and net interest income due to a likely decline in the interest we could earn on loans and other earning assets, while also likely requiring us to pay to maintain our deposits with the Federal Reserve Bank. In addition, our systems may not be able to handle adequately a negative interest rate environment and not all variable rate instruments are designed for such a circumstance. The current very low interest rate environment increases the potential for negative interest rates to occur.

We discuss the impact of governmental monetary policy on interest rates in the Risk Factors headed "The policies of the Federal Reserve and other governmental agencies have a significant impact on interest rates and overall financial market performance, which are important to our business and financial performance" and "The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance."

Our business and financial performance are vulnerable to the impact of changes in the values of financial assets.

As a financial institution, a substantial majority of our assets and liabilities are financial in nature. Examples include loans, securities, servicing rights, deposits and borrowings. Such assets and liabilities will fluctuate in value, often significantly, due to movements in the financial markets or market volatility as well as developments specific to the asset or liability in question. Credit-based assets and liabilities will fluctuate in value due to changes in the perceived creditworthiness of borrowers or other counterparties and also due to changes in market interest rates.

Changes in loan prepayment speeds, which often occur when interest rates change, impact the value of our mortgage servicing rights, possibly adversely. Also, the underlying value of assets under lease or securing an obligation generally decreases due to increases in supply or decreases in demand for the asset or deterioration in the condition of the asset. This could negatively impact the ability to collect fully on the secured obligation.

In many cases, we mark our assets and liabilities to market and recognize such changes either through net income or OCI. Thus, gains or losses on these assets and liabilities can have a direct impact on our results of operations, unless we have effectively hedged our exposures. We may need to record losses in the value of financial assets even where our expectation of realizing the face value of the underlying instrument has not changed. Other assets and liabilities are not market to market. As a result, our balance sheet does not precisely represent the fair market value of our financial assets and liabilities.

In addition, asset management revenue is earned primarily based on a percentage of the value of the assets being managed and thus is impacted by general changes in market valuations. Thus, although we are not directly impacted by changes in the value of such assets, decreases in the value of those assets would affect related Noninterest income.

For a discussion of the risks presented by the COVID-19 pandemic to the values of financial assets, see the Risk Factor headed "The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance."

Risks Related to Estimates and Assumptions

Our asset and liability valuations and the determination of the amount of loss allowances and impairments taken on our assets are highly subjective. Inaccurate estimates could materially impact our results of operations or financial position.

We must use estimates, assumptions and judgments when assets and liabilities are measured and reported at fair value. Assets and liabilities carried at fair value inherently result in a higher degree of financial statement volatility. Changes in underlying factors or assumptions in any of the areas underlying our estimates could materially impact our future financial condition and results of operations. During periods of market disruption, it would be difficult to value certain assets if trading becomes less frequent and/or market data becomes less observable. There may be certain asset classes that were historically traded in active markets with significant observable data that rapidly become illiquid due to market volatility, a loss in market confidence or other factors. In addition, we have assets and liabilities carried at fair value that are estimated using unobservable inputs that are significant to the fair value of the assets or liabilities. The valuation of any asset or liability substantially based on unobservable inputs is necessarily less reliable than those based on active trading markets. Further, rapidly changing and unprecedented market conditions in any particular market could materially impact the valuation of assets as reported within our consolidated financial statements. Our ability to hedge exposure is in part dependent on our ability to value the related assets or liabilities.

The determination of the amount of loss allowances and asset impairments varies by asset type and is based upon our periodic evaluation and assessment of known and inherent risks associated with the respective asset class. Management updates its evaluations regularly and reflects changes in allowances and impairments in operations as such evaluations are revised. Although we have policies and procedures in place to determine loss allowance and asset impairments, due to the subjective nature of this area, the level of impairments taken and allowances reflected in our financial statements may not accurately reflect the actual level of risk and the amount of future losses.

There are risks resulting from the extensive use of models in our business.

We rely on quantitative models to measure risks and to estimate many financial values. We use models throughout much of our business, relying on them for much of our decision making. Examples of areas we use models include determining the pricing of various products, grading loans and extending credit, measuring interest rate and other market risks, predicting or estimating losses, assessing capital adequacy, and calculating economic and regulatory capital levels. We also use models to estimate the value of financial instruments and balance sheet items. In particular, we depend significantly on complex models for credit loss accounting under CECL, many of which have only been in use for a relatively short period of time.

Models generally evaluate the performance of various factors under anticipated future conditions, relying on historical data to help build the model and in part on assumptions as to the future, often with respect to macro-economic conditions, in order to generate the output. Poorly designed or implemented models, including in the choice of relevant historical data or future-looking assumptions, present the risk that our business decisions based on information incorporating model output will be adversely affected due to the inadequacy of that information. Also, information we provide to the public or to our regulators based on poorly designed or implemented models could be inaccurate or misleading. Some of the decisions that our regulators make, including those related to capital distributions to our shareholders, would likely be affected adversely if they perceive that the quality of the relevant models used is insufficient.

Risks Related to Our Need for Customers

Our success depends on our ability to attract and retain customers for our products and services.

Our performance is subject to risks associated with declines in customer demand for our products and services. As a result of the nature of those products and services, we are particularly at risk for losses of economic confidence or customer trust in us. For a

discussion of the risks related to declines in demand for our products and services as a result of the COVID-19 pandemic, see the Risk Factor headed "The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance."

Economic and market developments may affect consumer and business confidence levels. If customers lose confidence due to concerns regarding the economy, the demand for our products and services could suffer. We may also fail to attract or retain customers if we are unable to develop and market products and services that meet evolving customer needs or demands or if we are unable to deliver them effectively and securely to our customers. This is particularly true to the extent that our competitors are better able to do so.

If we fail to attract and retain customers, demand for our loans and other financial products and services could decrease and we could experience adverse changes in payment patterns. We could lose interest income from a decline in credit usage and noninterest income from a decline in product sales, investments and other transactions.

Our customers could remove money from checking, savings or other types of deposit accounts with us in favor of other banks or other types of investment products. Deposits are a low cost source of funds for us. Therefore, losing deposits could increase our funding costs and reduce our net interest income.

Our ability to attract and retain customer deposits is impacted by the levels of interest rates, as customers balance the benefits of bank accounts such as deposit insurance and some of the convenience associated with more traditional banking products against the possibility of higher yields from other investments. In general, if the spread between the rates we offer and those offered by alternatives to bank accounts widens, customers are often willing to forego the benefits of bank accounts for higher returns elsewhere. In such circumstances, we would need either to increase rates to levels that are seen as competitive or lose customers, in either case with a negative impact to net interest income. Loss of customers could also harm noninterest income by decreasing fee-bearing transaction volume. In addition, when rates are higher, customers tend to shift deposits from noninterest-bearing accounts to interest-bearing ones, thereby negatively impacting net interest income.

Our customers increasingly use third party financial applications that are expected to interface with their PNC accounts. This use leads to the risk that issues with respect to the effective functioning of that interface, regardless of cause, could result in a loss of customers as they seek banking relationships that work better with these other applications.

News or other publicity that harms our reputation, or harms the reputation of our industry generally, also could cause a loss of customers or a reduction in the extent to which customers do business with us. This is described further in the Risk Factor headed "We are at risk for an adverse impact on our business due to damage to our reputation."

In our asset management business, investment performance is an important factor influencing the level of assets that we manage. Poor investment advice or performance could hurt revenue and growth as existing clients might withdraw funds in favor of better performing products. Additionally, the ability to attract funds from existing and new clients might diminish. Overall economic conditions may limit the amount that customers are able or willing to invest as well as the value of the assets they do invest. The failure or negative performance of products of other financial institutions could lead to a loss of confidence in similar products offered by us without regard to the performance of our products. Such a negative contagion could lead to withdrawals, redemptions and liquidity issues in such products and have an adverse impact on our assets under management and asset management revenues and earnings.

We are at risk for an adverse impact on our business due to damage to our reputation.

Our ability to compete effectively, to attract and retain customers and employees, and to grow our business is dependent on maintaining our reputation and having the trust of our customers and employees. Many types of developments, if publicized, can negatively impact a company's reputation with adverse consequences to its business.

Financial services companies are highly vulnerable to reputational damage when they are found to have harmed customers, particularly retail customers, through conduct that is seen as illegal, unfair, deceptive, abusive, manipulative or otherwise wrongful. There also may be reputational damage from human error or systems failures viewed as having harmed customers but not involving misconduct, including negative perceptions regarding our ability to maintain the security of our technology systems and protect client data. The reputational impact is likely greater to the extent that the bad conduct, error or failure are pervasive, long-standing or affect a significant number of customers, particularly retail consumers. The negative impact of such reputational damage on our business may be disproportionate to the actual harm caused to customers. It may be severe even if we fully remediate any harm suffered by our customers. Furthermore, because we conduct most of our businesses under the "PNC" brand, negative public opinion about one business could also affect our other businesses. In addition, we could suffer reputational harm and a loss of customer trust as a result of conduct of others in the industry even where we have not engaged in the conduct. We use third parties to help in many aspects of our business, with the risk that their conduct can affect our reputation regardless of the degree to which we are responsible for it.

To an increasing extent, financial services companies, including PNC, are facing criticism from social and environmental activists, with accompanying reputational risk. Activists target companies in our industry, including PNC, for engaging in business with specific customers or with customers in particular industries, where the customers' activities, even if legal, are perceived as having harmful impacts on matters such as environment, consumer health and safety, or society at large. In addition, other activities target companies in our industry, including PNC, seeking increased transparency and action with respect to diversity and inclusion (including pay equity) and political activities. Activist criticism has come in many forms, including protests at PNC facilities. PNC, together with many other financial services companies, have in recent years been criticized for financing companies engaged in, for example, extraction and distribution of fossil fuels, manufacture of nuclear and other weapons (including personal firearms), private prisons, and border control activities. Many of these issues are divisive without broad agreement as to the appropriate steps a company such as PNC should take and often with strong feelings on both sides. As a result, however we respond to such criticism, we expose ourselves to the risks that current or potential customers decline to do business with us or current or potential employees refuse to work for us. This can be true regardless of whether we are perceived by some as not having done enough to address activist concerns or by others as having inappropriately yielded to activist pressures. Activist pressure can also be a factor in decisions as to which business opportunities and customers we pursue, potentially resulting in foregone profit opportunities. The OCC has requested comment on a proposed rule that would prohibit large national banks, such as PNC Bank, from declining to provide credit or other products or services to customers engaged in lawful activities except fo

The speed with which information now moves through social media and non-mainstream news sources on the internet means that negative information about PNC can rapidly have a broadly adverse impact on our reputation. This is true whether or not the information is accurate. Once information has gone viral, it can be hard to counter it effectively, either by correcting inaccuracies or communicating remedial steps taken for actual issues. The potential impact of negative information going viral means that material reputational harm can result from a single discrete or isolated incident.

We are also subject to the risk of reputational harm resulting from conduct of persons identified as our employees but acting outside of the scope of their employment, including through their activities on personal social media.

We operate in a highly competitive environment in terms of the products and services we offer and the geographic markets in which we conduct business, as well as the labor markets where we compete for talented employees.

We are subject to intense competition both from other financial institutions and from non-bank entities, including financial technology companies (often referred to as FinTech). In many cases, non-bank entities can engage in many activities similar to ours without being subject to the same types of regulation, supervision and restrictions as are applicable to banks. The competition we face is described in Item 1 of this Report under "Competition."

Consolidation in our industry, including among smaller banks combining to form more competitive larger ones and between banks and non-bank entities, could result in PNC facing more intense competition, particularly in impacted regions or with respect to particular products.

Another increasingly competitive factor in the financial services industry is the ability to attract and retain talented and diverse employees across many of our businesses and support areas. This factor presents greater risk when we are expanding into new markets, developing new product lines, or significantly enhancing staffing in certain areas, particularly technology. This competition leads to increased expenses in affected business areas. In addition, the transition to increased work-from-home, which is likely to survive the COVID-19 pandemic for many companies, may exacerbate the challenges of attracting and retaining talented and diverse employees as job markets may be less constrained by physical geography. Limitations on the manner in which regulated financial institutions can compensate their officers and employees, including those contained in pending rule proposals implementing requirements of Dodd-Frank, may make it more difficult for regulated financial institutions, including PNC, to compete with unregulated companies for talent.

A failure to adequately address the competitive pressures we face could make it harder for us to attract and retain customers across our businesses. On the other hand, meeting these competitive pressures could require us to incur significant additional expense or to accept risk beyond what we would otherwise view as desirable under the circumstances. In addition, in our interest rate sensitive businesses, competitive pressures to increase rates on deposits or decrease rates on loans could reduce our net interest margin, negatively impacting our net interest income.

Risks Related to Other Operational Issues

We depend on the effectiveness and integrity of employees, and the systems and controls for which they are responsible, to manage operational risks.

We are a large company that offers a wide variety of products and services to a broad and diverse group of customers. We rely on our employees to design, manage, and operate our systems and controls to assure that we properly enter into, record and manage

The PNC Financial Services Group, Inc. - 2020 Form 10-K 31

processes, transactions and other relationships with customers, suppliers and other parties with whom we do business. In some cases, we rely on employees of third parties to perform these tasks. We also depend on employees and the systems and controls for which they are responsible to assure that we identify and mitigate the risks that are inherent in our relationships and activities. These concerns are increased when we change processes or procedures, introduce new products or services, or implement new technologies, as we may fail to adequately identify or manage operational risks resulting from such changes.

As a result of our necessary reliance on employees, whether ours or those of third parties, to perform these tasks and manage resulting risks, we are thus subject to human vulnerabilities. These range from innocent human error to misconduct or malfeasance, potentially leading to operational breakdowns or other failures. Our controls may not be adequate to prevent problems resulting from human involvement in our business, including risks associated with the design, operation and monitoring of automated systems. We may also fail to adequately develop a culture of risk management among our employees.

Errors by our employees or others responsible for systems and controls on which we depend and any resulting failures of those systems and controls could result in significant harm to PNC. This could include customer remediation costs, regulatory fines or penalties, litigation or enforcement actions, or limitations on our business activities. We could also suffer damage to our reputation, as described under "We are at risk for an adverse impact on our business due to damage to our reputation."

We use automation, machine learning, artificial intelligence and robotic process automation tools to help reduce some risks of human error. Nonetheless, we continue to rely on many manual processes to conduct our business and manage our risks. In addition, use of automation tools does not eliminate the need for effective design and monitoring of their operation to make sure they operate as intended. Enhanced use of automation may present its own risks. These tools are dependent on the quality of the data used by the tool to learn and enhance the process for which it is responsible. Not only bad or missing data but also anomalous data can adversely affect the functioning of such tools. It is possible that humans in some cases are better able than highly automated tools to identify that anomalous data is being used or that results are themselves anomalous.

We rely on third party vendors, service providers and other counterparties to help support many aspects of our business. When we do so, our direct control of activities related to our business is reduced, which could introduce risk.

Our use of third parties to support our business needs typically means that we do not directly control the activities we are having them perform. Risks can arise through greater complexity and inadequate performance by the third party, specifically where that performance could affect us or our customers. Many of the kinds of risks presented by activities performed by third parties are described elsewhere in these Risk Factors. For example, we use outside companies to assist us in processing some confidential customer or employee information. In such a case, a cyber attack on such a company may result in access to our customers' or employees' information. We are also vulnerable, including to regulatory penalties, where an outside company fails to comply with legal requirements relevant to its work on our behalf. We may in any such circumstance suffer financial losses, legal consequences and injury to our reputation. Even if the other company makes us whole for financial losses, which is not necessarily the case, it is unlikely that it would be able to restore any injury to our reputation. As a result, the use of third parties to assist in our business activities heightens the risks to us inherent in those activities.

Other Key Risks

We are at risk for the impact of adverse results in legal proceedings.

Many aspects of our business involve substantial risk of legal liability. We have been named or threatened to be named as defendants in various lawsuits arising from our business activities. In addition, we are regularly the subject of governmental investigations and other forms of regulatory inquiry. We also are at risk when we have agreed to indemnify others for losses related to legal proceedings they face, such as in connection with the sale of a business or assets by us. The results of these legal proceedings could lead to significant monetary damages or penalties, restrictions on the way in which we conduct our business, or reputational harm.

Although we establish accruals for legal proceedings when information related to the loss contingencies represented by those matters indicates both that a loss is probable and that the amount of loss can be reasonably estimated, we do not have accruals for all legal proceedings where we face a risk of loss. In addition, due to the inherent subjectivity of the assessments and unpredictability of the outcome of legal proceedings, amounts accrued often do not represent the ultimate loss to us from the legal proceedings in question. Thus, our ultimate future losses may be higher, and possibly significantly so, than the amounts accrued for legal loss contingencies. We discuss further the unpredictability of legal proceedings and describe certain of our pending legal proceedings in Note 21 Legal Proceedings in the Notes To Consolidated Financial Statements in Item 8 of this Report.

We grow our business in part by acquiring other financial services businesses from time to time. Sometimes these are businesses with technologies or other assets valuable to us even if they do not themselves provide financial services to customers. These acquisitions present a number of risks and uncertainties related both to the acquisition transactions themselves and to the integration of the acquired businesses into PNC after closing.

Acquisitions of other companies or of financial assets and related deposits and other liabilities present risks and uncertainties to us in addition to those presented by the nature of the business acquired. These risks and uncertainties are found in the pending acquisition of BBVA, including its U.S. banking subsidiary, BBVA USA, and its integration into PNC following closing.

Acquisitions may be substantially more expensive or take longer to complete than anticipated. This risk includes unanticipated costs incurred in connection with the integration of the acquired business. Anticipated benefits (such as cost savings from synergies or strategic gains from being able to offer enhanced product sets) may take longer or require greater resources to achieve. In some cases, it may prove impossible to realize them in their entirety. The success of an acquisition generally is at least partially dependent on our ability to retain and expand upon the acquired company's customer base. It is also frequently subject to risks related to human capital, including, if being retained, the quality of leadership of the acquired company.

Specific factors that can affect the ultimate results from acquisitions include, depending on the nature of the business acquired, the following:

- If the acquisition includes loan portfolios, the extent of actual credit losses and the required allowance for credit losses following completion of the acquisition.
- If a significant aspect of the value of an acquired business is intellectual property, the extent to which the intellectual property may be protected and commercialized by PNC following the acquisition.
- If the acquisition involves entering into new businesses or geographic or other markets, potential limitations on our ability to take advantage of these opportunities as a result of our inexperience with respect to them.
- The results of litigation and governmental investigations that may be pending at the time of the acquisition or be filed or commenced thereafter, as a result of an acquisition or otherwise. It is often hard to predict the results of such legal proceedings. It may also be hard to anticipate what legal proceedings may be started following an acquisition based on the prior activities of the acquired company (and its predecessors).
- If the acquired company depends on models for, among other things, capital planning and credit loss accounting, we may have to rely on the acquired company's models for a period of time post-closing prior to integrating the acquired company's data into PNC's models. The acquired company's models may be designed or implemented in a manner different than the models used by PNC. As a result, incorporation of the acquired company's data into our models could materially impact our results of operations or financial position to the extent that our estimates based on the acquired company's models prove to be inaccurate.
- The acquired company may operate under enterprise risk management systems, policies and procedures that are different and less mature than those of PNC, and we
 may need to rely on the acquired company's enterprise risk management systems policies and procedures for a period of time after acquisition, which might limit
 PNC's ability to identify, monitor, manage and report risks for a period of time.

Our ability to analyze the risks presented by prospective acquisitions, as well as our ability to prepare in advance of closing for integration, depends, in part, on the information we can gather with respect to the business we are acquiring. We may not have access to all of the information that would be desirable. Our pre-acquisition review of the business also impacts our ability to prepare for and execute on the integration of an acquired business. An acquired company's financial and business information and data may not be maintained at the level of detail or comprehensiveness to meet all of our post-acquisition needs.

Prospective acquisition targets are also subject to their own risks that we cannot manage or control prior to closing and that may impact their business, financial condition, results of operations and cash flows could be adversely affected after closing to the extent that any such risks result in non-indemnified losses for which we are responsible.

Completing attractive acquisition opportunities generally requires various governmental and regulatory approvals and consents prior to closing. These authorities have broad discretion, and regulatory approvals could be delayed, restrictively conditioned or denied, including due to regulatory issues we (or the target company) have, or may have, under any of the numerous governmental regulations to which we (or they) are subject. Moreover, as a condition to approval, governmental authorities may impose requirements, require divestitures or place restrictions on the conduct of the business of the combined company, which could limit the benefits of the acquisition or result in delay or the failure to close the acquisition. Significant acquisitions by large banks also often attract public scrutiny, which may result in negative publicity that adversely affects our reputation. Our ability to make large acquisitions may be negatively impacted as well by changes in leadership at the regulatory agencies responsible for reviewing or approving the transaction, changes in regulatory rules or standards or the application of those rules or standards, or future regulatory initiatives designed to limit systemic risk and the potential for a financial institution to become "too big to fail."

The PNC Financial Services Group, Inc. - 2020 Form 10-K 33

Our business and financial performance could be adversely affected, directly or indirectly, by disasters, natural or otherwise, by terrorist activities, by international hostilities or by domestic civil unrest.

Neither the occurrence nor the potential impact of disasters (whether caused naturally or by human conduct), pandemics, terrorist activities, international hostilities and domestic civil unrest can be predicted. However, these occurrences could adversely impact us, for example, by causing significant damage to our facilities or preventing us from conducting our business in the ordinary course. Also, their impact on our borrowers, depositors, other customers, suppliers or other counterparties could result in indirect adverse effects on us. Other indirect adverse consequences from disasters, pandemics, terrorist activities, international hostilities or domestic civil unrest could result from impacts to the financial markets, the economy in general or in any particular region, or key parts of the infrastructure (such as the power grid) on which we and our customers rely. These types of indirect effects, whether specific to our counterparties or more generally applicable, could lead, for example, to an increase in delinquencies, bankruptcies or defaults that could result in our experiencing higher levels of nonperforming assets, net charge-offs and provisions for credit losses. They could also cause a reduction in demand for lending or other services that we provide. To the extent that climate change increases the frequency or severity of adverse weather conditions, the impact from these types of natural disasters on us or our customers would be worse. The specific risks associated with the COVID-19 pandemic are discussed in the Risk Factor headed "The COVID-19 pandemic has had and is likely to continue to have an adverse effect, possibly materially, on our overall business and financial performance."

Our ability to mitigate the adverse consequences of such occurrences is in part dependent on the quality of our resiliency planning. This includes our ability to anticipate the nature of any such event that might occur. The adverse impact of disasters, pandemics, terrorist activities, international hostilities or domestic civil unrest also could be increased to the extent that there is a lack of preparedness on the part of national or regional emergency responders or on the part of other organizations and businesses that we deal with, many of which we depend on but have limited or no control over.

ITEM 1B – UNRESOLVED STAFF COMMENTS

There are no SEC staff comments regarding PNC's periodic or current reports under the Exchange Act that are pending resolution.

ITEM 2 – PROPERTIES

Our executive and primary administrative offices are currently located at The Tower at PNC Plaza, Pittsburgh, Pennsylvania. The 33-story structure is owned by PNC Bank, National Association.

We own or lease numerous other premises for use in conducting business activities, including operations centers, offices, and branches and other facilities. We consider the facilities owned or occupied under lease by our subsidiaries to be adequate for the purposes of our business operations. We include here by reference the additional information regarding our properties in Note 7 Leases and Note 8 Premises, Equipment and Leasehold Improvements in the Notes To Consolidated Financial Statements in Item 8 of this Report.

ITEM 3 – LEGAL PROCEEDINGS

See the information set forth in Note 21 Legal Proceedings in the Notes To Consolidated Financial Statements in Item 8 of this Report, which is incorporated here by reference.

ITEM 4 – MINE SAFETY DISCLOSURES

Not applicable

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Information regarding each of our executive officers as of February 19, 2021 is set forth below. Executive officers do not have a stated term of office. Each executive officer has held the position or positions indicated or another executive position with the same entity or one of its affiliates for the past five years unless otherwise indicated below.

Name	Age	Position with PNC	Year Employed (a)
Carole L. Brown	56	Executive Vice President and Head of Asset Management Group	2019
Richard K. Bynum	50	Executive Vice President and Chief Corporate Responsibility Officer	2005
William S. Demchak	58	Chairman, President and Chief Executive Officer (b)	2002
Kieran J. Fallon	54	Executive Vice President and Chief Risk Officer	2011
Deborah Guild	52	Executive Vice President and Head of Enterprise Technology	2013
Michael J. Hannon	64	Executive Vice President and Chief Credit Officer	1982
Vicki C. Henn	52	Executive Vice President and Chief Human Resources Officer	1994
Gregory B. Jordan	61	Executive Vice President, General Counsel, Chief Administrative Officer and Head of Regulatory and Government Affairs	2013
Stacy M. Juchno	45	Executive Vice President and General Auditor	2009
Ganesh Krishnan	45	Executive Vice President and Enterprise Chief Information Officer	2008
Karen L. Larrimer	58	Executive Vice President, Chief Customer Officer and Head of Retail Banking	1995
Michael P. Lyons	50	Executive Vice President and Head of Corporate & Institutional Banking	2011
E William Parsley, III	55	Executive Vice President and Chief Operating Officer	2003
Robert Q. Reilly	56	Executive Vice President and Chief Financial Officer	1987
Gregory H. Kozich	57	Senior Vice President and Controller	2010

- (a) Where applicable, refers to year employed by predecessor company.
- (b) Mr. Demchak also serves as a director. Biographical information for Mr. Demchak is included in "Election of Directors (Item 1)" in our proxy statement for the 2021 annual meeting of shareholders. See Item 10 of this Report.

Carole L. Brown was appointed Executive Vice President and Head of Asset Management Group in July 2020. Previously, she was the chief change and risk officer for PNC's Asset Management Group and Corporate & Institutional Banking businesses. Prior to joining PNC in 2019, she served as chief financial officer for the City of Chicago from May 2015 to May 2019. Prior to her work for the City of Chicago, Ms. Brown had a more than 25-year career as one of the leading municipal finance investment bankers in the country.

Richard K. Bynum was appointed Executive Vice President and Chief Corporate Responsibility Officer in July 2020. Prior to his appointment, he served as regional president for PNC's Greater Washington market from 2017 to 2020. He previously served as a member of PNC's retail executive leadership team, where he led the Business Banking division. Prior to that, he served as the Greater Washington retail market executive from 2010 to 2014.

Kieran J. Fallon was appointed Chief Risk Officer in February 2021. Prior to his appointment, he served as PNC's Senior Deputy General Counsel with legal oversight responsibility for PNC's government, regulatory affairs and enterprise risk, and as PNC's primary liaison with PNC's regulatory bodies. Previously, he served as PNC's chief counsel of Regulatory Affairs and briefly as acting general counsel.

Deborah Guild was appointed Executive Vice President and Head of Enterprise Technology in November 2020. Prior to her appointment, she was PNC's chief security officer. Previously, she served as PNC's chief technology officer. Prior to joining PNC in October 2013, Ms. Guild spent 21 years at Bank of America where she most recently served as chief technology officer of enterprise functions and end user computing.

Michael J. Hannon has served as Executive Vice President since 2009, prior to which he was a Senior Vice President. He has served as Chief Credit Officer since 2001 and was Interim Chief Risk Officer from December 2011 to February 2012.

Vicki C. Henn has served as Executive Vice President and Chief Human Resources Officer of PNC since July 2014. Ms. Henn joined PNC in 1994 and has held numerous management positions. Prior to being named to her current position, Ms. Henn was a Senior Vice President, responsible for Human Resources for Retail Banking.

Gregory B. Jordan joined PNC in 2013 as Executive Vice President, General Counsel and Head of Regulatory and Government Affairs. In February 2016, Mr. Jordan was also appointed Chief Administrative Officer. Prior to joining PNC, he served as the Global Managing Partner for the last 13 years of his 29 year tenure at Reed Smith LLP.

The PNC Financial Services Group, Inc. – 2020 Form 10-K 35

Stacy M. Juchno has served as Executive Vice President and General Auditor of PNC since April 2014 and previously served as Senior Vice President and Finance Governance and Oversight Director.

Ganesh Krishnan was appointed Executive Vice President and Enterprise Chief Information Officer in November 2020. Prior to being named to his current role, he was chief information officer for PNC's Corporate & Institutional Banking business and Staff Service Technology starting in 2017. Mr. Krishnan joined PNC in 2008 as a Technology Infrastructure Services manager and has held a variety of technology leadership roles with PNC.

Karen L. Larrimer was appointed Executive Vice President in 2013 and became head of Retail Banking in 2016. She has also served as Chief Customer Officer since April 2014, prior to which she served as Chief Marketing Officer.

Michael P. Lyons has been an Executive Vice President since 2011 and is head of Corporate & Institutional Banking. Prior to joining PNC in October 2011, from May 2010 until October 2011, Mr. Lyons was head of corporate development and strategic planning for Bank of America.

E William Parsley, III has served as Executive Vice President since 2009 and was appointed Chief Operating Officer in February 2018. Previously, he served as Treasurer and Chief Investment Officer starting in 2004 and head of Consumer Lending starting in the spring of 2016.

Robert Q. Reilly was appointed Chief Financial Officer in 2013. He served as the head of PNC's Asset Management Group from 2005 until April 2013. Previously, he held numerous management roles in both Corporate Banking and Asset Management. He was appointed Executive Vice President in 2009.

Gregory H. Kozich has served as Controller of PNC since 2011. He was appointed as Senior Vice President in 2010. Prior to joining PNC in 2010, Mr. Kozich was with the Federal National Mortgage Association from 2005 until late 2010, most recently serving as its corporate controller.

PART II

${\tt ITEM\,5-MARKET\,FOR\,REGISTRANT'S\,COMMON\,EQUITY,\,RELATED\,STOCKHOLDER\,MATTERS\,AND\,ISSUER\,PURCHASES\,OF\,EQUITY\,SECURITIES}$

Our common stock is listed on the New York Stock Exchange and is traded under the symbol "PNC." At the close of business on February 12, 2021, there were 49,295 common shareholders of record.

Holders of PNC common stock are entitled to receive dividends when declared by our Board of Directors out of funds legally available for this purpose. Our Board of Directors may not pay or set apart dividends on the common stock until dividends for all past dividend periods on any series of outstanding preferred stock and certain outstanding capital securities issued by the parent company have been paid or declared and set apart for payment. The Board of Directors presently intends to continue the policy of paying quarterly cash dividends. The amount of any future dividends will depend on economic and market conditions, our financial condition and operating results, and other factors, including contractual restrictions and applicable government regulations and policies (such as those relating to the ability of bank and non-bank subsidiaries to pay dividends to the parent company and regulatory capital limitations). PNC's ability to pay or increase dividends or otherwise return capital to shareholders is subject to PNC's compliance with its SCB, which is determined at least annually through the Federal Reserve's CCAR process as described in the Supervision and Regulation section in Item 1 of this Report. The Federal Reserve also has imposed additional limitations on capital distributions through the first quarter of 2021 by CCAR participating bank holding companies (including PNC) and may extend these limitations, potentially in modified form. PNC announced on March 16, 2020 a temporary suspension of our common stock repurchase program in conjunction with the Federal Reserve's effort to support the U.S. economy during the pandemic and we continued the suspension through the fourth quarter of 2020, with the exception of employee benefit-related purchases in the third quarter. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases in the third quarter. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases in the third quar

For further information concerning dividend restrictions and other factors that could limit our ability to pay dividends, as well as restrictions on loans, dividends or advances from bank subsidiaries to the parent company, see the Supervision and Regulation section in Item 1, Item 1A Risk Factors, the Liquidity and Capital Management portion of the Risk Management section in Item 7, and Note 10 Borrowed Funds, Note 12 Equity and Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report, which we include here by reference.

We include here by reference the information regarding our compensation plans under which PNC equity securities are authorized for issuance as of December 31, 2020 in the table (with introductory paragraph and notes) in Item 12 of this Report.

Our stock transfer agent and registrar is: Computershare 462 South 4th Street, Suite 1600 Louisville, KY 40202 800-982-7652 www.computershare.com/pnc

Registered shareholders may contact Computershare regarding dividends and other shareholder services.

We include here by reference the information that appears under the Common Stock Performance Graph caption at the end of this Item 5.

Unregistered Sales of Equity Securities

None.

Equity Security Repurchases

Details of our repurchases of PNC common stock during the fourth quarter of 2020 are included in the following table:

In thousands, except per share data

	Av	verage price paid per	Total shares purchased as part of publicly	Maximum number of shares that may yet be purchased
2020 period	Total shares purchased (a)	share	announced programs (b)	under the programs (b)
October 1 – 31	9 \$	111.63		75,109
November $1 - 30$				75,109
December 1 – 31				75,109
Total	9 \$	111.63	_	

- (a) Includes PNC common stock purchased in connection with our various employee benefit plans generally related to forfeitures of unvested restricted stock awards and shares used to cover employee payroll tax withholding requirements. Note 17 Employee Benefit Plans and Note 18 Stock Based Compensation Plans in the Notes To Consolidated Financial Statements in Item 8 of this Report include additional information regarding our employee benefit and equity compensation plans that use PNC common stock.
- (b) On April 4, 2019, our Board of Directors approved the establishment of a new stock repurchase program authorization in the amount of 100 million shares of PNC common stock, effective July 1, 2019. Under this authorization, repurchases may be made in open market or privately negotiated transactions, with the timing and exact amount of common stock repurchases depending on a number of factors including, among others, market and general economic conditions, regulatory capital considerations, alternative uses of capital, the potential impact on our credit ratings, and contractual and regulatory limitations, including the results of the supervisory assessment of capital adequacy and capital planning processes undertaken by the Federal Reserve as part of the CCAR process. In June 2019, we announced share repurchase programs of up to \$4.3 billion for the four quarter period beginning with the third quarter of 2019, in accordance with PNC's 2019 capital plan. In January 2020, we announced an increase to these programs to repurchase up to an additional \$1.0 billion in common shares through the end of the second quarter of 2020. PNC announced on March 16, 2020 a temporary suspension of our common stock repurchases in the third quarter, consistent with the extension of the Federal Reserve's special capital distribution restrictions. Under these programs we repurchased 11.0 million shares in 2020 and 25.9 million shares in 2019. A maximum amount of 75.1 million shares remained available for repurchase under the new stock program authorization at December 31, 2020. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases, during the period leading up to our pending BBVA transaction close date.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 37

Common Stock Performance Graph

This graph shows the cumulative total shareholder return (i.e., price change plus reinvestment of dividends) on our common stock during the five-year period ended December 31, 2020, as compared with: (1) a selected peer group as set forth below and referred to as the "Peer Group;" (2) an overall stock market index, the S&P 500 Index; and (3) a published industry index, the S&P 500 Banks. The yearly points marked on the horizontal axis of the graph correspond to December 31 of each year. The stock performance graph assumes that \$100 was invested on January 1, 2016 for the five-year period and that dividends were reinvested. The table below the graph shows the resultant compound annual growth rate for the performance period.

	Base Peri	iod		5-Year Compound Growth Rate				
	De	ec. 2015	Dec. 2016	Dec. 2017	Dec. 2018	Dec. 2019	Dec. 2020	
PNC	\$	100 \$	125.78 \$	158.43 \$	131.53 \$	185.32 \$	180.26	12.51 %
S&P 500 Index	\$	100 \$	111.95 \$	136.38 \$	130.39 \$	171.44 \$	202.96	15.21 %
S&P 500 Banks	\$	100 \$	124.31 \$	152.34 \$	127.30 \$	179.03 \$	154.41	9.08 %
Peer Group	\$	100 \$	132.72 \$	158.48 \$	125.50 \$	170.99 \$	154.90	9.15 %

The Peer Group for the preceding chart and table above consists of the following companies: Bank of America Corporation; Capital One Financial Corporation; Citizens Financial Group, Inc.; Fifth Third Bancorp; JPMorgan Chase & Co.; KeyCorp; M&T Bank Corporation; Regions Financial Corporation; The PNC Financial Services Group, Inc.; Truist Financial Corporation; U.S. Bancorp; and Wells Fargo & Company. For Truist Financial Corporation, the preceding chart and table reflects historical BB&T Corporation data from December 2015 to December 2018. Historical data for SunTrust Banks, Inc. is not included as a part of Truist Financial Corporation in the preceding chart and table. This Peer Group was approved for 2020 by the Board of Directors' Personnel and Compensation Committee, and the Committee has approved the same peer group for 2021.

Each yearly point for the Peer Group is determined by calculating the cumulative total shareholder return for each company in the Peer Group from December 31, 2015 to December 31 of that year, or the last business day of that year (End of Month Dividend Reinvestment Assumed) and then using the median of these returns as the yearly plot point.

In accordance with the rules of the SEC, this section, captioned "Common Stock Performance Graph," is not incorporated by reference into any of our future filings made under the Securities Exchange Act of 1934 or the Securities Act of 1933. The Common Stock Performance Graph, including its accompanying table and footnotes, is not deemed to be soliciting material or to be filed under the Exchange Act or the Securities Act.

ITEM 6 – SELECTED FINANCIAL DATA

This Selected Financial Data should be reviewed in conjunction with the Consolidated Financial Statements and Notes included in Item 8 of this Report as well as the other disclosures in this Report concerning our historical financial performance, our future prospects and the risks associated with our business and financial performance.

Year ended December 31										
Dollars in millions, except per share data	-	2020		2019	i cai c	2018	J1	2017		2016
Summary of Operations										
Interest income	\$	11,307	\$	13,762	\$	12,582	\$	10,814	\$	9,652
Interest expense		1,361		3,797		2,861		1,706		1,261
Net interest income		9,946		9,965		9,721		9,108		8,391
Noninterest income		6,955		6,874		6,469		6,144		6,089
Total revenue		16,901		16,839		16,190		15,252		14,480
Provision for credit losses		3,175		773		408		441		433
Noninterest expense		10,297		10,574		10,296		10,398		9,476
Income from continuing operations before income taxes and noncontrolling interests		3,429		5,492		5,486		4,413		4,571
Income taxes from continuing operations		426		901		928		(185)		1,115
Net income from continuing operations		3,003		4,591		4,558		4,598		3,456
Income from discontinued operations before taxes		5,777		988		942		1,077		682
Income taxes from discontinued operations		1,222		161		154		287		153
Net income from discontinued operations		4,555		827		788		790		529
Net income		7,558		5,418		5,346		5,388		3,985
Less: Net income attributable to noncontrolling interests		41		49		45		50		82
Preferred stock dividends		229		236		236		236		209
Preferred stock discount accretion and redemptions		4		4		4		26		6
Net income attributable to common shareholders	\$	7,284	\$	5,129	\$	5,061	\$	5,076	\$	3,688
Per Common Share										
Basic earnings from continuing operations	\$	6.37	\$	9.59	\$	9.11	\$	8.87	\$	6.35
Basic earnings from discontinued operations	\$	10.62	\$	1.84	\$	1.68	\$	1.62	\$	1.07
Total basic earnings	\$	16.99	\$	11.43	\$	10.79	\$	10.49	\$	7.42
Diluted earnings from continuing operations	\$	6.36	\$	9.57	\$	9.06	\$	8.79	\$	6.27
Diluted earnings from discontinued operations	\$	10.60	\$	1.82	\$	1.65	\$	1.57	\$	1.03
Total diluted earnings	\$	16.96	\$	11.39	\$	10.71	\$	10.36	\$	7.30
Book value	\$	119.11	\$	104.59	\$	95.72	\$	91.94	\$	85.94
Cash dividends declared	\$	4.60	\$	4.20	\$	3.40	\$	2.60	\$	2.12
Effective tax rate from continuing operations (a)		12.4 %	ó	16.4 %	ó	16.9 %)	(4.2)%)	24.4 %
Performance Ratios from Continuing Operations										
Net interest margin (b)		2.53 %	ó	2.89 %	ó	2.97 %)	2.87 %)	2.73 %
Noninterest income to total revenue		41 %	ó	41 %	ó	40 %)	40 %)	42 %
Efficiency		61 %	ó	63 %	ó	64 %)	68 %)	65 %
Return on:										
Average common shareholders' equity		15.21 %	ó	11.50 %	ó	11.83 %)	12.09 %)	8.85 %
Average assets		1.68 %	ó	1.35 %	ó	1.41 %)	1.45 %)	1.10 %

The effective tax rates are generally lower than the statutory rate due to the relationship of pretax income to tax credits and earnings that are not subject to tax.

Net interest margin is the total yield on interest-earning assets minus the total rate on interest-bearing liabilities and includes the benefit from use of noninterest-bearing sources. To provide more meaningful comparisons of net interest margins, we use net interest income on a taxable-equivalent basis in calculating average yields used in the calculation of net interest margin by increasing the interest income earned on tax-exempt assets to make it fully equivalent to interest income earned on taxable investments. This adjustment is not permitted under GAAP in the Consolidated Income Statement. For additional information, see Reconciliation of Taxable-Equivalent Net Interest Income (Non-GAAP) Statistical Information (Unaudited) section in Item 8 of this Report.

	Year ended December 31									
Dollars in millions, except as noted		2020		2019		2018		2017		2016
Balance Sheet Highlights										
Assets	\$	466,679	\$	410,295	\$	382,315	\$	380,768	\$	366,380
Loans	\$	241,928	\$	239,843	\$	226,245	\$	220,458	\$	210,833
Allowance for loan and lease losses (a)	\$	5,361	\$	2,742	\$	2,629	\$	2,611	\$	2,589
Interest-earning deposits with banks (b)	\$	85,173	\$	23,413	\$	10,893	\$	28,595	\$	25,711
Investment securities	\$	88,799	\$	86,824	\$	82,701	\$	76,131	\$	75,947
Loans held for sale	\$	1,597	\$	1,083	\$	994	\$	2,655	\$	2,504
Equity investments	\$	6,052	\$	5,176	\$	4,878	\$	3,816	\$	3,842
Asset held for sale (c)			\$	8,558	\$	8,016	\$	7,576	\$	6,886
Mortgage servicing rights	\$	1,242	\$	1,644	\$	1,983	\$	1,832	\$	1,758
Goodwill	\$	9,233	\$	9,233	\$	9,218	\$	9,173	\$	9,103
Other assets	\$	30,999	\$	32,202	\$	34,408	\$	27,894	\$	27,506
Noninterest-bearing deposits	\$	112,637	\$	72,779	\$	73,960	\$	79,864	\$	80,230
Interest-bearing deposits	\$	252,708	\$	215,761	\$	193,879	\$	185,189	\$	176,934
Total deposits	\$	365,345	\$	288,540	\$	267,839	\$	265,053	\$	257,164
Borrowed funds (d)	\$	37,195	\$	60,263	\$	57,419	\$	59,088	\$	52,706
Allowance for unfunded lending related commitments (a)	\$	584	\$	318	\$	285	\$	297	\$	301
Total shareholders' equity	\$	54,010	\$	49,314	\$	47,728	\$	47,513	\$	45,699
Common shareholders' equity	\$	50,493	\$	45,321	\$	43,742	\$	43,530	\$	41,723
Accumulated other comprehensive income (loss)	\$	2,770	\$	799	\$	(725)	\$	(148)	\$	(265)
Period-end common shares outstanding (millions)		424	Ť	433		457	-	473		485
Loans to deposits		66 %	ó	83 %	6	84 %	ń	83 %		82 %
Client Assets (billions)										
Discretionary client assets under management	\$	170	\$	154	\$	148	\$	151	\$	137
Nondiscretionary client assets under administration		154		143		124		131		120
Total client assets under administration		324		297		272		282		257
Brokerage account client assets		59		54		47		49		44
Total	\$	383	\$	351	\$	319	\$	331	\$	301
Capital Ratios (e) (f)										
Basel III										
Common equity Tier 1		12.2 %	ó	9.5 %	6	9.6 %	, 0	9.8 %)	10.0 %
Common equity Tier 1 fully implemented (g)		11.8 %	ó	N/A	A	N/A		N/A		N/A
Tier 1 risk-based		13.2 %	ó	10.7 %	6	10.8 %	ó	N/A		N/A
Total capital risk-based (h)		15.6 %	ó	12.7 %	6	13.0 %		N/A		N/A
Leverage		9.5 %	ó	9.1 %	6	9.4 %	ó	9.6 %		9.8 %
Supplementary leverage		9.9 %	ó	7.6 %	6	7.8 %	ó	8.0 %		8.3 %
Other Selected Ratios										
Dividend payout		27.2 %	ó	36.7 %	6	31.5 %	ó	24.7 %		29.0 %
Common shareholders' equity to total assets		10.8 %	ó	11.0 %	6	11.4 %	Ó	11.4 %)	11.4 %
Average common shareholders' equity to average assets		10.7 %		11.1 %		11.3 %		11.3 %		11.5 %
Selected Statistics										
Employees		51,257		51,918		53,063		52,906		52,006
Retail Banking branches		2,162		2,296		2,372		2,459		2,520
ATMs		8,900		9,091		9,162		9,051		9,024

Amounts at December 31, 2020 reflect the impact of adopting ASU 2016-13, Financial Instruments & Fedit Losses, which is commonly referred to as the CECL standard and our transition from an incurred loss methodology for these reserves to an expected credit loss methodology. Refer to Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional detail on the adoption of this standard. Includes balances held with the Federal Reserve Bank of Cleveland of S84.9 billion, 523.2 billion, 523.2 billion as of December 31, 2020, 2019, 2018, 2017 and 2016, respectively. Represents our held for sale investment in BlackRock. In the second quarter of 2020, PNC divested its entire investment in BlackRock investment balances have been reclassified to the Asset held for sale line in accordance (a)

Includes long-term borrowings of \$29.3 billion, \$33.2 billion, \$33.2 billion, \$43.1 billion and \$38.3 billion for 2020, 2019, 2018, 2017 and 2016, respectively. Borrowings which mature more than one year after December 31, 2020 are considered to be (d)

Includes long-term orrowings of \$29.5 billion, \$35.2 billion, \$35.4 billion and \$38.3 billion and \$38.

with ASC 205-20, Presentation of Financial Statements - Discontinued Operations. Refer to Note 1 Accounting Policies and Note 2 Acquisition and Divestiture Activity in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional details

the 2016 and 2017 fully phased-in ratios is included in the Transitional Basel III and Fully Phased-In Basel III Common Equity Tier 1 Capital Ratios (Non-GAAP) Statistical Information (Unaudited) section in Item 8 of this Report. The 2020 fully implemented CET1 ratio is calculated to reflect the full impact of CECL and excludes the benefits of the five-year transition provision.

The 2020, 2019 and 2018 Basel III Total capital risk-based ratios include nonqualifying trust preferred capital securities of \$40 million, \$60 million, and \$80 million, respectively, that are subject to a phase-out period that runs through 2021.

ITEM 7 – MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (MD&A)

EXECUTIVE SUMMARY

Key Strategic Goals

At PNC we manage our company for the long term. We are focused on the fundamentals of growing customers, loans, deposits and revenue and improving profitability, while investing for the future and managing risk, expenses and capital. We continue to invest in our products, markets and brand, and embrace our commitments to our customers, shareholders, employees and the communities where we do business.

We strive to serve our customers and expand and deepen relationships by offering a broad range of deposit, credit and fee-based products and services. We are focused on delivering those products and services to our customers with the goal of addressing their financial objectives and putting customers' needs first. Our business model is built on customer loyalty and engagement, understanding our customers' financial goals and offering our diverse products and services to help them achieve financial well-being. Our approach is concentrated on organically growing and deepening client relationships across our businesses that meet our risk/return measures.

We are focused on our strategic priorities, which are designed to enhance value over the long term, and consist of:

- Expanding our leading banking franchise to new markets and digital platforms,
- Deepening customer relationships by delivering a superior banking experience and financial solutions, and
- Leveraging technology to innovate and enhance products, services, security and processes.

Our capital priorities are to support customers and business investment, maintain appropriate capital in light of economic conditions, the Basel III framework and other regulatory expectations, and return excess capital to shareholders. For more detail, see the Supervision and Regulation section in Item 1 Business, the Capital Highlights portion of this Executive Summary and the Liquidity and Capital Management portion of the Risk Management section in this Item 7.

Key Factors Affecting Financial Performance

We face a variety of risks that may impact various aspects of our risk profile from time to time. The extent of such impacts may vary depending on factors such as the current business and economic conditions, political and regulatory environment and operational challenges. Many of these risks and our risk management strategies are described in more detail elsewhere in this Report.

Our success will depend upon, among other things, the following factors that we manage or control:

- Effectively managing capital and liquidity including:
 - Continuing to maintain and grow our deposit base as a low-cost stable funding source,
 - Prudent liquidity and capital management to meet evolving regulatory capital, capital planning, stress testing and liquidity standards, and
 - Actions we take within the capital and other financial markets.
- Execution of our strategic priorities,
- Management of credit risk in our portfolio,
- Our ability to manage and implement strategic business objectives within the changing regulatory environment,
- The impact of legal and regulatory-related contingencies,
- The appropriateness of reserves needed for critical accounting estimates and related contingencies, and
- The closing of the pending BBVA acquisition and integration of its business into PNC after closing.

Our financial performance is also substantially affected by a number of external factors outside of our control, including the following:

- Global and domestic economic conditions, including the length and extent of the economic impacts of the pandemic,
- The actions by the Federal Reserve, U.S. Treasury and other government agencies, including those that impact money supply and market interest rates,
- The level of, and direction, timing and magnitude of movement in, interest rates and the shape of the interest rate yield curve,
- The functioning and other performance of, and availability of liquidity in, U.S. and global financial markets, including capital markets,
- The impact of tariffs and other trade policies of the U.S. and its global trading partners,

- Changes in the competitive and regulatory landscape,
- The impact of the results of the recent U.S. elections on the regulatory landscape, capital markets, and the response to and management of the pandemic,
- · The impact of market credit spreads on asset valuations,
- . The ability of customers, counterparties and issuers to perform in accordance with contractual terms, and the resulting impact on our asset quality,
- · Loan demand, utilization of credit commitments and standby letters of credit, and
- · The impact on customers and changes in customer behavior due to changing business and economic conditions or regulatory or legislative initiatives.

For additional information on the risks we face, see the Cautionary Statement Regarding Forward-Looking Information section in this Item 7 and Item 1A Risk Factors in this Report.

Second Quarter Sale of Equity Investment in BlackRock, Inc.

In the second quarter of 2020, PNC divested its entire 22.4% equity investment in BlackRock. Net proceeds from the sale were \$14.2 billion. The after-tax gain on the sale of \$4.3 billion, and donation expense and BlackRock's historical results for all periods presented, are reported as discontinued operations. For additional details on the divestiture of our equity investment in BlackRock, see Note 2 Acquisition and Divestiture Activity in the Notes to Consolidated Financial Statements in Item 8 of this Report.

Pending Acquisition of BBVA USA Bancshares, Inc.

On November 16, 2020 PNC announced a definitive agreement to acquire BBVA, including its U.S. banking subsidiary BBVA USA, from the Spanish financial group BBVA, S.A for a fixed purchase price of \$11.6 billion in cash. BBVA USA operates over 600 branches in Texas, Alabama, Arizona, California, Florida, Colorado and New Mexico. The transaction is expected to close in mid-2021 and add approximately \$102 billion in total assets, \$86 billion of deposits and \$66 billion of loans, creating the fifth largest bank by assets and a PNC presence in 29 of the 30 largest markets in the U.S. See Note 2 Acquisition and Divestiture Activity in the Notes to Consolidated Financial Statements in Item 8 of this Report for details on the pending acquisition.

Income Statement Highlights

Net income from continuing operations for 2020 was \$3.0 billion, or \$6.36 per diluted common share, a decrease of 35% compared to net income from continuing operations of \$4.6 billion, or \$9.57 per diluted common share, for 2019.

- Total revenue increased \$62 million to \$16.9 billion.
 - Net interest income decreased \$19 million to \$9.9 billion.
 - Net interest margin decreased to 2.53% for 2020 compared to 2.89% for 2019.
 - Noninterest income increased \$81 million, or 1%, to \$7.0 billion.
- Provision for credit losses of \$3.2 billion in 2020, calculated under the CECL accounting standard adopted January 1, 2020, increased \$2.4 billion compared to \$0.8 billion for 2019, reflecting changes due to the adoption of CECL, together with the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality and loan growth.
- Noninterest expense decreased \$277 million, or 3%, to \$10.3 billion.
- We generated positive operating leverage in 2020 of 3%.

For additional detail, see the Consolidated Income Statement Review section of this Item 7.

Balance Sheet Highlights

Our balance sheet was strong and well positioned at December 31, 2020 and 2019. In comparison to December 31, 2019:

- Total assets increased \$56.4 billion, or 14%, to \$466.7 billion.
- Total loans increased \$2.1 billion, or 1%, to \$241.9 billion.
 - Total commercial loans grew \$6.6 billion, or 4%, to \$167.2 billion.
 - Total consumer loans decreased \$4.5 billion, or 6%, to \$74.7 billion.
- Investment securities increased \$2.0 billion, or 2%, to \$88.8 billion.
- Interest earning deposits with banks, primarily with the Federal Reserve Bank, increased \$61.8 billion to \$85.2 billion due to higher liquidity from deposit growth and proceeds from the sale of our equity investment in BlackRock.
- Total deposits increased \$76.8 billion, or 27%, to \$365.3 billion, due to growth in commercial deposits reflecting pandemic-related accumulation of liquidity by customers and higher consumer deposits driven by government stimulus payments and lower consumer spending.
- Borrowed funds of \$37.2 billion decreased \$23.1 billion, or 38%, reflecting use of liquidity from deposit growth and proceeds from the sale of our equity investment in BlackRock.

For additional detail, see the Consolidated Balance Sheet Review section of this Item 7.

Credit Quality Highlights

Credit quality metrics in 2020 reflected a challenging economic environment.

- At December 31, 2020 compared to December 31, 2019:
 - Nonperforming assets of \$2.3 billion increased \$585 million, or 33%, primarily due to the significantly adverse economic impacts of the pandemic.
 - Overall loan delinquencies of \$1.4 billion decreased \$141 million, or 9%, reflecting CARES Act and other forbearance and extension treatments.
- Net charge-offs of \$832 million, or 0.33% of average loans, in 2020 increased 30% compared to net charge-offs of \$642 million, or 0.27% of average loans, for 2019. Commercial loan net charge-offs increased \$175 million, primarily in industries adversely impacted by the pandemic, and consumer loan net charge-offs increased \$15 million compared to 2019.
- The ACL related to loans increased to \$5.9 billion, or 2.46% of total loans, at December 31, 2020, calculated under the CECL accounting standard adopted January 1, 2020, compared to \$3.1 billion, or 1.28% of total loans, at December 31, 2019. The increase was due to the transition impact from the adoption of the CECL standard along with the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality and loan growth.

For additional detail, see the Credit Risk Management portion of the Risk Management section of this Item 7.

Capital Highlights

We maintained a strong capital position during 2020.

- The Basel III CET1 capital ratio was 12.2% at December 31, 2020 compared with 9.5% at December 31, 2019.
 - The December 31, 2020 ratio reflects higher capital due in part to the gain from the sale of our equity investment in BlackRock and changes under the Tailoring Rules, effective January 1, 2020 for PNC, partially offset by the impact of the CECL accounting standard.
 - Additionally, capital benefited from our election of a five-year transition period for CECL's estimated impact on CET1 capital. CECL's estimated impact on CET1 capital is defined as the change in retained earnings at adoption plus or minus 25% of the change in CECL ACL at the balance sheet date compared to CECL ACL at transition. The estimated CECL impact is added to CET1 capital through December 31, 2021, then phased-out over the following three years.
- Common shareholder's equity increased 11% to \$50.5 billion at December 31, 2020, compared to \$45.3 billion at December 31, 2019.
- On January 5, 2021, the PNC board of directors declared a quarterly cash dividend on common stock of \$1.15 per share payable on February 5, 2021.
- PNC announced on March 16, 2020 a temporary suspension of our common stock repurchase program in conjunction with the Federal Reserve's effort to support the U.S. economy during the pandemic, and continued the suspension through the fourth quarter of 2020, consistent with the extension of the Federal Reserve's special capital distribution restrictions. We repurchased \$99 million of common shares in the third quarter to offset the effects of employee benefit plan-related issuances in 2020 as permitted by guidance from the Federal Reserve. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases, during the period leading up to our pending BBVA transaction close date.

PNC's ability to take certain capital actions, including returning capital to shareholders, is subject to PNC meeting or exceeding a stress capital buffer established by the Federal Reserve Board in connection with the Federal Reserve Board's CCAR process. The Federal Reserve also has imposed additional limitations on capital distributions through the first quarter of 2021 by CCAR-participating bank holding companies and may extend these limitations, potentially in modified form. See additional discussion of the CCAR process in the Supervision and Regulation section of Item 1 Business and Item 1A Risk Factors of this Report.

See the Liquidity and Capital Management portion of the Risk Management section of this Item 7 for more detail on our 2020 capital and liquidity actions as well as our capital ratios

Business Outlook

Statements regarding our business outlook are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. Our forward-looking financial statements are subject to the risk that economic and financial market conditions will be substantially different than those we are currently expecting and do not take into account potential legal and regulatory contingencies. These statements are based on our view that:

• The U.S. economy is in an economic recovery, following a very severe but very short economic contraction in the first half of 2020 due to the COVID-19 pandemic and public health measures to contain it.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 43

- Despite the improvement in the economy since the spring of 2020, economic activity remains far below its prepandemic level and unemployment remains elevated.
- Growth will be much weaker in early 2021 because of record COVID-19 cases and continued government restrictions of economic activity. Growth should then pick up in the spring of 2021 as vaccines are more widely available and the federal government provides aid to households and small and medium-sized businesses. PNC does not expect real GDP to return to its pre-pandemic level until late 2021, and does not expect employment to return to its pre-pandemic level until at least 2023.
- PNC expects the FOMC to keep the fed funds rate in its current range of 0.00% to 0.25% through at least mid-2024.

See the Cautionary Statement Regarding Forward-Looking Information section in this Item 7 and Item 1A Risk Factors in this Report for other factors that could cause future events to differ, perhaps materially, from those anticipated in these forward-looking statements.

For information on financial results for the fourth quarter of 2020, see the Selected Quarterly Financial Data section in the Statistical Information (Unaudited) section of Item 8 of this Report.

For the PNC standalone full year 2021, excluding one-time costs related to the BBVA transaction, compared to full year 2020 where appropriate, we expect:

- · Average loan growth to be down in the low-single digits range, and spot loan growth to be up in the low single-digits range, on a percentage basis,
- Revenue growth to be stable, which includes net interest income down modestly,
- Noninterest expense to remain stable, and
- The effective tax rate to be approximately 17%.

Assuming a mid-2021 close date and excluding one-time integration costs, we expect the pending BBVA acquisition to be approximately \$600 million accretive to PNC's 2021 pre-provision net revenue.

For the first quarter of 2021, compared to the fourth quarter of 2020 where appropriate, we expect:

- Average loans to be stable to down modestly, with PPP loans to be up approximately \$2 billion,
- · Net interest income to decline approximately 1%, which includes the impact of two fewer days in the quarter,
 - Excluding the impact of PPP, net interest income to decline approximately 3%.
- · Noninterest income to decline mid-single digits, on a percentage basis, with other noninterest income to be between \$275 million and \$325 million,
- Noninterest expense to be down in the mid-single digit range, on a percentage basis, and
- Net loan charge-offs to be between \$200 million and \$250 million.

CONSOLIDATED INCOME STATEMENT REVIEW

Our Consolidated Income Statement is presented in Item 8 of this Report. For the comparison of 2019 over 2018, see the Consolidated Income Statement Review section in our 2019 Form 10-K.

Net income from continuing operations for 2020 was \$3.0 billion, or \$6.36 per diluted common share, a decrease of \$1.6 billion compared with net income from continuing operations of \$4.6 billion, or \$9.57 per diluted common share, for 2019. The decrease was primarily driven by a \$2.4 billion increase in the provision for credit losses reflecting changes due to the adoption of CECL, together with the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality and loan growth, partially offset by lower noninterest expense.

44 The PNC Financial Services Group, Inc. – 2020 Form 10-K

Net Interest Income

Table 1: Summarized Average Balances and Net Interest Income (a)

	 2020				2019			
Year ended December 31 Dollars in millions	 Average Balances	Average Yields/ Rates	Interest Income/ Expense		Average Balances	Average Yields/ Rates	Interest Income/ Expense	
Assets								
Interest-earning assets								
Investment securities	\$ 87,279	2.36 % \$	2,064	\$	83,666	2.93 %\$	2,450	
Loans	252,633	3.55 %	8,979		235,016	4.51 %	10,604	
Interest-earning deposits with banks	47,333	0.21 %	100		16,878	2.09 %	353	
Other	9,553	2.50 %	239		12,425	3.69 %	458	
Total interest-earning assets/interest income	\$ 396,798	2.87 %	11,382	\$	347,985	3.98 %	13,865	
Liabilities								
Interest-bearing liabilities								
Interest-bearing deposits	\$ 238,771	0.27 %	643	\$	204,588	0.97 %	1,986	
Borrowed funds	47,938	1.50 %	718		61,528	2.94 %	1,811	
Total interest-bearing liabilities/interest expense	\$ 286,709	0.47 %	1,361	\$	266,116	1.43 %	3,797	
Net interest margin/income (Non-GAAP)		2.53 %	10,021			2.89 %	10,068	
Taxable-equivalent adjustments			(75)				(103)	
Net interest income (GAAP)		\$	9,946			\$	9,965	

⁽a) Interest income calculated as taxable-equivalent interest income. To provide more meaningful comparisons of interest income and yields for all interest-earning assets, as well as net interest margins, we use interest income on a taxable-equivalent basis in calculating average yields and net interest margins by increasing the interest income earned on tax-exempt assets to make it fully equivalent to interest income earned on taxable investments. This adjustment is not permitted under GAAP on the Consolidated Income Statement. For more information, see Reconciliation of Taxable-Equivalent Net Interest Income (Non-GAAP) in the Statistical Information (Unaudited) section in Item 8 of this Report.

Changes in net interest income and margin result from the interaction of the volume and composition of interest-earning assets and related yields, interest-bearing liabilities and related rates paid, and noninterest-bearing sources of funding. See the Statistical Information (Unaudited) – Average Consolidated Balance Sheet And Net Interest Analysis and Analysis Of Year-To-Year Changes In Net Interest Income in Item 8 of this Report.

Net interest income decreased \$19 million in 2020 compared with 2019. The decrease was driven by lower yields on interest-earning assets, partially offset by lower rates on deposits, higher interest earning asset balances, and lower borrowing rates and balances. Net interest margin decreased 36 basis points reflecting the impact of the 1.5% reduction in the federal funds rate by the Federal Reserve in March 2020 and related changes in other short-term rates.

Average investment securities increased \$3.6 billion, or 4%, primarily due to an increase in residential mortgage-backed securities. Average investment securities represented 22% of average interest-earning assets in 2020, compared to 24% in 2019.

Average loans grew \$17.6 billion, or 8%, driven by commercial and consumer loan growth. Average commercial loans increased by \$15.5 billion, or 10%, reflecting new production, including PPP lending under the CARES Act, and higher multifamily agency warehouse lending, partially offset by lower average utilization of loan commitments.

Average consumer loans increased \$2.1 billion, or 3%, to \$77.8 billion as growth in residential mortgage, auto, unsecured installment and credit card loans was partially offset by declines in education loans due to runoff in the guaranteed government loan portfolio and home equity loan paydowns and payoffs that exceeded new origination volumes.

Average loans represented 64% of average interest-earning assets in 2020 compared to 68% in 2019.

Average interest-earning deposits grew \$30.5 billion as average balances held with the Federal Reserve Bank increased due to higher liquidity from deposit growth and proceeds from the sale of our equity investment in BlackRock.

Average interest-bearing deposits grew \$34.2 billion, or 17%, as growth in commercial and consumer deposits reflected pandemic-related accumulation of customer liquidity. In total, average interest-bearing deposits represented 83% of average interest-bearing liabilities in 2020 compared to 77% in 2019.

Further details regarding average loans and deposits are included in the Business Segments Review section of this Item 7.

Average borrowed funds decreased \$13.6 billion, or 22%, primarily due to a decline in FHLB borrowings and federal funds purchased reflecting use of liquidity from deposit growth and proceeds from the sale of our equity investment in BlackRock.

Noninterest Income

Table 2: Noninterest Income

Year ended December 31	_			Cha	ange
Dollars in millions		20	20 2019	\$	%
Noninterest income					
Asset management	\$	83	6 \$ 862	\$ (26)	(3)%
Consumer services		1,48	4 1,555	(71)	(5)%
Corporate services		2,16	7 1,914	253	13 %
Residential mortgage		60	4 368	236	64 %
Service charges on deposits		50	0 702	(202)	(29)%
Other		1,36	4 1,473	(109)	(7)%
Total noninterest income	\$	6,95	5 \$ 6,874	\$ 81	1 %

Noninterest income as a percentage of total revenue was 41% for both 2020 and 2019.

Asset management revenue declined due to the impact of PNC's divestiture activity in 2019 of the retirement recordkeeping business and PNC's proprietary mutual funds, partially offset by the impact of higher average equity markets. PNC's discretionary client assets under management increased to \$170 billion at December 31, 2020 compared with \$154 billion at December 31, 2019, primarily attributable to higher equity markets.

Consumer services revenue declined as a result of lower transaction volumes and activities, reflecting lower consumer spending.

Broad-based growth in corporate services revenue was driven by higher capital markets-related revenue, primarily from increased equity capital markets advisory fees and asset-backed financing fees, higher revenue from commercial mortgage banking activities and higher treasury management product revenue.

Residential mortgage revenue increased due to higher loan sales revenue driven by increased loan volume and favorable gain on sale margins and revenue from RMSR valuation, net of economic hedge, partially offset by lower servicing fees due to increased payoff volumes.

Service charges on deposits decreased due to lower transaction volumes, fees waived for customers experiencing pandemic-related hardships and the elimination of certain checking product fees.

Other noninterest income decreased due to lower revenue from private equity investments reflecting the significantly adverse economic impacts of the pandemic, lower gains on asset sales including the 2019 divestitures of PNC's retirement recordkeeping business and proprietary mutual funds and higher negative Visa Class B derivative fair value adjustments, primarily related to the extension of anticipated litigation resolution timing, partially offset by higher net securities gains and capital markets-related revenue.

Other noninterest income typically fluctuates from period to period depending on the nature and magnitude of transactions completed. Further details regarding our customer-related trading activities are included in the Market Risk Management – Customer-Related Trading Risk portion of the Risk Management section of this Item 7. Further details regarding private and other equity investments are included in the Market Risk Management – Equity and Other Investment Risk section.

Noninterest Expense

Table 3: Noninterest Expense

Year ended December 31	_			Chang	e
Dollars in millions		2020	2019	\$	%
Noninterest expense					
Personnel	\$	5,673 \$	5,647 \$	26	_
Occupancy		826	834	(8)	(1)%
Equipment		1,176	1,210	(34)	(3)%
Marketing		236	301	(65)	(22)%
Other		2,386	2,582	(196)	(8)%
Total noninterest expense	\$	10,297 \$	10,574 \$	(277)	(3)%

The decrease in noninterest expense reflected lower business activity related to the significantly adverse economic impacts of the pandemic, including lower costs associated with business travel, marketing expense and lower equipment expense primarily due to technology-related write-offs in 2019, partially offset by higher personnel expense reflecting continued investment in our employees.

We achieved our 2020 continuous improvement program savings goal of \$300 million. In 2021, our goal will once again be \$300 million in cost savings, without regard to cost saves related to BBVA, which we expect to contribute to the funding of our business and technology investments.

Effective Income Tax Rate

The effective income tax rate from continuing operations was 12.4% for 2020 compared with 16.4% for 2019. The decrease was primarily due to tax credit benefits and the favorable resolution of certain tax matters in the third quarter of 2020.

The effective tax rate is generally lower than the statutory rate primarily due to tax credits we receive from our investments in low income housing and new markets investments, as well as earnings on other tax exempt investments.

Additional information regarding our effective tax rate is included in the Reconciliation of Statutory and Effective Tax Rates table in Note 19 Income Taxes in Item 8 of this Report.

Provision for Credit Losses

Table 4: Provision for Credit Losses

Year ended December 31

Dollars in millions		2020	2019
Provision for credit losses			
Loans and leases	\$ 2,	985	\$ 773
Unfunded lending related commitments (a)		87	
Investment securities		80	
Other financial assets		23	
Total provision for credit losses	\$ 3,	175	\$ 773

⁽a) For the year ended December 31, 2019, the provision for unfunded lending related commitments was included in the provision for loans and leases.

The provision for credit losses was \$3.2 billion in 2020 compared to \$0.8 billion in 2019. The provision in 2020 was calculated under the CECL accounting standard adopted January 1, 2020. The increase reflected changes due to the adoption of CECL, together with the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality and loan growth.

Net interest income less the provision for credit losses was \$6.8 billion, \$9.2 billion and \$9.3 billion for 2020, 2019 and 2018, respectively.

The Credit Risk Management portion of the Risk Management section of this Item 7 includes additional information regarding factors impacting the provision for credit losses.

Net Income from Discontinued Operations

The following table summarizes net income from our investment in BlackRock, which is now reported as discontinued operations as a result of the second quarter 2020 divestiture.

Table 5: Discontinued Operations

Year ended December 31		
Dollars in millions	 2020	2019
Net income from discontinued operations	\$ 4,555 \$	827

For additional details on the divestiture of our equity investment in BlackRock, see Note 2 Acquisition and Divestiture Activity in the Notes to Consolidated Financial Statements in Item 8 of this Report.

CONSOLIDATED BALANCE SHEET REVIEW

The summarized balance sheet data in Table 6 is based upon our Consolidated Balance Sheet in Item 8 of this Report. For additional detail of the comparison of 2019 over 2018, see the Consolidated Balance Sheet Review section in our 2019 Form 10-K.

Table 6: Summarized Balance Sheet Data

	 December 31	December 31	Chan	ge
Dollars in millions	2020	2019	\$	%
Assets				
Interest-earning deposits with banks	\$ 85,173	\$ 23,413	\$ 61,760	264 %
Loans held for sale	1,597	1,083	514	47 %
Asset held for sale (a)		8,558	(8,558)	(100)%
Investment securities	88,799	86,824	1,975	2 %
Loans	241,928	239,843	2,085	1 %
Allowance for loan and lease losses (b)	(5,361)	(2,742)	(2,619)	(96)%
Mortgage servicing rights	1,242	1,644	(402)	(24)%
Goodwill	9,233	9,233		
Other, net	44,068	42,439	1,629	4 %
Total assets	\$ 466,679	\$ 410,295	\$ 56,384	14 %
Liabilities				
Deposits	\$ 365,345	\$ 288,540	\$ 76,805	27 %
Borrowed funds	37,195	60,263	(23,068)	(38)%
Allowance for unfunded lending related commitments (b)	584	318	266	84 %
Other	9,514	11,831	(2,317)	(20)%
Total liabilities	412,638	360,952	51,686	14 %
Equity				
Total shareholders' equity	54,010	49,314	4,696	10 %
Noncontrolling interests	31	29	2	7 %
Total equity	 54,041	49,343	4,698	10 %
Total liabilities and equity	\$ 466,679	\$ 410,295	\$ 56,384	14 %

⁽a) Represents our held for sale investment in BlackRock. In the second quarter of 2020, PNC divested its entire investment in BlackRock. The prior period BlackRock investment balance has been reclassified to the Asset held for sale line in accordance with ASC 205-20, Presentation of Financial Statements - Discontinued

Operations. Refer to Note 1 Accounting Policies and Note 2 Acquisition and Divestiture Activity in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional details.

Our balance sheet was strong and well-positioned at December 31, 2020 and December 31, 2019.

- Total assets increased as a result of higher interest-earning deposits with banks, primarily the Federal Reserve Bank, loan growth and higher investment securities.
- Total liabilities increased due to deposit growth reflecting customer liquidity accumulation, partially offset by lower borrowed funds, primarily FHLB borrowings, federal funds purchased and bank notes and senior debt.
- Total equity increased due to higher retained earnings driven by the gain on sale of our equity investment in BlackRock and higher AOCI, partially offset by dividends on common and preferred stock, share repurchases, the day-one effect of adopting the CECL accounting standard and the redemption of our Series Q preferred stock.

The ACL related to loans totaled \$5.9 billion at December 31, 2020, an increase of \$2.9 billion since December 31, 2019. The increase was attributable to a \$0.6 billion day-one CECL transition adjustment and a \$3.1 billion provision for credit losses, partially offset by net charge-offs of \$0.8 billion. The provision reflects changes due to the adoption of the CECL standard, together with the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality and loan growth. See the following for additional information regarding our ACL related to loans:

- · Allowance for Credit Losses in the Credit Risk Management section of this Item 7, and
- Note 1 Accounting Policies and Note 4 Loans and Related Allowance for Credit Losses in the Notes To Consolidated Financial Statements included in Item 8 of this Report.

The following discussion provides additional information about the major components of our balance sheet. Information regarding our capital and regulatory compliance is included in the Liquidity and Capital Management portion of the Risk Management section of this Item 7 and in Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report.

⁽b) Amount as of December 31, 2020 reflects the impact of adopting the CECL accounting standard and our transition from an incurred loss methodology for these reserves to an expected credit loss methodology. Prior period amounts represent ALLL under the incurred loss methodology. Refer to Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional detail on the adoption of this standard.

Loans

Table 7: Loans

	December 3	1 December 31	31 Change		
Dollars in millions	202	0 2019	\$	%	
Commercial					
Commercial and industrial	\$ 132,073	\$ 125,337	\$ 6,736	5 %	
Commercial real estate	28,716	28,110	606	2 %	
Equipment lease financing	6,414	7,155	(741)	(10)%	
Total commercial	167,203	160,602	6,601	4 %	
Consumer					
Home equity	24,088	25,085	(997)	(4)%	
Residential real estate	22,560	21,821	739	3 %	
Automobile	14,218	16,754	(2,536)	(15)%	
Credit card	6,215	7,308	(1,093)	(15)%	
Education	2,946	3,336	(390)	(12)%	
Other consumer	4,698	4,937	(239)	(5)%	
Total consumer	74,725	79,241	(4,516)	(6)%	
Total loans	\$ 241,928	\$ 239,843	\$ 2,085	1 %	

Commercial loans increased primarily due to PPP loan originations and higher multifamily agency warehouse lending, partially offset by lower utilization of loan commitments. At December 31, 2020 PNC had \$12.0 billion of PPP loans outstanding.

For commercial and industrial loans by industry and commercial real estate loans by geography and property type, see Loan Portfolio Characteristics and Analysis in the Credit Risk Management portion of the Risk Management section in this Item 7.

Total consumer loans declined as new originations decreased due to the significantly adverse economic impacts of the pandemic and lower consumer spending. Education loans declined primarily due to continued runoff of the government guaranteed education loan portfolio. Residential mortgage loans increased as the low interest rate environment resulted in an increase in the volume of originations retained by PNC, primarily of nonconforming loans, which are loans that do not meet agency standards as a result of exceeding agency conforming loan limits.

For information on home equity and residential real estate portfolios, including loans by geography, and our auto loan portfolio, see Loan Portfolio Characteristics and Analysis in the Credit Risk Management portion of the Risk Management section in this Item 7.

For additional information regarding our loan portfolio, see the Credit Risk Management portion of the Risk Management section in this Item 7 and Note 1 Accounting Policies, Note 4 Loans and Related Allowance for Credit Losses in our Notes To Consolidated Financial Statements included in Item 8 of this Report.

Investment Securities

Investment securities of \$88.8 billion at December 31, 2020 increased \$2.0 billion, or 2%, compared to December 31, 2019, due primarily to net purchases of U.S. Treasury and government agency securities, partially offset by portfolio run-off of agency residential mortgage-backed securities.

The level and composition of the investment securities portfolio fluctuates over time based on many factors including market conditions, loan and deposit growth, and balance sheet management activities. We manage our investment securities portfolio to optimize returns, while providing a reliable source of liquidity for our banking and other activities, considering LCR and other internal and external guidelines and constraints. During 2020, \$16.2 billion of debt securities were transferred from held to maturity to available for sale pursuant to elections made under recently adopted accounting standards. See further discussion in Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report.

Table 8: Investment Securities

	Decembe	r 31, 2	2020	December	r 31, 1	2019					
Dollars in millions	 Amortized Cost (b)		Fair Value	Amortized Cost		Fair Value	AAA/ AA	A	BBB	BB and Lower	No Rating
U.S. Treasury and government agencies	\$ 20,616	\$	21,631	\$ 16,926	\$	17,348	100 %				
Agency residential mortgage-backed	47,355		48,911	50,266		50,984	100 %				
Non-agency residential mortgage-backed	1,272		1,501	1,648		1,954	10 %	1 %	2 %	48 %	39 %
Agency commercial mortgage-backed	2,571		2,688	3,153		3,178	100 %				
Non-agency commercial mortgage-backed (c)	3,678		3,689	3,782		3,806	87 %	1 %		5 %	7 %
Asset-backed (d)	5,060		5,150	5,096		5,166	92 %	1 %		6 %	1 %
Other debt (e)	5,061		5,393	4,580		4,771	67 %	21 %	10 %		2 %
Total investment securities (f)	\$ 85,613	\$	88,963	\$ 85,451	\$	87,207	96 %	1 %	1 %	1 %	1 %

- (a) Ratings percentages allocated based on amortized cost.
- (b) Amortized cost is presented net of applicable allowance for securities of \$82 million at December 31, 2020 in accordance with the adoption of the CECL accounting standard. See the Recently Adopted Accounting Standards portion of Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional detail on the CECL accounting standard.
- (c) Collateralized primarily by office buildings, multifamily housing, industrial properties, retail properties and lodging properties.
- d) Collateralized primarily by corporate debt, government guaranteed and private education loans and other consumer credit products
- Includes state and municipal securities.
- (f) Includes available for sale and held to maturity securities, which are recorded on our balance sheet at fair value and amortized cost, respectively.

Table 8 presents the distribution of our total investment securities portfolio by amortized cost and fair value, as well as by credit rating. We have included credit ratings information because we believe that the information is an indicator of the degree of credit risk to which we are exposed, which could affect our risk-weighted assets and, therefore, our risk-based regulatory capital ratios under the regulatory capital rules. Changes in credit ratings classifications could indicate increased or decreased credit risk and could be accompanied by a reduction or increase in the fair value of our investment securities portfolio. We continually monitor the credit risk in our portfolio and maintain the allowance for securities at an appropriate level to absorb expected credit losses on our investment securities portfolio for the remaining contractual term of the securities adjusted for expected prepayments. See Note 1 Accounting Policies and Note 3 Investment Securities in the Notes To Consolidated Financial Statements included in Item 8 of this Report for additional details regarding the methodology for determining the allowance and the amount of the allowance for investment securities, respectively.

The duration of investment securities was 2.6 years at December 31, 2020. We estimate that at December 31, 2020 the effective duration of investment securities was 3.1 years for an immediate 50 basis points parallel increase in interest rates and 2.0 years for an immediate 50 basis points parallel decrease in interest rates. Comparable amounts at December 31, 2019 for the effective duration of investment securities were 2.8 years and 2.4 years, respectively.

Based on expected prepayment speeds, the weighted-average expected maturity of the investment securities portfolio was 3.4 years at December 31, 2020 compared to 4.1 years at December 31, 2019.

Table 9: Weighted-Average Expected Maturities of Mortgage and Asset-Backed Debt Securities

December 31, 2020	Years
Agency residential mortgage-backed	2.9
Non-agency residential mortgage-backed	6.0
Agency commercial mortgage-backed	4.2
Non-agency commercial mortgage-backed	2.5
Asset-backed	2.4

Additional information regarding our investment securities is included in Note 3 Investment Securities and Note 15 Fair Value in the Notes To Consolidated Financial Statements included in Item 8 of this Report.

Funding Sources

Table 10: Details of Funding Sources

	December 31	December 31	Chang	je
Dollars in millions	2020	2019	\$	%
Deposits				
Noninterest-bearing	\$ 112,637	\$ 72,779	\$ 39,858	55 %
Interest-bearing				
Money market	59,737	54,115	5,622	10 %
Demand	92,294	71,692	20,602	29 %
Savings	80,985	68,291	12,694	19 %
Time deposits	19,692	21,663	(1,971)	(9)%
Total interest-bearing deposits	252,708	215,761	36,947	17 %
Total deposits	365,345	288,540	76,805	27 %
Borrowed funds			_	
Federal Home Loan Bank borrowings	3,500	16,341	(12,841)	(79)%
Bank notes and senior debt	24,271	29,010	(4,739)	(16)%
Subordinated debt	6,403	6,134	269	4 %
Other	3,021	8,778	(5,757)	(66)%
Total borrowed funds	37,195	60,263	(23,068)	(38)%
Total funding sources	\$ 402,540	\$ 348,803	\$ 53,737	15 %

Growth in total deposits reflected growth in commercial deposits reflecting pandemic-related accumulation of liquidity by customers and higher consumer deposits driven by government stimulus payments and lower consumer spending.

Borrowed funds decreased due to lower FHLB borrowings, federal funds purchased (included in other borrowed funds) and bank notes and senior debt, reflecting the use of liquidity from deposit growth and proceeds from the sale of our equity investment in BlackRock.

The level and composition of borrowed funds fluctuates over time based on many factors including market conditions, loan, investment securities and deposit growth and capital considerations. We manage our borrowed funds to provide a reliable source of liquidity for our banking and other activities, considering our LCR requirements and other internal and external guidelines and constraints.

See the Liquidity and Capital Management portion of the Risk Management section of this Item 7 for additional information regarding our 2020 liquidity and capital activities. See Note 10 Borrowed Funds in the Notes to Consolidated Financial Statements in Item 8 of this Report for additional information related to our borrowings.

Shareholders' Equity

Total shareholders' equity was \$54.0 billion at December 31, 2020, an increase of \$4.7 billion, or 10%, compared to December 31, 2019. The increase resulted from net income of \$7.6 billion, which included the gain on sale of our equity investment in BlackRock, and higher AOCI of \$2.0 billion, partially offset by common and preferred dividends of \$2.2 billion, common share repurchases of \$1.4 billion, a day-one transition adjustment of \$0.7 billion for the adoption of the CECL accounting standard and \$0.5 billion for the redemption of our Series Q preferred stock.

PNC announced on March 16, 2020 a temporary suspension of our common stock repurchase program in conjunction with the Federal Reserve's effort to support the U.S. economy during the pandemic, and continued the suspension through the fourth quarter of 2020, consistent with the extension of the Federal Reserve's special capital distribution restrictions. We repurchased \$99 million of common shares in the third quarter to offset the effects of employee benefit plan-related issuances in 2020 as permitted by guidance from the Federal Reserve. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases, during the period leading up to our pending BBVA transaction close date.

BUSINESS SEGMENTS REVIEW

We have three reportable business segments:

- Retail Banking
- Corporate & Institutional Banking
- Asset Management Group

Business segment results and a description of each business are included in Note 23 Segment Reporting in the Notes To Consolidated Financial Statements in Item 8 of this Report. Certain amounts included in this Business Segments Review differ from those amounts shown in Note 23, primarily due to the presentation in this Item 7 of business net interest income on a taxable-equivalent basis. Note 23 presents results of businesses for 2020, 2019 and 2018.

During the second quarter of 2020, we divested our entire 22.4% investment in BlackRock, which had previously been reported as a separate business segment. See Note 2 Acquisition and Divestiture Activity in the Notes To Consolidated Financial Statements included in Item 8 of this Report for additional information on the sale and details on our results and cash flows for 2020, 2019 and 2018.

Net interest income in business segment results reflects our internal funds transfer pricing methodology. Assets receive a funding charge and liabilities and capital receive a funding credit based on a transfer pricing methodology that incorporates product repricing characteristics, tenor and other factors.

Total business segment financial results differ from total consolidated net income. The impact of these differences is reflected in the "Other" category as shown in Table 114 in Note 23 Segment Reporting in the Notes To Consolidated Financial Statements included in Item 8 of this Report. "Other" includes residual activities that do not meet the criteria for disclosure as a separate reportable business, such as asset and liability management activities including net securities gains or losses, ACL for investment securities, certain trading activities, certain runoff consumer loan portfolios, private equity investments, intercompany eliminations, certain corporate overhead, tax adjustments that are not allocated to business segments, exited businesses, and differences between business segment performance reporting and financial statement reporting (GAAP).

See the Executive Summary of this Item 7 for our discussion of the impact of pandemic-related developments on our business and operations, including pandemic relief efforts for our customers. We have granted loan modifications through various hardship relief programs to assist our customers in need during the pandemic. See Loan Modifications in the Troubled Debt Restructurings and Loan Modifications section of Credit Risk Management for details on these programs.

52 The PNC Financial Services Group, Inc. - 2020 Form 10-K

Retail Banking

Retail Banking's core strategy is to acquire and retain customers who maintain their primary checking and transaction relationships with us. We seek to deepen relationships by meeting the broad range of our customers' financial needs with savings, liquidity, lending, investment and retirement solutions. A strategic priority for us is to differentiate the customer experience and drive transformation and automation. A key element of our strategy is to expand the use of lower-cost alternative distribution channels, with an emphasis on digital capabilities, while continuing to optimize the traditional branch network. In addition, we have a disciplined process to continually improve the engagement of both our employees and customers, which is a strong driver of customer growth, retention and relationship expansion.

Table 11: Retail Banking Table

(Unaudited)						
Year ended December 31					Change	
Dollars in millions, except as noted		2020		2019	 \$	%
Income Statement						
Net interest income	\$	5,609	\$	5,520	\$ 89	2 %
Noninterest income		2,519		2,648	(129)	(5)%
Total revenue		8,128		8,168	 (40)	_
Provision for credit losses		968		517	451	87 %
Noninterest expense		6,019		6,011	8	_
Pretax earnings		1,141		1,640	(499)	(30)%
Income taxes		266		377	(111)	(29)%
Noncontrolling interest		31		50	(19)	(38)%
Earnings	\$	844	\$	1,213	\$ (369)	(30)%
Average Balance Sheet						
Loans held for sale	\$	745	\$	627	\$ 118	19 %
Loans						
Consumer						
Home equity	\$	22,633	\$	22,657	\$ (24)	_
Residential real estate		18,171		16,196	1,975	12 %
Automobile		15,968		15,510	458	3 %
Credit card		6,629		6,550	79	1 %
Education		3,176		3,611	(435)	(12)%
Other consumer		2,334		2,244	90	4 %
Total consumer		68,911		66,768	2,143	3 %
Commercial		12,573		10,410	2,163	21 %
Total loans	\$	81,484	\$	77,178	\$ 4,306	6 %
Total assets	\$	97,643	\$	92,959	\$ 4,684	5 %
Deposits						
Noninterest-bearing demand	\$	39,754	\$	31,675	\$ 8,079	26 %
Interest-bearing demand		47,557		42,077	5,480	13 %
Money market		23,436		25,317	(1,881)	(7)%
Savings		68,267		56,722	11,545	20 %
Certificates of deposit		11,222		12,613	(1,391)	(11)%
Total deposits	\$	190,236	\$	168,404	\$ 21,832	13 %
Performance Ratios						
Return on average assets		0.86 %	-	1.30 %		
Noninterest income to total revenue		31 %		32 %		
Efficiency		74 %	Ó	74 %		

(continued on following page)

(continued from previous page)

Year ended December 31				Change	1
Dollars in millions, except as noted	2020		2019	 \$	%
Supplemental Noninterest Income Information					
Consumer services	\$ 1,427	\$	1,530	\$ (103)	(7)%
Residential mortgage	\$ 604	\$	368	\$ 236	64 %
Service charges on deposits	\$ 497	\$	687	\$ (190)	(28)%
Residential Mortgage Information					
Residential mortgage servicing statistics (in billions, except as noted) (a)					
Serviced portfolio balance (b)	\$ 121	\$	120	\$ 1	1 %
Serviced portfolio acquisitions	\$ 33	\$	12	\$ 21	175 %
MSR asset value (b)	\$ 0.7	\$	1.0	\$ (0.3)	(30)%
MSR capitalization value (in basis points) (b)	56		83	(27)	(33)%
Servicing income: (in millions)					
Servicing fees, net (c)	\$ 118	\$	178	\$ (60)	(34)%
Mortgage servicing rights valuation, net of economic hedge	\$ 137	\$	47	\$ 90	191 %
Residential mortgage loan statistics					
Loan origination volume (in billions)	\$ 15.1	\$	11.5	\$ 3.6	31 %
Loan sale margin percentage	3.57 %	Ó	2.41 %		
Percentage of originations represented by:					
Purchase volume (d)	40 %	ó	47 %		
Refinance volume	60 %	ó	53 %		
Other Information (b)					
<u>Customer-related statistics (average)</u>					
Non-teller deposit transactions (e)	64 %	Ó	57 %		
Digital consumer customers (f)	74 %	ó	69 %		
<u>Credit-related statistics</u>					
Nonperforming assets	\$ 1,211	\$	1,046	\$ 165	16 %
Net charge-offs - loans and leases	\$ 569	\$	534	\$ 35	7 %
Other statistics					
ATMs	8,900		9,091	(191)	(2)%
Branches (g)	2,162		2,296	(134)	(6)%
Brokerage account client assets (in billions) (h)	\$ 59	\$	54	\$ 5	9 %

- (a) Represents mortgage loan servicing balances for third parties and the related income.
- (b) Presented as of period end, except for average customer-related statistics and net charge-offs, which are both shown for the year ended, respectively.
- (c) Servicing fees net of impact of decrease in MSR value due to passage of time, including the impact from both regularly scheduled loan payments, prepayments, and loans that were paid down or paid off during the period.
- (d) Mortgages with borrowers as part of residential real estate purchase transactions.
- (e) Percentage of total consumer and business banking deposit transactions processed at an ATM or through our mobile banking application.
- (f) Represents consumer checking relationships that process the majority of their transactions through non-teller channels.
- (g) Excludes stand-alone mortgage offices and satellite offices (e.g., drive-ups, electronic branches and retirement centers) that provide limited products and/or services.
- (h) Includes cash and money market balances.

Retail Banking earned \$0.8 billion in 2020 compared with \$1.2 billion in 2019. The decrease in earnings was primarily attributable to a higher provision for credit losses and lower noninterest income, partially offset by higher net interest income.

Net interest income increased primarily due to wider interest rate spreads on the value of loans, as well as growth in average deposits and average loan balances, partially offset by narrower interest rate spreads on the value of deposits.

Noninterest income decreased largely due to declines in service charges on deposits as a result of fees waived for customers experiencing pandemic-related hardships and the elimination of certain checking product fees, as well as a decline in consumer services, including merchant services, and credit and debit card. Lower noninterest income also reflected the impact of negative derivative fair value adjustments related to Visa Class B common shares of \$195 million in 2020 compared with negative adjustments of \$100 million in 2019. These declines were partially offset by growth in residential mortgage revenue attributable to increased loan sales revenue as a result of the low interest rate environment and higher revenue from residential mortgage servicing rights valuation, net of economic hedge.

Provision for credit losses increased in 2020 compared to 2019 reflecting changes due to the adoption of the CECL accounting standard, together with the significantly adverse economic impacts of the pandemic.

Noninterest expense increased marginally, primarily as a result of higher personnel, branch-related expenses due in part to the impacts of the pandemic, equipment, and technology costs, partially offset by lower advertising and marketing.

The deposit strategy of Retail Banking is to remain disciplined on pricing and focused on growing and retaining relationship-based balances, executing on market-specific deposit growth strategies and providing a source of low-cost funding and liquidity to PNC. In 2020, average total deposits increased compared to 2019 primarily driven by growth in demand and savings deposits which benefited from the impact of government stimulus payments and lower consumer spending due to the pandemic. Savings and demand deposits also increased due, in part, to a shift from money market deposits to relationship-based savings products.

Retail Banking average total loans grew in 2020 compared with 2019:

- Average commercial loans increased primarily due to PPP loans.
- Average residential real estate loans increased primarily as a result of growth in nonconforming residential mortgages and a robust refinance market driven by historically low interest rates.
- Average auto loan balances in 2020 grew at a lower rate than in recent years due to the impacts of the pandemic on auto sales.
- Average other consumer loans in 2020 increased at a lower rate than in 2019 as growth in the first quarter of 2020 primarily driven by unsecured installment loan
 originations through digital channels was muted for the remainder of the year as originations declined in part due to effects of the pandemic and customer behavior.
- Average credit card balances increased marginally in 2020 as balance growth in the first quarter of 2020 was largely offset by lower consumer spending for the remainder of the year due to the effects of the pandemic.
- Average education loans decreased driven by a decline in the runoff portfolio of government guaranteed education loans.
- Average home equity loans decreased as paydowns and payoffs exceeded new originated volume.

In 2018, we launched our national expansion strategy designed to grow customers with digitally-led banking and a thin branch network in markets outside of our existing retail branch network and began offering our digital high yield savings deposit product and opened our first solution center in Kansas City. Solution centers are an emerging branch operating model with a distinctive layout, where routine transactions are supported through a combination of technology and skilled banker assistance to create personalized customer experiences. The primary focus of the solution center is to bring a community element to our digital banking capabilities. The solution center provides a collaborative environment that connects our customers with our digital solutions and services, beyond deposits and withdrawals. Following the first solution center opening in 2018, four additional solution centers opened in 2019 with a second in Kansas City and three in the Dallas/Fort Worth market. In 2020, we expanded into three new markets, Boston, Houston and Nashville and opened seventeen new solution centers. We also offer digital unsecured installment and small business loans in the expansion markets. Beginning in mid-2021, we expect the BBVA acquisition will accelerate our Retail National expansion efforts to become a coast-to-coast Retail Bank.

Retail Banking continues to enhance the customer experience with refinements to product and service offerings that drive value for consumers and small businesses. We are focused on meeting the financial needs of our customers by providing a broad range of liquidity, banking and investment products. Retail Banking continued to execute on its strategy of transforming the customer experience through transaction channel migration, branch network and home lending process transformations and multi-channel engagement and service strategies. We are also continually assessing our current branch network for optimization opportunities as usage of alternative channels has increased and have closed 162 branches in 2020.

- Approximately 74% of consumer customers used non-teller channels for the majority of their transactions in 2020 compared with 69% in 2019, in part reflecting
 consumer transaction behavior changes during the pandemic.
- Deposit transactions via ATM and mobile channels increased to 64% of total deposit transactions in 2020 from 57% in 2019, in part reflecting consumer transaction behavior changes during the pandemic.

Retail Banking continues to make progress on its multi-year initiative to redesign the home lending process, including integrating mortgage and home equity lending into a common platform. Technology enhancements supported increased residential mortgage origination volume. In addition, we enhanced the home equity origination process to make it easier and to reach additional customers by offering the product in new states. The enhanced product is currently available in forty-three states and we are moving toward offering the product in most of the remaining states in 2021. Additional improvements for both mortgage and home equity are planned to continue throughout 2021.

Corporate & Institutional Banking

Corporate & Institutional Banking's strategy is to be the leading relationship-based provider of traditional banking products and services to its customers through the economic cycles. We aim to grow our market share and drive higher returns by delivering value-added solutions that help our clients better run their organizations, all while maintaining prudent risk and expense management. We continue to focus on building client relationships where the risk-return profile is attractive.

Table 12: Corporate & Institutional Banking Table

Tuble 12. Corporate & Institutional Banking Tuble	_						
(Unaudited)							
Year ended December 31						Change	
Dollars in millions		2020		2019		\$	%
Income Statement							
Net interest income	\$	4,049	\$	3,714	\$	335	9 %
Noninterest income		3,062		2,537		525	21 %
Total revenue		7,111		6,251		860	14 %
Provision for credit losses		2,088		284		1,804	635 %
Noninterest expense		2,856		2,813		43	2 %
Pretax earnings		2,167		3,154		(987)	(31)%
Income taxes		483		706		(223)	(32)%
Noncontrolling interest		10				10	*
Earnings	\$	1,674	\$	2,448	\$	(774)	(32)%
Average Balance Sheet							
Loans held for sale	\$	762	\$	505	\$	257	51 %
Loans							
Commercial							
Commercial and industrial	\$	125,426	\$	112,809	\$	12,617	11 %
Commercial real estate		27,180		26,340		840	3 %
Equipment lease financing		6,813		7,255		(442)	(6)%
Total commercial		159,419		146,404		13,015	9 %
Consumer		10		15		(5)	(33)%
Total loans	\$	159,429	\$	146,419	\$	13,010	9 %
Total assets	\$	183,189	\$	164,243	\$	18,946	12 %
Deposits	*	,	-	,	· -		/ 0
Noninterest-bearing demand	\$	53,681	\$	39,141	\$	14,540	37 %
Interest-bearing demand	•	26,838	Ψ	19,487	Ψ	7,351	38 %
Money market		34,959		28,091		6,868	24 %
Other		8,825		6,676		2,149	32 %
Total deposits	\$	124,303	\$	93,395	\$	30,908	33 %
Performance Ratios	J.	124,303	Ψ	75,575	Ψ	30,700	33 /0
Return on average assets		0.91 %	_	1.49 %			
Noninterest income to total revenue		43 %		41 %			
Efficiency		40 %		45 %			
Other Information		40 /)	43 /0			
Consolidated revenue from: (a)							
	\$	1,884	\$	1,866	\$	18	1 %
Treasury Management (b)	\$ \$	1,607	\$	1,140	\$	467	
Capital Markets (b)	\$	1,607	Ф	1,140	Э	407	41 %
Commercial mortgage banking activities:	\$	162	\$	07	\$	65	67 %
Commercial mortgage loans held for sale (c)	\$	162	\$	97	2	65	
Commercial mortgage loan servicing income (d)		294		261		33 53	13 % 279 %
Commercial mortgage servicing rights valuation, net of economic hedge (e)		72		19			
Total	\$	528	\$	377	\$	151	40 %
MSR asset value (f)	\$	569	\$	649	\$	(80)	(12)%
Average Loans by C&IB business							
Corporate Banking	\$	81,977	\$	74,016	\$	7,961	11 %
Real Estate		40,381		37,149		3,232	9 %
Business Credit		22,589		22,586		3	_
Commercial Banking		10,415		7,984		2,431	30 %
Other		4,067		4,684		(617)	(13)%
Total average loans	\$	159,429	\$	146,419	\$	13,010	9 %
<u>Credit-related statistics</u>							
Nonperforming assets (f)	\$	827	\$	444	\$	383	86 %
Net charge-offs - loans and leases	\$	280	\$	105	\$	175	167 %

^{* -} Not Meaningful

See the additional revenue discussion regarding treasury management, capital markets-related products and services, and commercial mortgage banking activities in the Product Revenue section of this Corporate & Institutional

Amounts are reported in net interest income and noninterest income.

Represents other noninterest income for valuations on commercial mortgage loans held for sale and related commitments, derivative valuations, originations fees, gains on sale of loans held for sale and net interest income on loans held for sale.

- (d) Represents net interest income and noninterest income (primarily in corporate service fees) from loan servicing net of reduction in commercial mortgage servicing rights due to amortization expense and payoffs. Commercial mortgage servicing rights valuation, net of economic hedge is shown separately.
- (e) Amounts are reported in corporate service fees.
- (f) As of December 31.

Corporate & Institutional Banking earned \$1.7 billion in 2020 compared to \$2.4 billion in 2019, as higher provision for credit losses was partially offset by higher revenue.

Net interest income increased in the comparison primarily due to higher average loan and deposit balances and wider interest rate spreads on the value of loans, partially offset by narrower interest rate spreads on the value of deposits.

Growth in noninterest income in the comparison reflected broad-based increases including higher capital markets-related revenue, revenue from commercial mortgage banking activities and treasury management product revenue.

Provision for credit losses increased in 2020 compared to 2019, primarily reflecting changes due to the adoption of the CECL accounting standard, together with the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality.

Nonperforming assets at December 31, 2020 and net loan and lease charge-offs for 2020 increased over the comparative periods of 2019 primarily related to industries economically impacted by the pandemic.

Noninterest expense increased in the comparison largely due to higher variable costs associated with increased business activity and investments in strategic initiatives.

Average loans increased compared with 2019 due to strong growth in Corporate Banking, PNC Real Estate and Commercial Banking:

- Corporate Banking provides lending, equipment financing, treasury management and capital markets-related products and services to mid-sized and large corporations, and government and not-for-profit entities. Average loans for this business grew reflecting new production, including PPP loan originations, partially offset by lower average utilization of loan commitments.
- PNC Real Estate provides banking, financing and servicing solutions for commercial real estate clients across the country. Average loans for this business increased primarily driven by higher commercial mortgage and multifamily agency warehouse lending, partially offset by project loan payoffs.
- Commercial Banking provides lending, treasury management and capital markets-related products and services to smaller corporations and businesses. Average loans for this business increased primarily driven by PPP loan originations, partially offset by lower average utilization of loan commitments.
- Business Credit provides asset-based lending and equipment financing solutions. The loan and lease portfolio is relatively high yielding, with acceptable risk as the loans are mainly secured by marketable collateral. Average loans for this business were relatively unchanged as new originations were mostly offset by lower average utilization of loan commitments.

The deposit strategy of Corporate & Institutional Banking is to remain disciplined on pricing and focused on growing and retaining relationship-based balances over time, executing on customer and segment-specific deposit growth strategies and continuing to provide funding and liquidity to PNC. Average total deposits increased in the comparison reflecting customers maintaining liquidity due to the economic impacts of the pandemic. We continue to actively monitor the interest rate environment and make adjustments in response to evolving market conditions, bank funding needs and client relationship dynamics.

Corporate & Institutional Banking continues to expand its Corporate Banking business, focused on the middle market and larger sectors. We executed on our expansion plans into the Seattle and Portland markets in 2020, and in 2021, we expect the BBVA acquisition to accelerate our expansion efforts across the Southwest, but this has not changed our strategy regarding our de novo expansion efforts. This follows offices opened in Boston and Phoenix in 2019, Denver, Houston and Nashville in 2018, and Dallas, Kansas City and Minneapolis in 2017. These locations complement Corporate & Institutional Banking national businesses with a significant presence in these cities, and build on past successes in the markets where PNC's retail banking presence was limited, such as in the Southeast. Our full suite of commercial products and services is offered in these locations.

Product Revenue

In addition to credit and deposit products for commercial customers, Corporate & Institutional Banking offers other services, including treasury management, capital markets-related products and services, and commercial mortgage banking activities, for customers of all business segments. On a consolidated basis, the revenue from these other services is included in net interest income, corporate service fees and other noninterest income. From a business perspective, the majority of the revenue and expense related to these services is reflected in the Corporate & Institutional Banking segment results and the remainder is reflected in the results of other businesses. The Other Information section in Table 12 includes the consolidated revenue to PNC for these services. A discussion of the consolidated revenue from these services follows.

The Treasury Management business provides payables, receivables, deposit and account services, liquidity and investments, and online and mobile banking products and services to our clients. Treasury management revenue is reported in noninterest income and net interest income. Noninterest income includes treasury management product revenue less earnings credits provided to customers on compensating deposit balances used to pay for products and services. Net interest income primarily includes revenue from all treasury management customer deposit balances. Compared with 2019, treasury management revenue increased primarily due to higher deposit balances and product revenue, partially offset by narrower interest rate spreads on the value of deposits.

Capital markets-related products and services include foreign exchange, derivatives, securities underwriting, loan syndications, mergers and acquisitions advisory and equity capital markets advisory related services. The increase in capital markets-related revenue in the comparison was broad-based across most products and services and included higher credit valuations and fees on customer-related derivatives activities, underwriting fees, equity capital market advisory fees and asset-backed financing fees.

Commercial mortgage banking activities include revenue derived from commercial mortgage servicing (both net interest income and noninterest income) and revenue derived from commercial mortgage loans held for sale and related hedges. Total revenue from commercial mortgage banking activities increased in the comparison due to higher revenue across all activities.

58 The PNC Financial Services Group, Inc. - 2020 Form 10-K

Asset Management Group

Asset Management Group is focused on being a premier bank-held individual and institutional asset manager in each of the markets it serves. The business seeks to deliver high quality banking, trust and investment management services to our high net worth, ultra high net worth and institutional client sectors through a broad array of products and services. Asset Management Group's priorities are to serve our clients' financial objectives, grow and deepen customer relationships and deliver solid financial performance with prudent risk and expense management.

Table 13: Asset Management Group Table

(Unaudited)						Change	
Year ended December 31 Dollars in millions, except as noted		2020				%	
Income Statement		2020		2019		\$	70
Net interest income	\$	357	\$	288	\$	69	24 %
Noninterest income Noninterest income	\$	854	Ф	991	Ф	(137)	(14)%
Total revenue		1,211		1,279	_	(68)	
Provision for (recapture of) credit losses		21		(1)		22	(5)%
Noninterest expense		858		939		(81)	(9)%
•		332		341		(9)	
Pretax earnings Income taxes		332 77		79			(3)% (3)%
	Ф.		ď.		Φ.	(2)	
Earnings	\$	255	\$	262	\$	(7)	(3)%
Average Balance Sheet							
Loans							
Consumer					_		
Residential real estate	\$	2,832	\$	1,923	\$	909	47 %
Other consumer		4,042		4,232	_	(190)	(4)%
Total consumer		6,874		6,155		719	12 %
Commercial		831		759		72	9 %
Total loans	\$	7,705	\$	6,914	\$	791	11 %
Total assets	\$	8,186	\$	7,360	\$	826	11 %
Deposits							
Noninterest-bearing demand	\$	1,568	\$	1,360	\$	208	15 %
Interest-bearing demand		7,777		4,060		3,717	92 %
Money market		1,613		1,832		(219)	(12)%
Savings		7,307		6,216		1,091	18 %
Other		650		822		(172)	(21)%
Total deposits	\$	18,915	\$	14,290	\$	4,625	32 %
Performance Ratios							
Return on average assets		3.12 %)	3.56 %			
Noninterest income to total revenue		71 %)	77 %			
Efficiency		71 %)	73 %			
Supplemental Noninterest Income Information							
Asset management fees	\$	836	\$	862	\$	(26)	(3)%
Other Information							
Nonperforming assets (a)	\$	66	\$	39	\$	27	69 %
Net charge-offs - loans and leases	\$	1	\$	5	\$	(4)	(80)%
Client Assets Under Administration (in billions) (a) (b)							
Discretionary client assets under management	\$	170	\$	154	\$	16	10 %
Nondiscretionary client assets under administration		154		143		11	8 %
Total	\$	324	\$	297	\$	27	9 %
Discretionary client assets under management							
Personal	\$	108	\$	99	\$	9	9 %
Institutional		62		55		7	13 %
Total	\$	170	\$	154	\$	16	10 %
A V 1004	Ψ	1/0	Ψ	1.57	Ψ	10	10 /0

^{* -} Not Meaningful
(a) As of December 31.

Excludes brokerage account client assets.

Asset Management Group earned \$255 million in 2020 compared with \$262 million in 2019. Earnings decreased primarily due to lower revenue and an increase in provision for credit losses, partially offset by a decrease in noninterest expense.

Net interest income increased due to growth in average loan and deposit balances and wider interest rate spreads on loans, partially offset by narrower interest rate spreads on the value of deposits.

Noninterest income decreased due to lower asset management fees resulting from the impact of 2019 divestiture activities and the gains recognized on the retirement recordkeeping and the PNC Capital Advisors investment management business divestitures in the prior period. This decline was partially offset by increases in the average equity markets.

Noninterest expense decreased in the comparison and was primarily attributable to the impact of the 2019 divestitures and lower variable costs.

Provision for credit losses increased reflecting changes due to the adoption of the CECL accounting standard, together with the significantly adverse economic impacts of the pandemic.

Asset Management Group's discretionary client assets under management increased in comparison to the prior year primarily attributable to higher equity markets as of December 31, 2020.

The Asset Management Group strives to be the leading relationship-based provider of investment, planning, banking and fiduciary services to wealthy individuals and institutions by proactively delivering value-added ideas, solutions and exceptional service.

Wealth Management and Hawthorn have nearly 100 offices operating in six out of the ten most affluent states in the U.S. with a majority co-located with retail banking branches. The businesses provide customized investments, planning, trust and estate administration and private banking solutions to affluent individuals and ultra-affluent families.

Institutional Asset Management provides outsourced chief investment officer, custody, private real estate, cash and fixed income client solutions, and fiduciary retirement advisory services to institutional clients including corporations, healthcare systems, insurance companies, unions, municipalities, and non-profits.

We expect that the BBVA acquisition will allow meaningful opportunities to grow the Asset Management Group segment by entering into new markets for both the Wealth Management and Institutional Asset Management businesses.

RISK MANAGEMENT

Enterprise Risk Management

We encounter risk as part of the normal course of operating our business. Accordingly, we design our risk governance framework, referred to as the (ERM) Framework, and risk management processes to help manage this risk. We manage risk in light of our risk appetite to optimize long-term shareholder value while supporting our employees, customers and communities.

Our ERM Framework is structurally aligned with enhanced prudential standards and heightened standards which establish minimum requirements for the design and implementation of a risk governance framework. This Risk Management section describes our ERM Framework which consists of seven core components that provide executive management and the Board of Directors with an aggregate view of significant risks impacting the organization. The seven core components are risk culture, enterprise strategy (including risk appetite, strategic planning, capital planning and stress testing), risk governance and oversight, risk identification, risk assessments, risk controls and monitoring, and risk aggregation and reporting (see the figure below). The overall Risk Management section of this Item 7 also provides an analysis of the firm's Capital Management and our key areas of risk, which include but are not limited to Credit, Market, Liquidity and Operational (including Compliance and Information Security). Our use of financial derivatives as part of our overall asset and liability risk management process is also addressed within this Risk Management section.

We operate within a rapidly evolving regulatory environment. Accordingly, we are actively focused on the timely adoption of applicable regulatory pronouncements within our ERM Framework.

60 The PNC Financial Services Group, Inc. - 2020 Form 10-K



Risk Culture

A strong risk culture helps us make well-informed decisions, ensures individuals conform to the established culture, reduces an individual's ability to do something for personal gain, and rewards employees working toward a common goal rather than individual interests. Our risk culture reinforces the appropriate protocols for responsible and ethical behavior. These protocols are especially critical in terms of our risk awareness, risk-taking behavior and risk management practices.

Managing risk is every employee's responsibility. All of our employees individually and collectively are responsible for ensuring the organization is performing with the utmost integrity, is applying sound risk management practices and is striving to achieve our stated objectives rather than pursuing individual interests. All employees are also responsible for understanding our Enterprise Risk Appetite Statement, the ERM Framework and how risk management applies to their respective roles and responsibilities. Employees are encouraged to collaborate across groups to identify and mitigate risks and elevate issues as required. We reinforce risk management responsibilities through a performance management system where employee performance goals include risk management objectives and incentives for employees to reinforce balanced measures of risk-adjusted performance.

Proactive and open communication, between groups and up to the Board of Directors, facilitates timely identification and resolution of risk issues. Our multi-level risk committee structure provides formal channels to identify and report risk.

Enterprise Strategy

We ensure that our overall enterprise strategy is within acceptable risk parameters through our risk appetite, strategic planning, capital planning and stress testing processes. These components are reviewed and approved at least annually by the Board of Directors.

Risk Appetite: Our risk appetite represents the organization's desired enterprise risk position, set within our capital based risk and liquidity capacity to achieve our strategic objectives and business plans. The Enterprise Risk Appetite Statement qualitatively describes the aggregate level of risk we are willing to accept in order to execute our business strategies. Qualitative guiding principles further define each of the risks within our taxonomy to support the risk appetite statement. Risk appetite metrics and limits, including forward-looking metrics, quantitatively measure whether we are operating within our stated Risk Appetite. Our risk appetite metrics reflect material risks, align with our established Risk Appetite Framework, balance risk and reward, leverage analytics, and adjust in a timely manner to changes in the external and internal risk environments.

Strategic Planning: Our enterprise and line of business strategic plans outline major objectives, strategies and goals which are expected to be achieved over the next five years while seeking to ensure we remain compliant with all capital, risk appetite and liquidity targets and guidelines. Our CEO and CFO lead the development of the corporate strategic plan, the strategic objectives and the comprehensive identification of material risks that could hinder successful implementation and execution of strategies. Strategic planning is linked to our risk management and capital planning processes.

Capital Planning and Stress Testing: Capital planning helps to ensure we are maintaining safe and sound operations and viability. The capital planning process and the resulting capital plan evolve as our overall risks, activities and risk management practices change. Capital planning aligns with our strategic planning process. Stress testing is an essential element of the capital planning process. Effective stress testing enables us to consider the estimated effect on capital of various hypothetical scenarios.

Risk Governance and Oversight

We employ a comprehensive risk management governance framework to help ensure that risks are identified, balanced decisions are made that consider risk and return, and risks are adequately monitored and managed. Risk committees established within this risk governance and oversight framework provide oversight for risk management activities at the Board of Directors, executive, corporate and business levels. Committee composition is designed to provide effective oversight balanced across the three lines of defense in accordance with the OCC's Heightened Risk Management and Governance Standards and Guidelines and the Federal Reserve Board's Enhanced Prudential Standards rules. See the Supervision and Regulation section in Item 1 of this Report for more information.

To ensure the appropriate risks are being taken and effectively managed and controlled, risk is managed across three lines of defense. The Board of Directors' and each line of defense's responsibilities are detailed below:

Board of Directors – The Board of Directors oversees our risk-taking activities, holds management accountable for adhering to the ERM Framework and is responsible for exercising sound, independent judgment when assessing risk.

First line of defense – The front line units are accountable for identifying, owning and managing risks to within acceptable levels while adhering to the ERM Framework. Our businesses strive to enhance risk management and internal control processes within their areas. Integrated and comprehensive processes are designed to adequately manage the business' risk profile and risk appetite through identifying, assessing, monitoring and reporting risks which may significantly impact each business.

Second line of defense – The second line of defense is independent from the first line of defense and is responsible for establishing the risk governance framework and the standards by each independent risk area for identifying, measuring, monitoring, controlling and reporting aggregate risks. As the second line of defense, the independent risk areas monitor the risks generated by the first line of defense, review and challenge the implementation of effective risk management practices, and report any issues or exceptions. The risk areas help to ensure processes and controls owned by the businesses are designed and operating as intended, and they may intervene directly in modifying and developing first line of defense risk processes and controls.

Third line of defense – As the third line of defense, Internal Audit is independent from the first and second lines of defense. Internal Audit provides the Board of Directors and executive management comprehensive assurance on the effectiveness of the ERM Framework and the risk management practices across the organization.

Within the three lines of defense, the independent risk organization has sufficient authority to influence material decisions. Our business oversight and decision-making is supported through a governance structure at the Board of Directors and management level. Specific responsibilities include:

Board of Directors – Our Board of Directors oversees our business and affairs as managed by our officers and employees. The Board of Directors may receive assistance in carrying out its duties and may delegate authority through the following standing committees:

- Audit Committee: monitors the integrity of our consolidated financial statements; monitors internal control over financial reporting; monitors compliance with our code
 of ethics; evaluates and monitors the qualifications and independence of our independent auditors; and evaluates and monitors the performance of our Internal Audit
 function and our independent auditors.
- Nominating and Governance Committee. oversees the implementation of sound corporate governance principles and practices while promoting our best interests and those of our shareholders.
- Personnel and Compensation Committee: oversees the compensation of our executive officers and other specified responsibilities related to personnel and compensation matters affecting us. The committee is also responsible for evaluating the relationship between risk-taking activities and incentive compensation plans.
- Risk Committee: oversees enterprise-wide risk structure and the processes established to identify, measure, monitor and manage the organization's risks and evaluates and approves our risk governance framework. The Risk Committee has formed a Technology Subcommittee and a Compliance Subcommittee to facilitate Board-level oversight of risk management in these areas.

In 2020, the Board created the Special Committee on Equity & Inclusion, which assists the Board in its oversight of management's equity and inclusion efforts, internally and externally, focusing on our systemic processes (including for employees and suppliers); low and moderate income communities (including community development banking, and product offerings and financial support for such communities); and advocacy (including partnerships with leading organizations, and advocacy for necessary structural changes to help provide greater access to the banking system and end systemic racism).

Management Level Executive Committee – The Management Level Executive Committee is responsible for guiding the creation and execution of our business strategy across the company. With this responsibility, the Management Level Executive Committee executes various strategic approval and review activities, with a focus on capital deployment, business performance and risk management. This Committee also helps ensure PNC is staffed with sufficient resources and talent to operate within its risk appetite.

Corporate Committees – The Corporate Committees generally operate based on the delegated approval authority from a Board-level Committee, the Management Level Executive Committee or other Corporate Committees. These Committees operate at the senior management level and are designed to facilitate the review, evaluation, oversight and approval of key risk activities.

Working Committees – The Working Committees generally operate on delegated approval authority from a Corporate Committee, other Working Committees or provide oversight of regulatory/legal matters. Working Committees are intended to assist in the implementation of key enterprise-level activities within a business or function and support the oversight of the businesses key risk activities.

Transactional Committees – Transactional Committees generally operate based on delegated approval authority from a Corporate or Working Committee to approve individual transactions, transactional related activities or movements on the organization's balance sheet.

Policies and Procedures – We have established risk management Policies and Procedures to support our ERM Framework, articulate our risk culture, define the parameters and processes within which employees are to manage risk and conduct our business activities and to provide direction, guidance and clarity on roles and responsibilities to management and the Board of Directors. These Policies and Procedures are organized in a multi-tiered framework and require periodic review and approval by relevant Committees or management.

Risk Identification

Risk identification takes place across a variety of risk types throughout the organization. These risk types include, but are not limited to, credit, liquidity and capital, market, operational and compliance. Risks are identified based on a balanced use of analytical tools and management judgment for both on- and off-balance sheet exposures. Our governance structure supports risk identification by facilitating assessment of key risk issues, emerging risks and idiosyncratic risks and implementation of mitigation strategies as appropriate. These risks are prioritized based on quantitative and qualitative analysis and assessed against the risk appetite. Multiple tools and approaches are used to help identify and prioritize risks, including Risk Appetite Metrics, Key Risk Indicators, Key Performance Indicators, Risk Control and Self-Assessments, scenario analysis, stress testing and special investigations.

Risks are aggregated and assessed within and across risk functions or businesses. The aggregated risk information is reviewed and reported at an enterprise level for adherence to the Risk Appetite Framework and approved by the Board of Directors or by appropriate committees. This enterprise aggregation and reporting approach promotes the identification and appropriate escalation of material risks across the organization and supports an understanding of the cumulative impact of risk in relation to our risk appetite.

Risk Assessment

Once risks are identified, they are evaluated based on quantitative and qualitative analysis to determine whether they are material. Risk assessments support the overall management of an effective ERM Framework and allow us to control and monitor our actual risk level and risk management effectiveness through the use of risk measures. Comprehensive, accurate and timely assessments of risk are essential to an effective ERM Framework. Effective risk measurement practices will uncover recurring risks that have been experienced in the past; make the known risks easy to monitor, understand, compare and report; and reveal unanticipated risks that may not be easy to understand or predict.

Risk Controls and Monitoring

Our ERM Framework consists of policies, processes, personnel and control systems. Risk controls and limits provide the linkage from our Risk Appetite Statement and associated guiding principles to the risk-taking activities of our businesses. In addition to risk appetite limits, a system of more detailed internal controls exists which oversees and monitors our various processes and functions. These control systems measure performance, help employees make correct decisions, help ensure information is accurate and reliable and document compliance with laws and regulations.

We design our monitoring and evaluation of risks and controls to provide assurance that policies, procedures and controls are effective and also to result in the identification of control improvement recommendations. Risk monitoring is a daily, ongoing process used by both the first and second line of defense to ensure compliance with our ERM Framework. Risk monitoring is accomplished in many ways, including performing risk assessments at the prime process and risk assessment unit level, monitoring an area's key controls, the timely reporting of issues, and establishing a quality control and/or quality assurance function, as applicable.

Risk Aggregation and Reporting

Risk reporting is a comprehensive way to: (i) aggregate risks; (ii) identify concentrations; (iii) help ensure we remain within our established risk appetite; (iv) serve as a basis for monitoring our risk profile in relation to our risk appetite and (v) communicate risks to the Board of Directors and executive management.

Risk reports are produced at the line of business, functional risk and enterprise levels. The enterprise level risk report aggregates risks identified in the risk area reports and in the business reports to define the enterprise risk profile. The enterprise risk profile is a point-in-time assessment of enterprise risk and represents our overall risk position in relation to the desired enterprise risk appetite. The

The PNC Financial Services Group, Inc. – 2020 Form 10-K 63

determination of the enterprise risk profile is based on analysis of quantitative reporting of risk limits and other measures along with qualitative assessments. Quarterly aggregation of risk reports from the risk areas and lines of business to inform our risk profile enables a clear view of our risk level relative to our quantitative risk appetite. The enterprise level report is provided through the governance structure to the Risk Committee of the Board of Directors.

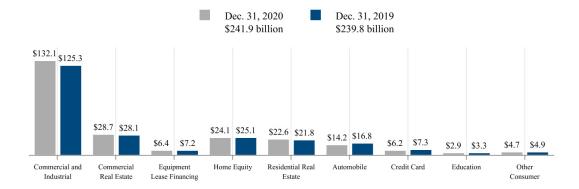
Each individual risk report includes an assessment of inherent risk, quality of risk management, residual risk, risk appetite and risk outlook. The enterprise level risk report includes an aggregate view of risks identified in the individual report and provides a summary of our overall risk profile compared to our risk appetite.

Credit risk represents the possibility that a customer, counterparty or issuer may not perform in accordance with contractual terms. Credit risk is inherent in the financial services business and results from extending credit to customers, purchasing securities, and entering into financial derivative transactions and certain guarantee contracts. Credit risk is one of our most significant risks. Our processes for managing credit risk are designed to be embedded in our risk culture and in our decision-making processes using a systematic approach whereby credit risks and related exposures are identified and assessed, managed through specific policies and processes, measured and evaluated against our risk appetite and credit concentration limits, and reported, along with specific mitigation activities, to management and the Board of Directors through our governance structure. Our most significant concentration of credit risk is in our loan portfolio.

Loan Portfolio Characteristics and Analysis

Table 14: Details of Loans

In billions



We use several credit quality indicators, as further detailed in Note 4 Loans and Related Allowance for Credit Losses in the Notes To Consolidated Financial Statements in Item 8 of this Report, to monitor and measure our exposure to credit risk within our loan portfolio. The following provides additional information about the significant loan classes that comprise our Commercial and Consumer portfolio segments.

Commercial

Environmental and social risks are incorporated into the transaction and portfolio management policies and procedures that govern our underwriting and portfolio management practices. All Corporate & Institutional Banking transactions are subject to an Environmental and Social Risk Management assessment designed to help us better identify and mitigate environmental, human rights and other social risks early in the credit application process. Transactions identified as having a potential environmental, human rights or other social risk are evaluated to determine whether enhanced due diligence is warranted. We have also chosen to limit new originations in sectors that are no longer consistent with our strategic direction, such as mountain-top removal coal mining and private prisons. We periodically review environmental and social risk topics in PNC's Credit Portfolio Strategy Committee, and outcomes of these reviews may result in changes to our due diligence, origination requirements, or limits on credit exposure. Our approach to identifying environmental and social risks is regularly reviewed by senior management and overseen by our Board of Directors. PNC will continue to refine its approach as banking conditions, regulatory requirements, investors' perspectives and our strategic direction evolve.

Commercial and Industrial

Commercial and industrial loans comprised 55% and 52% of our total loan portfolio at December 31, 2020 and 2019, respectively. The majority of our commercial and industrial loans are secured by collateral that provides a secondary source of repayment for the loan should the borrower experience cash generation difficulties. Examples of this collateral include short-term assets, such as accounts receivable, inventory and securities, and long-lived assets, such as equipment, real estate and other business assets.

We actively manage our commercial and industrial loans to assess any changes (both positive and negative) in the level of credit risk at both the borrower and portfolio level. To evaluate the level of credit risk, we assign internal risk ratings reflecting our estimates of the borrower's PD and LGD for each related credit facility. This two-dimensional credit risk rating methodology provides granularity in the risk monitoring process and is updated on an ongoing basis through our credit risk management processes. In addition to monitoring the level of credit risk, we also monitor concentrations of credit risk pertaining to both specific industries and geography that may exist in our portfolio. Our commercial and industrial portfolio is well-diversified as shown in the following table which provides a breakout by industry classification (classified based on the NAICS).

Table 15: Commercial and Industrial Loans by Industry

	_	December 3	1, 2020	December 3	1, 2019
Dollars in millions		Amount	% of Total	Amount	% of Total
Commercial and industrial					
Manufacturing	\$	20,712	16 %	\$ 21,540	17 %
Retail/wholesale trade		20,218	15	21,565	17
Service providers		19,419	15	16,112	13
Financial services		14,909	11	11,318	9
Real estate related (a)		13,369	10	12,346	10
Health care		8,987	7	8,035	6
Transportation and warehousing		7,095	5	7,474	6
Other industries		27,364	21	26,947	22
Total commercial and industrial loans	\$	132,073	100 %	\$ 125,337	100 %

⁽a) Represents loans to customers in the real estate and construction industries.

Commercial and industrial loan growth at December 31, 2020 primarily reflects the impact of PPP lending under the CARES Act and higher multifamily agency warehouse lending, partially offset by lower utilization of loan commitments. At December 31, 2020 PNC had \$12.0 billion of PPP loans outstanding. See the Commercial High Impact Industries discussion within this Credit Risk Management section for additional discussion of the impact of COVID-19 on our commercial portfolio and how we are evaluating and monitoring the portfolio for elevated levels of credit risk.

Commercial Real Estate

Commercial real estate loans comprised \$17.3 billion related to commercial mortgages, \$6.3 billion of real estate project loans and \$5.1 billion of intermediate term financing loans as of December 31, 2020. Comparable amounts were \$17.0 billion, \$5.6 billion and \$5.5 billion, respectively, as of December 31, 2019.

We monitor credit risk associated with our commercial real estate loans similar to commercial and industrial loans by analyzing PD and LGD. Additionally, risks associated with these types of credit activities tend to be correlated to the loan structure, collateral location, project progress and business environment. These attributes are also monitored and utilized in assessing credit risk. The portfolio is geographically diverse due to the nature of our business involving clients throughout the U.S.

The following table presents our commercial real estate loans by geography and property type:

Table 16: Commercial Real Estate Loans by Geography and Property Type

		December :	31, 2020	December 31, 2019		
Dollars in millions		Amount	% of Total		Amount	% of Total
Geography (a)						
California	\$	4,458	16 %	\$	4,393	16 %
Florida		2,991	10		2,557	9
Texas		2,031	7		1,717	6
Maryland		1,770	6		1,889	7
Virginia		1,586	6		1,547	6
Pennsylvania		1,425	5		1,310	4
Ohio		1,247	4		1,307	4
New Jersey		1,117	4		1,106	4
Illinois		900	3		1,001	4
Georgia		859	3		876	3
Other		10,332	36		10,407	37
Total commercial real estate loans	\$	28,716	100 %	\$	28,110	100 %
Property Type						
Multifamily	\$	9,617	33 %	\$	9,003	32 %
Office		7,691	27		7,641	27
Retail		3,490	12		3,702	13
Industrial/warehouse		1,999	7		2,003	7
Hotel/motel		1,954	7		1,813	7
Seniors housing		1,417	5		1,123	4
Mixed use		835	3		943	3
Other		1,713	6		1,882	7
Total commercial real estate loans	\$	28,716	100 %	\$	28,110	100 %

⁽a) Presented in descending order based on loan balances at December 31, 2020.

Commercial High Impact Industries

In light of the current economic circumstances related to COVID-19, we are evaluating and monitoring our entire commercial portfolio for elevated levels of credit risk; however, the industry sectors that have been and we believe will continue to be most likely impacted by the effects of the pandemic are:

- Non-real estate related
 - Leisure recreation: restaurants, casinos, hotels, convention centers
 - Non-essential retail: retail excluding auto, gas, staples
 - · Healthcare facilities: elective, private practices
 - Consumer services: religious organizations, childcare
 - Leisure travel: cruise, airlines, other travel/transportation
 - Other impacted areas: shipping, senior living, specialty education
- Real estate related
 - Non-essential retail and restaurants: malls, lifestyle centers, outlets, restaurants
 - Hotel: full service, limited service, extended stay
 - · Seniors housing: assisted living, independent living

As of December 31, 2020, our outstanding loan balances in these industries totaled \$17.2 billion, or approximately 7% of our total loan portfolio, while additional unfunded loan commitments totaled \$11.2 billion. We continue to carefully monitor and manage these loans, and while we have not yet experienced material charge-offs in these industries, we do expect to see further stress.

In our non-real estate related category we have \$9.7 billion in loans outstanding, \$1.9 billion of which are funded through the PPP and guaranteed by the SBA under the CARES Act. Nonperforming loans in these industries totaled \$0.1 billion, or 1% of total loans outstanding in the non-real estate related category, while criticized assets totaled \$1.3 billion at December 31, 2020 with the greatest stress seen in the leisure recreation and leisure travel sectors.

Within the real estate related category we have \$7.5 billion in loans outstanding, which includes real estate projects of \$5.0 billion and unsecured real estate of \$2.5 billion. Nonperforming loans in this category totaled \$0.2 billion at December 31, 2020, or 3% of total

loans outstanding in the commercial real estate related category, driven primarily by loans related to two real estate investment trusts. In this category, we continue to see substantial stress in the non-essential retail and hotel segments.

Oil and Gas Loan Portfolio

We are also monitoring our oil and gas portfolio closely for elevated levels of credit risk given the continued pressures on the energy industry. As of December 31, 2020, our outstanding loans in the oil and gas sector totaled \$3.4 billion, or 1% of total loans, which included \$0.1 billion funded through the PPP and guaranteed by the SBA under the CARES Act. This portfolio comprised approximately \$1.6 billion in the midstream and downstream sectors, \$0.9 billion of oil services companies and \$0.9 billion related to exploration and production companies. Of the oil services category, approximately \$0.2 billion is not asset-based or investment grade. Nonperforming loans in the oil and gas sector as of December 31, 2020 totaled \$0.2 billion, or 6% of total loans outstanding in this sector. Additional unfunded loan commitments for the oil and gas portfolio totaled \$7.1 billion at December 31, 2020.

Consumer

Home Equity

Home equity loans comprised \$12.6 billion of primarily variable-rate home equity lines of credit and \$11.5 billion of closed-end home equity installment loans at December 31, 2020. Comparable amounts were \$13.9 billion and \$11.2 billion, as of December 31, 2019, respectively.

We track borrower performance monthly, including obtaining original LTVs, updated FICO scores at least quarterly, updated LTVs at least quarterly, and other credit metrics at least quarterly, including the historical performance of any related mortgage loans regardless of whether we hold the lien. We also segment the population into pools based on product type (e.g., home equity loans, brokered home equity loans, home equity lines of credit, brokered home equity lines of credit). This information is used for internal reporting and risk management. As part of our overall risk analysis and monitoring, we also segment the portfolio based upon the loan delinquency, nonperforming status, modification and bankruptcy status, FICO scores, LTV, lien position and geographic concentration.

The credit quality of newly originated loans in 2020 was strong overall with a weighted-average LTV on originations of 67% and a weighted-average FICO score of 776.

The credit performance of the majority of the home equity portfolio where we hold the first lien position is superior to the portfolio where we hold the second lien position, but do not hold the first lien. Lien position information is generally determined at the time of origination and monitored on an ongoing basis for risk management purposes. We use an industry-leading third-party service provider to obtain updated loan information, including lien and collateral data that is aggregated from public and private sources.

The following table presents our home equity loans by geography and lien type:

Table 17: Home Equity Loans by Geography and by Lien Type

		December	31, 2020		December 3	31, 2019
Dollars in millions	A	Amount % of Total			Amount	% of Total
Geography (a)						
Pennsylvania	\$	5,602	23 %	\$	5,812	23 %
New Jersey		3,462	14		3,728	15
Ohio		2,753	11		2,899	12
Florida		1,536	6		1,340	5
Illinois		1,411	6		1,544	6
Michigan		1,398	6		1,371	5
Maryland		1,332	6		1,420	6
North Carolina		1,043	4		1,092	4
Kentucky		922	4		990	4
Indiana		813	3		820	3
Other		3,816	17		4,069	17
Total home equity loans	\$	24,088	100 %	\$	25,085	100 %
Lien type						
1st lien			63 %			59 %
2nd lien			37			41
Total			100 %			100 %

(a) Presented in descending order based on loan balances at December 31, 2020.

Residential Real Estate

Residential real estate loans primarily consisted of residential mortgage loans at both December 31, 2020 and 2019.

We track borrower performance of this portfolio monthly similarly to home equity loans. We also segment the mortgage portfolio into pools based on product type (g., nonconforming, conforming). This information is used for internal reporting and risk management. As part of our overall risk analysis and monitoring, we also segment the portfolio based upon loan delinquency, nonperforming status, modification and bankruptcy status, FICO scores, LTV and geographic concentrations. Loan performance is evaluated by source originators and loan servicers.

The credit quality of newly originated loans that we retained on our balance sheet in 2020 was strong overall as evidenced by a weighted-average LTV on originations of 67% and a weighted-average FICO score of 775.

The following table presents our residential real estate loans by geography:

Table 18: Residential Real Estate Loans by Geography

		December 3	1, 2020		1, 2019	
Dollars in millions	Amount % of Total			Amount		% of Total
Geography (a)						
California	\$	7,828	35 %	\$	6,800	31 %
New Jersey		1,635	7		1,779	8
Florida		1,620	7		1,580	7
Washington		1,104	5		646	3
Illinois		1,039	5		1,118	5
Pennsylvania		1,036	5		1,113	5
New York		1,020	5		1,008	5
Virginia		864	4		868	4
Maryland		857	4		923	4
North Carolina		796	4		877	4
Other		4,761	19		5,109	24
Total residential real estate loans	\$	22,560	100 %	\$	21,821	100 %

⁽a) Presented in descending order based on loan balances at December 31, 2020.

We originate residential mortgage loans nationwide through our national mortgage business as well as within our branch network. Residential mortgage loans underwritten to agency standards, including conforming loan amount limits, are typically sold with servicing retained by us. We also originate nonconforming residential mortgage loans that do not meet agency standards, which we retain on our balance sheet. The originated nonconforming residential mortgage portfolio had strong credit quality at December 31, 2020 with an average original LTV of 69% and an average original FICO score of 775. Our portfolio of originated nonconforming residential mortgage loans totaled \$17.9 billion at December 31, 2020 with 41% located in California.

<u>Automobile</u>

Within auto loans, \$12.7 billion resided in the indirect auto portfolio while \$1.5 billion were in the direct auto portfolio as of December 31, 2020. Comparable amounts as of December 31, 2019 were \$15.1 billion and \$1.7 billion, respectively. The indirect auto portfolio pertains to loans originated through franchised dealers, including from expansion into new markets. This business is strategically aligned with our core retail banking business.

The following table presents certain key statistics related to our indirect and direct auto portfolios:

Table 19: Auto Loan Key Statistics

	December 31, 2020	December 31, 2019
Weighted-average loan origination FICO score (a)		
Indirect auto	784	757
Direct auto	768	769
Weighted-average term of loan originations - in months (a)		
Indirect auto	72	74
Direct auto	62	63

⁽a) Weighted-averages calculated for the years ended December $31,\,2020$ and 2019.

We continue to focus on borrowers with strong credit profiles as evidenced by the weighted-average loan origination FICO scores noted in Table 19. We offer both new and used auto financing to customers through our various channels. At December 31, 2020, the portfolio balance was composed of 56% new vehicle loans and 44% used vehicle loans. Comparable amounts at December 31, 2019 were 55% and 45%, respectively.

The auto loan portfolio's performance is measured monthly, including updated collateral values that are obtained monthly and updated FICO scores that are obtained at least quarterly. For internal reporting and risk management, we analyze the portfolio by product channel and product type and regularly evaluate default and delinquency experience. As part of our overall risk analysis and monitoring, we segment the portfolio by loan structure, collateral attributes and credit metrics which include FICO score, LTV and term.

Nonperforming Assets and Loan Delinquencies

Nonperforming Assets

Nonperforming assets include nonperforming loans and leases for which ultimate collectability of the full amount of contractual principal and interest is not probable and include nonperforming TDRs, OREO and foreclosed assets. Loans held for sale, certain government insured or guaranteed loans and loans accounted for under the fair value option are excluded from nonperforming loans. Amounts as of December 31, 2019 also excluded purchased impaired loans as we were accreting interest income over the expected life of the loans. In connection with the adoption of the CECL standard, nonperforming loans as of December 31, 2020 include PCD loans which meet the criteria to be classified as nonperforming. See Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report for details on our nonaccrual policies and additional information related to the adoption of the CECL standard, including the discontinuation of purchased impaired loan accounting.

The following table presents a summary of nonperforming assets by major category:

Table 20: Nonperforming Assets by Type

			December 31		Change		
Dollars in millions	Dec	cember 31 2020)	2019		\$	%
Nonperforming loans							
Commercial	\$	923	\$	501	\$	422	84%
Consumer (a)		1,363		1,134		229	20%
Total nonperforming loans		2,286		1,635		651	40%
OREO and foreclosed assets		51		117		(66)	(56)%
Total nonperforming assets	\$	2,337	\$	1,752	\$	585	33%
TDRs included in nonperforming loans	\$	902	\$	843	\$	59	7%
Percentage of total nonperforming loans		39 %)	52 %)		
Nonperforming loans to total loans		0.94 %)	0.68 %)		
Nonperforming assets to total loans, OREO and foreclosed assets		0.97 %)	0.73 %)		
Nonperforming assets to total assets		0.50 %)	0.43 %)		
Allowance for loan and lease losses to nonperforming loans (b)		235 %)	168 %)		

(a) Excludes most unsecured consumer loans and lines of credit, which are charged off after 120 to 180 days past due and are not placed on nonperforming status.

The increase in nonperforming assets at December 31, 2020 was primarily attributable to higher nonperforming commercial loans in industries adversely impacted by the pandemic and the energy industry and an increase in residential real estate nonperforming loans primarily related to borrowers exiting forbearance and deferring payments to the end of the loan term, partially offset by the decline in OREO and foreclosed assets due to asset sales and the suspension of pandemic-related foreclosures. See the discussion of Commercial High Impact Industries and the Oil and Gas Loan Portfolio within this Credit Risk Management section for further detail on these industries.

⁽b) Ratio at December 31, 2020 reflects the changes in ALLL methodology due to the adoption of the CECL accounting standard on January 1, 2020, along with increases in reserves during 2020 due to the significantly adverse economic impacts of the pandemic and its resulting effects on loan portfolio credit quality and loan growth.

The following table provides details on the change in nonperforming assets for the years ended December 31, 2020 and 2019:

Table 21: Change in Nonperforming Assets

In millions	2020	2019
January 1	\$ 1,752 \$	1,808
New nonperforming assets	1,947	1,342
Charge-offs and valuation adjustments	(421)	(664)
Principal activity, including paydowns and payoffs	(603)	(472)
Asset sales and transfers to loans held for sale	(82)	(95)
Returned to performing status	(256)	(167)
December 31	\$ 2,337 \$	1,752

As of December 31, 2020, approximately 97% of total nonperforming loans were secured by collateral which lessened reserve requirements and is expected to reduce credit losses. As of December 31, 2020, commercial nonperforming loans were carried at approximately 83% of their unpaid principal balance, due to charge-offs and interest applied to principal, before consideration of the ALLL.

Within consumer nonperforming loans, residential real estate TDRs comprised 47% of total residential real estate nonperforming loans, while home equity TDRs comprised 41% of home equity nonperforming loans at December 31, 2020. Comparable amounts at December 31, 2019 were 79% and 49%, respectively. TDRs generally remain in nonperforming status until a borrower has made at least six consecutive months of both principal and interest payments under the modified terms or ultimate resolution occurs. Loans where borrowers have been discharged from personal liability through Chapter 7 bankruptcy and have not formally reaffirmed their loan obligations to us and loans to borrowers not currently obligated to make both principal and interest payments under the restructured terms are not returned to accrual status. Loans that have been restructured for COVID-19 related hardships and meet certain criteria under the CARES Act are not identified as TDRs. Refer to the Troubled Debt Restructurings and Loan Modifications discussion in this Credit Risk Management section for more information on the treatment of loan modifications under the CARES Act.

At December 31, 2020, our largest nonperforming asset was \$141 million in the Real Estate and Rental and Leasing industry and the ten largest individual nonperforming assets represented 19% of total nonperforming assets.

Loan Delinquencies

We regularly monitor the level of loan delinquencies and believe these levels may be a key indicator of credit quality in our loan portfolio. Measurement of delinquency status is based on the contractual terms of each loan. Loans that are 30 days or more past due in terms of payment are considered delinquent. Loan delinquencies include government insured or guaranteed loans and loans accounted for under the fair value option, and at December 31, 2020 also include PCD loans. Amounts exclude loans held for sale, while amounts as of December 31, 2019 also excluded purchased impaired loans.

Pursuant to the interagency guidance issued in April 2020 and in connection with the credit reporting rules from the CARES Act, the December 31, 2020 delinquency status of loans modified due to COVID-19 related hardships aligns with the rules set forth for banks to report delinquency status to the credit agencies. These rules require that COVID-19 related loan modifications be reported as follows:

- if current at the time of modification, the loan remains current throughout the modification period,
- if delinquent at the time of modification and the borrower was not made current as part of the modification, the loan maintains its reported delinquent status during the modification period, or
- if delinquent at the time of modification and the borrower was made current as part of the modification or became current during the modification period, the loan is reported as current.

As a result, certain loans modified due to COVID-19 related hardships are not being reported as past due as of December 31, 2020 based on the contractual terms of the loan, even where borrowers may not be making payments on their loans during the modification period. Loan modifications due to COVID-19 related hardships that permanently reduce either the contractual interest rate or the principal balance of a loan do not qualify for TDR relief under the CARES Act or the interagency guidance. See the COVID-19 Relief section in Item 1 of this Report for more information on the CARES Act and the related interagency guidance.

Table 22: Accruing Loans Past Due (a)

	Amount % o						% of Total Loans O	of Total Loans Outstanding		
Dollars in millions	 December 31 2020		December 31 2019		Chang \$	e %	December 31 2020	December 31 2019		
Early stage loan delinquencies										
Accruing loans past due 30 to 59 days	\$ 620	\$	661	\$	(41)	(6)%	0.26 %	0.28 %		
Accruing loans past due 60 to 89 days	234		258		(24)	(9)%	0.10 %	0.11 %		
Total early stage loan delinquencies	854		919		(65)	(7)%	0.35 %	0.38 %		
Late stage loan delinquencies										
Accruing loans past due 90 days or more	509		585		(76)	(13)%	0.21 %	0.24 %		
Total accruing loans past due	\$ 1,363	\$	1,504	\$	(141)	(9)%	0.56 %	0.63 %		

⁽a) Past due loan amounts include government insured or guaranteed loans of \$0.6 billion at both December 31, 2020 and 2019.

Accruing loans past due 90 days or more continue to accrue interest because they are (i) well secured by collateral and are in the process of collection, (ii) managed in homogeneous portfolios with specified charge-off timeframes adhering to regulatory guidelines or (iii) certain government insured or guaranteed loans. As such, they are excluded from nonperforming loans.

Troubled Debt Restructurings and Loan Modifications

Troubled Debt Restructurings

A TDR is a loan whose terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties. TDRs result from our loss mitigation activities and include rate reductions, principal forgiveness, postponement/reduction of scheduled amortization and extensions, which are intended to minimize economic loss and to avoid foreclosure or repossession of collateral. Additionally, TDRs also result from court-imposed concessions (e.g., a Chapter 7 bankruptcy where the debtor is discharged from personal liability to us and a court approved Chapter 13 bankruptcy repayment plan). Loans to borrowers experiencing COVID-19 related hardships that have been restructured but that meet certain criteria under the CARES Act are not categorized as TDRs.

The following table provides a summary of Troubled Debt Restructurings at December 31, 2020 and 2019, respectively:

Table 23: Summary of Troubled Debt Restructurings (a)

	-		December 31	Change			
Dollars in millions		December 31 2020		2019		\$	%
Commercial	\$	528	\$	361	\$	167	46%
Consumer		1,116		1,303		(187)	(14)%
Total TDRs	\$	1,644	\$	1,664	\$	(20)	(1)%
Nonperforming	\$	902	\$	843	\$	59	7%
Accruing (b)		742		821		(79)	(10)%
Total TDRs	8	1,644	\$	1,664	\$	(20)	(1)%

⁽a) Amounts in table do not include associated valuation allowances.

Nonperforming TDRs represented approximately 39% of total nonperforming loans and 55% of total TDRs at December 31, 2020. Comparable amounts at December 31, 2019 were 52% and 51%, respectively. The remaining portion of TDRs represents TDRs that have been returned to accrual status after performing under the restructured terms for at least six consecutive months.

See Note 1 Accounting Policies and Note 4 Loans and Related Allowance for Credit Losses in the Notes To Consolidated Financial Statements in Item 8 of this Report and the COVID-19 Relief section within Item 1 of this Report for additional information on TDRs. For additional information on the CARES Act, also see the COVID-19 Relief section within Item 1 of this Report.

Loan Modifications

During the fourth quarter of 2020, PNC continued to provide relief to our customers from the economic impacts of COVID-19 through a variety of solutions, including additional grants and extensions of loan and lease modifications under our hardship relief programs.

Under the CARES Act, loan modifications meeting certain criteria qualify the loan for relief from TDR treatment. These criteria include:

- the loan modification resulted from a COVID-19 related hardship,
- the borrower was no more than 30 days past due as of December 31, 2019, and
- the loan modification did not result in a permanent reduction of interest or principal.

⁽b) Accruing loans include consumer credit card loans and certain loans that have demonstrated a period of at least six months of performance under the restructured terms and are excluded from nonperforming loans.

Loans that do not meet the criteria for TDR relief under the CARES Act may be evaluated under interagency guidance, which allows banks to not designate certain short-term modifications as TDRs for borrowers with COVID-19 hardships who were current on their payments prior to the modification. Loan modifications related to COVID-19 hardships that permanently reduce either the contractual interest rate and/or principal balance of the loan are designated as TDRs. For additional information on the CARES Act and interagency guidance, see the COVID-19 Relief section within Item 1 of this Report.

The impact of these modifications was considered within the quarterly reserve determination. See the Allowance for Credit Losses discussion within the Critical Accounting Estimates and Judgments section for additional information. Refer to the Loan Delinquencies discussion in this Credit Risk Management section for information on how these hardship related loan modifications are reported from a delinquency perspective as of December 31, 2020.

Commercial Loan and Lease Modifications Under COVID-19 Hardship Relief Programs

During the fourth quarter of 2020, PNC continued to selectively grant temporary loan and lease modifications to our commercial clients although the volume of this activity declined significantly from earlier in the year. Modifications made were in the form of principal and/or interest (payment) deferrals, covenant waivers and other types of modifications, including term extensions, and were based on each individual borrower's situation.

Commercial accounts in active assistance under COVID-19 hardship relief payment deferral programs totaled \$0.1 billion, or 0.1% of total commercial loans at December 31, 2020

We are monitoring the delinquency status of loans exiting assistance as a measure to assess credit risk. As of December 31, 2020, approximately 99% of the accruing commercial loans that have exited COVID-19 payment deferral programs were current or less than 30 days past due.

Consumer Loan Modifications Under Hardship Relief Programs

Our consumer loan modification programs are being granted in response to customer hardships that extended beyond the initial relief period. These loan and line modifications include all hardship related modifications, and the primary offerings as of December 31, 2020 are described in the following matrix.

Modification Type	Home Equity	Residential Real Estate	Automobile	Credit Card	Education	Other Consumer
Extensions - Defers current payments and moves them to the end of the loan by extending the loan's maturity or the extension reamortizes the remaining principal balance.						
Forbearance - Part or all of the payments are deferred and moved to the end of the forbearance period. Balance is due at the end of the forbearance period, but payment options may be available to repay the forborne amount, including for many borrowers an option to delay payment until the payoff or maturity of the loan.						
Minimum payment suspension - Reduces required minimum payment to $\$0$ for a period of time.						
New loan terms - Sets loan terms to a new monthly payment of principal and interest based on customer's financial situation.	0					
Reduced payments - Allows the customer to make a lower payment for a period of time, with any deferred balance being moved to the end of the loan term or extending the loan's maturity.						
Repayment plan - Allows reduced payment and interest rate for a period of time.						

Interest continues to accrue during the relief period for loans modified in these programs unless the loan was designated as a nonperforming TDR or was on nonaccrual at the date of modification. The method of collection of the accrued interest is dependent on the product type and modification offered.

During the fourth quarter of 2020, we continued to see a reduction in the number of consumers requesting hardship assistance from the peak in the summer of 2020, which has led to additional declines in loans under modification that present credit risk to PNC at December 31, 2020.

The following table provides a summary of consumer accounts in active assistance under hardship relief programs that were on our balance sheet at December 31, 2020. We have excluded government insured or guaranteed loans totaling \$426 million and \$262 million in the Residential real estate and Education loan classes, respectively, from Table 24 as these loans present minimal credit risk to PNC.

Table 24: Consumer Loans in Active Hardship Relief Programs (a) (b)

As of December 31, 2020 - Dollars in millions	Number of Accounts	Unpaid Principal Balance	% of Loan Class (c)	% Making Payment in Last Payment Cycle
Consumer				
Home equity	1,316	\$ 112	0.5 %	66.9 %
Residential real estate	2,185	577	2.6 %	29.5 %
Automobile	8,104	197	1.4 %	71.5 %
Credit card	8,936	63	1.0 %	68.0 %
Education	3,772	56	1.9 %	15.2 %
Other consumer	1,928	25	0.5 %	73.0 %
Total consumer (d)	26,241	\$ 1,030	1.4 %	59.9 %

- (a) In cases where there have been multiple modifications on an individual loan, regardless of the number of modifications granted, each loan is counted only once in this table.
- (b) Amounts include loan modifications that qualify for TDR accounting staling \$149 million.
- (c) Based on total loans outstanding at December 31, 2020.
- (d) Approximately 86% of these loan balances were secured by collateral at December 31, 2020.

Modifications are considered to have exited active assistance after the modification period has expired or the modification was exited. As of December 31, 2020, approximately 95% of the accruing consumer loans that have exited hardship relief program modifications were current or less than 30 days past due.

The initial consumer loan modifications granted in response to the COVID-19 outbreak and the surrounding economic circumstances were short-term and temporary in nature and generally meet the qualifications for relief from TDR treatment under the CARES Act. However, in response to customers' hardships that have extended beyond the initial relief period, PNC has offered options to customers which include both temporary and permanent modifications that may reduce the payment, the interest rate or extend the term and/or defer principal and interest payments. Loan modifications that permanently reduce either the contractual interest rate and/or principal balance of the loan would not meet the qualifications for relief from TDR treatment under the CARES Act.

Allowance for Credit Losses

On January 1, 2020 we adopted the CECL standard which replaced the incurred loss methodology for our credit related reserves with an expected credit loss methodology for the remaining estimated contractual term of in-scope assets and off-balance sheet exposures. Our ACL is based on historical loss experience, current borrower risk characteristics, current economic conditions, reasonable and supportable forecasts of future conditions and other relevant factors. We maintain the ACL at an appropriate level for expected losses on our existing investment securities, loans, equipment finance leases, trade receivables and other financial assets and off-balance sheet credit exposures and determine this allowance based on quarterly assessments of the remaining estimated contractual term of the assets or exposures as of the balance sheet date.

Expected losses are estimated using a combination of (i) the expected losses over a reasonable and supportable forecast period, (ii) a period of reversion to long run average expected losses where applicable and (iii) long run average expected losses for the remaining estimated contractual term.

We use forward-looking information in estimating expected credit losses for our reasonable and supportable forecast period. For this purpose, we have established a framework which includes a three year forecast period and the use of four economic scenarios and associated probability weights, which in combination create a forecast of expected economic outcomes over the forecasted period. Forward looking information, such as forecasted relevant macroeconomic variables, is incorporated into the expected credit loss estimates using quantitative techniques, as well as through analysis from PNC's economists and management's judgment in qualitatively assessing the ACL.

The reversion period is used to bridge our three year reasonable and supportable forecast period and the long run average expected credit losses. We may consider a number of factors in determining the duration of the reversion period, such as contractual maturity of the asset, observed historical patterns and the estimated credit loss rates at the end of the forecast period relative to the beginning of the long run average period. The reversion period is typically 1-3 years, if not immediate.

The long run average expected credit losses are derived from our available historical credit information. We use long run average

expected loss for the portfolio over the estimated remaining contractual term beyond our forecast period and the reversion period.

The following discussion provides additional information related to our reserves under CECL for loans and leases as well as unfunded lending related commitments. See Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report for further discussion on our ACL, including details of our methodologies and discussion of the allowances for investment securities and other financial assets. See also the Critical Accounting Estimates and Judgments section for further discussion of the assumptions used in the determination of the ACL.

Allowance for Loan and Lease Losses

Our pooled expected loss methodology is based upon the quantification of PD, LGD, EAD and the remaining estimated contractual term for a loan or loan segment. We also consider the impact of prepayments and amortization on contractual maturity in our expected loss estimates. We use historical data, current borrower characteristics and forecasted economic variables in quantitative methods to estimate these risk parameters by loan or loan segments. PDs represent a quantification of risk that a borrower may not be able to pay their contractual obligation over a defined period of time. LGD describes the estimate of potential loss if a borrower were to default, and EAD (or utilization rates for revolving loans) is the estimated balance outstanding at the time of default and expected loss. These parameters are calculated for each forecasted scenario, and are combined to generate expected loss estimates by scenario in proportion to the scenario weights.

We use a discounted cash flow methodology for our consumer real estate related loan classes and for certain commercial and consumer TDR loans. For non-TDR residential real estate loans and lines, we determine effective interest rates considering contractual cash flows adjusted for prepayments and market interest rates. We then determine the net present value of expected cash flows and ALLL by discounting contractual cash flows adjusted for both prepayments and expected credit losses using the effective interest rates.

We establish individually assessed reserves for loans and leases that do not share similar risk characteristics with a pool of loans using methods prescribed by GAAP. Reserves for individual commercial nonperforming loans and commercial TDRs exceeding a defined dollar threshold are based on an analysis of the present value of the loan's expected future cash flows or the fair value of the collateral, if appropriate under our policy for collateral dependent loans. Commercial loans that are below the defined threshold and accruing TDRs are collectively reserved for, as we believe these loans continue to share similar risk characteristics. For consumer nonperforming loans classified as collateral dependent, charge-off and ALLL related to recovery of amounts previously charged-off are evaluated through an analysis of the fair value of the collateral less costs to sell.

While our reserve methodologies strive to reflect all relevant credit risk factors, there continues to be uncertainty associated with, but not limited to, potential imprecision in the estimation process due to the inherent time lag of obtaining information and normal variations between expected and actual outcomes. We may hold additional reserves that are designed to provide coverage for losses attributable to such risks. A portion of the allowance is related to qualitative measurement factors. These factors may include, but are not limited to, the following:

- Industry concentrations and conditions, including the impacts of COVID-19 on highly impacted segments,
- · Changes in market conditions, including regulatory and legal requirements,
- · Changes in the nature and volume of our portfolio,
- Recent credit quality trends, including the impact of COVID-19 hardship related loan modifications,
- · Recent loss experience in particular portfolios, including specific and unique events,
- Recent macro-economic factors that may not be reflected in the forecast information,
- Limitations of available input data, including historical loss information and recent data such as collateral values,
- Model imprecision and limitations,
- · Changes in lending policies and procedures, including changes in loss recognition and mitigation policies and procedures, and
- Timing of available information, including the performance of first lien positions.

Allowance for Unfunded Lending Related Commitments

We maintain the allowance for unfunded lending related commitments on off-balance sheet credit exposures that are not unconditionally cancelable, é.g., unfunded loan commitments, letters of credit and certain financial guarantees) at a level we believe is appropriate as of the balance sheet date to absorb expected credit losses on these exposures. Other than the estimation of the probability of funding, this reserve is estimated in a manner similar to the methodology used for determining reserves for loans and leases. The allowance for unfunded lending related commitments is recorded as a liability on the Consolidated Balance Sheet. Net adjustments to this reserve are included in the provision for credit losses.

The following table summarizes our allowance for credit loss by loan class:

Table 25: Allowance for Credit Losses by Loan Class (a)

	_		D 1 21 20	20		D					
	_		December 31, 20	20	-	December 31, 2019					
Dollars in millions		Allowance Amount	Total Loans	% of Total Loans	Allowance Amount	Total Loans	% of Total Loans				
Allowance for loans and lease losses											
Commercial											
Commercial and industrial	\$	2,300	\$ 132,07	3 1.74 %	\$ 1,489	\$ 125,337	1.19 %				
Commercial real estate		880	28,71	3.06 %	278	28,110	0.99 %				
Equipment lease financing		157	6,41	4 2.45 %	45	7,155	0.63 %				
Total commercial		3,337	167,20	3 2.00 %	1,812	160,602	1.13 %				
Consumer				_	<u>-</u>		_'				
Home equity		313	24,08	8 1.30 %	87	25,085	0.35 %				
Residential real estate		28	22,56	0.12 %	258	21,821	1.18 %				
Automobile		379	14,21	8 2.67 %	160	16,754	0.95 %				
Credit card		816	6,21	5 13.13 %	288	7,308	3.94 %				
Education		129	2,94	6 4.38 %	17	3,336	0.51 %				
Other consumer		359	4,69	8 7.64 %	120	4,937	2.43 %				
Total consumer		2,024	74,72	5 2.71 %	930	79,241	1.17 %				
Total	\$	5,361	\$ 241,92	8 2.22 %	\$ 2,742	\$ 239,843	1.14 %				
Allowance for unfunded lending related commitments		584			318						
Allowance for credit losses	\$	5,945			\$ 3,060						
Allowance for credit losses to total loans				2.46 %			1.28 %				
Commercial				2.29 %			1.33 %				
Consumer				2.84 %			1.18 %				

⁽a) Excludes allowances for investment securities and other financial assets, which together totaled \$109 million at December 31, 2020.

The following table summarizes our loan charge-offs and recoveries:

Table 26: Loan Charge-Offs and Recoveries

Year ended December 31 Dollars in millions	Gro	Gross Charge-offs		Recoveries		Net Charge-offs / (Recoveries)	% of Average Loans (Annualized)
2020							
Commercial							
Commercial and industrial	\$	382	\$	75	\$	307	0.22 %
Commercial real estate		2		9		(7)	(0.02) %
Equipment lease financing		23		10		13	0.19 %
Total Commercial		407		94		313	0.18 %
Consumer							
Home equity		42		61		(19)	(0.08) %
Residential real estate		10		16		(6)	(0.03) %
Automobile		265		128		137	0.86 %
Credit card		300		35		265	3.99 %
Education		16		8		8	0.25 %
Other consumer		152		18		134	2.75 %
Total Consumer	\$	785	\$	266	\$	519	0.67 %
Total	\$	1,192	\$	360	\$	832	0.33 %
2019							
Commercial							
Commercial and industrial	\$	183	\$	59	\$	124	0.10 %
Commercial real estate		18		11		7	0.02 %
Equipment lease financing		15		8		7	0.10 %
Total Commercial		216		78		138	0.09 %
Consumer							
Home equity		68		74		(6)	(0.02) %
Residential real estate		9		14		(5)	(0.02) %
Automobile		261		114		147	0.95 %
Credit card		263		27		236	3.60 %
Education		26		8		18	0.50 %
Other consumer		131		17		114	2.41 %
Total Consumer	\$	758	\$	254	\$	504	0.67 %
Total	\$	974	\$	332	\$	642	0.27 %

Total net charge-offs increased \$190 million, or 30%, in 2020 compared to 2019. The increase is primarily attributable to commercial net charge-offs, which were driven by industries adversely impacted by the pandemic.

See Note 1 Accounting Policies and Note 4 Loans and Related Allowance for Credit Losses in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional information.

Liquidity and Capital Management

Liquidity risk has two fundamental components. The first is potential loss assuming we were unable to meet our funding requirements at a reasonable cost. The second is the potential inability to operate our businesses because adequate contingent liquidity is not available. We manage liquidity risk at the consolidated company level (bank, parent company and nonbank subsidiaries combined) to help ensure that we can obtain cost-effective funding to meet current and future obligations under both normal "business as usual" and stressful circumstances, and to help ensure that we maintain an appropriate level of contingent liquidity.

Management monitors liquidity through a series of early warning indicators that may indicate a potential market, or PNC-specific, liquidity stress event. In addition, management performs a set of liquidity stress tests over multiple time horizons with varying levels of severity and maintains a contingency funding plan to address a potential liquidity stress event. In the most severe liquidity stress simulation, we assume that our liquidity position is under pressure, while the market in general is under systemic pressure. The simulation considers, among other things, the impact of restricted access to both secured and unsecured external sources of funding, accelerated runoff of customer deposits, valuation pressure on assets and heavy demand to fund committed obligations. Parent company liquidity guidelines are designed to help ensure that sufficient liquidity is available to meet our parent company obligations over the succeeding 24-month period. Liquidity-related risk limits are established within our Enterprise Liquidity Management Policy

and supporting policies. Management committees, including the Asset and Liability Committee, and the Board of Directors and its Risk Committee regularly review compliance with key established limits.

In addition to these liquidity monitoring measures and tools described above, we also monitor our liquidity by reference to the LCR which is further described in the Supervision and Regulation section in Item 1 of this Report. PNC and PNC Bank calculate the LCR on a daily basis, and as of December 31, 2020, the LCR for PNC and PNC Bank exceeded the requirement of 100%.

We provide additional information regarding regulatory liquidity requirements, including information on the 2019 Tailoring Rules, and their potential impact on us in the Supervision and Regulation section of Item 1 Business and Item 1A Risk Factors of this Report.

Sources of Liquidity

Our largest source of liquidity on a consolidated basis is the customer deposit base generated by our banking businesses. These deposits provide relatively stable and low-cost funding. Total deposits increased to \$365.3 billion at December 31, 2020 from \$288.5 billion at December 31, 2019 driven by growth in noninterest-bearing deposits and interest-bearing deposits. See the Funding Sources section of the Consolidated Balance Sheet Review in this Item 7 for additional information related to our deposits. Additionally, certain assets determined by us to be liquid as well as unused borrowing capacity from a number of sources are also available to manage our liquidity position.

At December 31, 2020, our liquid assets consisted of cash and due from banks and short-term investments (federal funds sold, resale agreements, trading securities and interest-earning deposits with banks) totaling \$95.1 billion and securities available for sale totaling \$87.4 billion. The level of liquid assets fluctuates over time based on many factors, including market conditions, loan and deposit growth and balance sheet management activities. Our liquid assets included \$22.7 billion of securities available for sale and trading securities pledged as collateral to secure public and trust deposits, repurchase agreements and for other purposes. In addition, \$0.1 billion of securities held to maturity were also pledged as collateral for these purposes.

We also obtain liquidity through various forms of funding, including long-term debt (senior notes, subordinated debt and FHLB borrowings) and short-term borrowings (securities sold under repurchase agreements, commercial paper and other short-term borrowings). See Note 10 Borrowed Funds in the Notes To Consolidated Financial Statements in Item 8 and the Funding Sources section of the Consolidated Balance Sheet Review in this Item 7 for additional information related to our borrowings.

Total senior and subordinated debt, on a consolidated basis, decreased due to the following activity:

Table 27: Senior and Subordinated Debt

In billions	 2020
January 1	\$ 35.1
Issuances	3.5
Calls and maturities	(9.0)
Other	1.1
December 31	\$ 30.7

Bank Liquidity

Under PNC Bank's 2014 bank note program, as amended, PNC Bank may from time to time offer up to \$40.0 billion aggregate principal amount outstanding at any one time of its unsecured senior and subordinated notes with maturity dates more than nine months (in the case of senior notes) and five years or more (in the case of subordinated notes) from their date of issue. At December 31, 2020, PNC Bank had \$19.2 billion of notes outstanding under this program of which \$14.2 billion were senior bank notes and \$5.0 billion were subordinated bank notes.

The following table details issuances in 2020:

Table 28: PNC Bank Notes Issued

Issuance Date	Amount	Description of Issuance
February 25, 2020		\$1.0 billion of senior floating rate notes with a maturity date of February 24, 2023. Interest is payable quarterly at the 3-month LIBOR rate, reset quarterly, plus 32.5 basis points, on February 24, May 24, August 24, and November 24, commencing on May 24, 2020.
February 25, 2020		\$500 million of senior fixed-to-floating rate notes with a maturity date of February 24, 2023. Interest is payable semi-annually at a fixed rate of 1.743% per annum, on February 24 and August 24 of each year, beginning on August 24, 2020. Beginning on February 24, 2022, interest is payable quarterly at the floating rate equal to the 3-month LIBOR rate, reset quarterly, plus 32.3 basis points, on February 24, May 24, August 24, and November 24, commencing on May 24, 2022.

The following table details redemptions in 2020:

Table 29: PNC Bank Notes Redeemed

Redemption Date	Amount	Description of Redemption
March 12, 2020	\$1.1 billion	\$1.1 billion of all outstanding Senior Floating Rate Notes with an original scheduled maturity date of March 12, 2021. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of March 12, 2020.
April 20, 2020	\$1.0 billion	\$1.0 billion of all outstanding Senior Notes with an original scheduled maturity date of May 19, 2020. The securities have a distribution rate of 2.000%. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of April 20, 2020.
May 4, 2020	\$750 million	\$750 million of all outstanding Senior Notes with an original scheduled maturity date of June 1, 2020. The securities have a distribution rate of 2.300%. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of May 4, 2020.
June 10, 2020	\$800 million	\$800 million of all outstanding Senior Floating Rate Notes with an original scheduled maturity date of June 10, 2021. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of June 10, 2020.
June 22, 2020	\$750 million	\$750 million of all outstanding Senior Notes with an original scheduled maturity date of July 21, 2020. The securities have a distribution rate of 2.600%. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of June 22, 2020.
October 6, 2020	\$1.5 billion	\$1.5 billion of all outstanding Senior Notes with an original scheduled maturity date of November 5, 2020. The securities have a distribution rate of 2.450%. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of October 6, 2020.
December 23, 2020	\$900 million	\$900 million of all outstanding Senior Notes with an original scheduled maturity date of January 22, 2021. The securities have a distribution rate of 2.500%. The redemption price was equal to \$1,000 per \$1,000 in principal amount, plus any accrued and unpaid distributions to the redemption date of December 23, 2020.

PNC Bank maintains additional secured borrowing capacity with the FHLB-Pittsburgh and through the Federal Reserve Bank discount window. The Federal Reserve Bank, however, is not viewed as a primary means of funding our routine business activities, but rather as a potential source of liquidity in a stressed environment or during a market disruption. At December 31, 2020, our unused secured borrowing capacity at the FHLB-Pittsburgh and the Federal Reserve Bank totaled \$81.1 billion. The Federal Reserve also has established certain special liquidity facilities under its emergency lending authority in Section 13(3) of the Federal Reserve Act in response to the economic impacts of the pandemic. For additional information, see the Supervision and Regulation section in Item 1 of this Report.

PNC Bank has the ability to offer up to \$10.0 billion of its commercial paper to provide additional liquidity. As of December 31, 2020, there were no issuances outstanding under this program.

Parent Company Liquidity

In addition to managing liquidity risk at the bank level, we monitor the parent company's liquidity. The parent company's contractual obligations consist primarily of debt service related to parent company borrowings and funding non-bank affiliates. Additionally, the parent company maintains adequate liquidity to fund discretionary activities such as paying dividends to our shareholders, share repurchases and acquisitions.

As of December 31, 2020, available parent company liquidity totaled \$14.1 billion. Parent company liquidity is held in intercompany cash. Investments with longer durations may also be acquired, but if so, the related maturities are aligned with scheduled cash needs, such as the maturity of parent company debt obligations.

The principal source of parent company liquidity is the dividends it receives from PNC Bank, which may be impacted by the following:

- · Bank-level capital needs,
- · Laws and regulations,
- Corporate policies,
- · Contractual restrictions, and
- Other factors.

There are statutory and regulatory limitations on the ability of a national bank to pay dividends or make other capital distributions or to extend credit to the parent company or its non-bank subsidiaries. The amount available for dividend payments by PNC Bank to the parent company without prior regulatory approval was approximately \$3.1 billion at December 31, 2020. See Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report for a further discussion of these limitations.

In addition to dividends from PNC Bank, other sources of parent company liquidity include cash and investments, as well as dividends and loan repayments from other subsidiaries and dividends or distributions from equity investments. We can also generate liquidity for the parent company and PNC's non-bank subsidiaries through the issuance of debt and equity securities, including certain capital instruments, in public or private markets and commercial paper. Authorized by the Board of Directors, the parent company has the ability to offer up to \$5.0 billion of commercial paper to provide additional liquidity. As of December 31, 2020 there were no commercial paper issuances outstanding.

The parent company has an effective shelf registration statement pursuant to which we can issue additional debt, equity and other capital instruments. On January 22, 2020, the parent company issued \$2.0 billion of senior notes with a maturity date of January 22, 2030, redeemable, in whole or in part, on or after October 24, 2029. Interest is payable semi-annually at a fixed rate of 2.550% per annum, on January 22 and July 22 of each year, commencing on July 22, 2020.

Parent company senior and subordinated debt outstanding totaled \$10.6 billion at December 31, 2020 compared with \$9.8 billion at December 31, 2019.

PNC will use approximately \$11.6 billion of parent company cash to acquire BBVA.

Contractual Obligations and Commitments

The following tables set forth contractual obligations and various other commitments as of December 31, 2020:

Table 30: Contractual Obligations

		Payment Due By Period					
December 31, 2020 – in millions	Total	Less than one year	One to three years	Four to five years	After five years		
Remaining contractual maturities of time deposits	\$ 19,692 \$	17,452 \$	1,518 \$	499 \$	223		
Borrowed funds (a)	37,195	7,958	11,956	5,706	11,575		
Minimum annual rentals on noncancellable operating leases	2,312	364	649	477	822		
Nonqualified pension and postretirement benefits	418	49	90	86	193		
Purchase obligations (b)	1,111	519	463	103	26		
Total contractual cash obligations	\$ 60,728 \$	26,342 \$	14,676 \$	6,871 \$	12,839		

- (a) Includes basis adjustment relating to accounting hedges.
- (b) Includes purchase obligations for goods and services covered by noncancellable contracts and contracts including cancellation fees.

Table 31: Other Commitments (a)

· ·										
	<u></u>	Amount Of Commitment Expiration By Period								
December 31, 2020 – in millions		Total Amounts Committed		Less than one year		One to three years		Four to five years		After five years
Commitments to extend credit (b)	\$	207,821	\$	99,592	\$	64,956	\$	42,338	\$	935
Net outstanding standby letters of credit (c)		9,053		4,583		3,548		914		8
Standby bond purchase agreements		1,448		274		720		454		
Other commitments (d)		2,046		1,086		585		48		327
Total commitments	\$	220,368	\$	105,535	\$	69,809	\$	43,754	\$	1,270

- a) Other commitments are funding commitments that could potentially require performance in the event of demands by third parties or contingent events. Loan commitments are reported net of syndications, assignments and
- (b) Commitments to extend credit, or net unfunded loan commitments, represent arrangements to lend funds or provide liquidity subject to specified contractual conditions.
- c) Includes \$3.8 billion of standby letters of credit that support remarketing programs for customers' variable rate demand notes.
- (d) Includes other commitments of \$0.6 billion that were not on our Consolidated Balance Sheet. The remaining \$1.4 billion of other commitments were included in Other liabilities on our Consolidated Balance Sheet.

Credit Ratings

PNC's credit ratings affect the cost and availability of short and long-term funding, collateral requirements for certain derivative instruments and the ability to offer certain products.

In general, rating agencies base their ratings on many quantitative and qualitative factors, including capital adequacy, liquidity, asset quality, business mix, level and quality of earnings, and the current legislative and regulatory environment, including implied government support. A decrease, or potential decrease, in credit ratings could impact access to the capital markets and/or increase the cost of debt, and thereby adversely affect liquidity and financial condition.

The following table presents credit ratings for PNC and PNC Bank as of December 31, 2020:

Table 32: Credit Ratings for PNC and PNC Bank

		December 31, 2020				
	Moody's	Standard & Poor's	Fitch			
PNC						
Senior debt	A3	A-	A			
Subordinated debt	A3	BBB+	A-			
Preferred stock	Baa2	BBB-	BBB			
PNC Bank						
Senior debt	A2	A	A+			
Subordinated debt	A3	A-	A			
Long-term deposits	Aa2	A	AA-			
Short-term deposits	P-1	A-1	F1+			
Short-term notes	P-1	A-1	F1			

On November 16, 2020, Moody's affirmed the ratings and assessments of The PNC Financial Services Group, Inc. and its subsidiaries. At the same time, the Moody's rating outlook on PNC Bank's long-term deposit, senior unsecured debt and issuer ratings were changed from stable to negative, based on Moody's view that recent deposit growth and the acquisition of BBVA may reduce the amount of unsecured debt on PNC's balance sheet, a key input in Moody's rating methodology.

Capital Management

We manage our funding and capital positions by making adjustments to our balance sheet size and composition, issuing or redeeming debt, issuing equity or other capital instruments, executing treasury stock transactions and capital redemptions or repurchases, and managing dividend policies and retaining earnings.

In 2020, we returned \$3.5 billion of capital to shareholders through repurchases of 11 million shares for \$1.5 billion and dividends on common shares of \$2.0 billion.

We repurchase shares of PNC common stock under a share repurchase authorization provided by our Board of Directors in the amount of up to 100 million shares and consistent with capital plans submitted to the Federal Reserve. Repurchases are made on the open market or in privately negotiated transactions and the extent and timing of share repurchases under authorizations depend on a number of factors including, among others, market and general economic conditions, economic and regulatory capital considerations, alternative uses of capital, the potential impact on our credit ratings, contractual and regulatory limitations, and the results of supervisory assessments of capital adequacy and capital planning processes undertaken by the Federal Reserve and the OCC as part of the CCAR and DFAST processes.

In relation to the 2019 capital plan accepted by the Federal Reserve, we repurchased a total of 24 million shares for \$3.4 billion as of the end of the first quarter 2020.

PNC announced on March 16, 2020 a temporary suspension of our common stock repurchase program in conjunction with the Federal Reserve's effort to support the U.S. economy during the pandemic.

Following completion of the 2020 CCAR/DFAST process, the Federal Reserve announced certain limitations on the capital distributions of any CCAR-participating bank holding company (including PNC) during the third quarter of 2020. Under these limitations, PNC and other CCAR-participating firms, absent Federal Reserve approval, were permitted to make only the following capital distributions during the third quarter and fourth quarter of 2020:

- Pay common dividends at the same per share level as paid during the second quarter of 2020, provided that the amount does not exceed the average of the firm's net
 income for the four preceding calendar quarters,
- · Purchase common shares in an amount that equals the amount of share issuances related to expensed employee compensation, and
- Make scheduled payments on additional Tier 1 and Tier 2 capital instruments.

We continued the suspension of our common stock repurchase program through the fourth quarter of 2020, with the exception of employee benefit-related repurchases in the third quarter, consistent with the extension of the Federal Reserve's special capital distribution restrictions.

The Federal Reserve extended these limitations through the first quarter of 2021, but modified the limitations to permit common stock share repurchases and dividends provided that the aggregate amount of such repurchases and dividends do not exceed the average of

the firm's net income for the four preceding calendar quarters and the firm does not increase its common dividend. The Federal Reserve may extend these limitations to additional quarters, potentially in modified form. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases, during the period leading up to our pending BBVA transaction close date.

On January 5, 2021, the PNC Board of Directors declared a quarterly cash dividend on common stock of \$1.15 per share payable on February 5, 2021.

See the Supervision and Regulation section of Item 1 Business in this Report for further information concerning the CCAR and DFAST process and the factors the Federal Reserve takes into consideration in its evaluation of capital plans.

Table 33: Basel III Capital

	_						
Dollars in millions		Basel III December 31, 2020 (a)	December 31, 2020 (Fully Implemented) (estimated) (b)				
Common equity Tier 1 capital							
Common stock plus related surplus, net of treasury stock	\$	875	\$ 875				
Retained earnings		48,083	46,848				
Goodwill, net of associated deferred tax liabilities		(9,021)	(9,021)				
Other disallowed intangibles, net of deferred tax liabilities		(172)	(172)				
Other adjustments/(deductions)		(30)	(33)				
Common equity Tier 1 capital	\$	39,735	\$ 38,497				
Additional Tier 1 capital							
Preferred stock plus related surplus		3,517	3,517				
Other adjustments/(deductions)							
Tier 1 capital	\$	43,252	\$ 42,014				
Additional Tier 2 capital							
Qualifying subordinated debt		3,648	3,648				
Trust preferred capital securities		40					
Eligible credit reserves includable in Tier 2 capital		4,061	4,061				
Total Basel III capital	\$	51,001	\$ 49,723				
Risk-weighted assets							
Basel III standardized approach risk-weighted assets (c)	\$	326,772	\$ 325,547				
Average quarterly adjusted total assets	\$	454,220	\$ 452,983				
Supplementary leverage exposure (d)	\$	437,526	\$ 539,999				
Basel III risk-based capital and leverage ratios (a)(e)							
Common equity Tier 1		12.2 %	11.8 %				
Tier 1		13.2 %	12.9 %				
Total (f)		15.6 %	15.3 %				
Leverage (g)		9.5 %	9.3 %				
Supplementary leverage ratio (d)		9.9 %	7.8 %				
			•				

- (a) The ratios are calculated to reflect PNC's election to adopt the CECL five-year transition provision.
- (b) The ratios are calculated to reflect the full impact of CECL and excludes the benefits of the optional five-year transition.
- (c) Basel III standardized approach weighted-assets are based on the Basel III standardized approach rules and include credit and market risk-weighted assets.
- (d) As of December 31, 2020, the BHC's Supplementary leverage exposure and Supplementary leverage ratio reflects the temporary exclusions of U.S. Treasury securities and deposits at Federal Reserve Banks. The Supplementary leverage ratio is calculated based on Tier 1 capital divided by Supplementary leverage exposure, which takes into account both on balance sheets assets as well as certain off-balance sheet items, including loan commitments and potential future exposure under derivative contracts.
- (e) All ratios are calculated using the regulatory capital methodology applicable to PNC and calculated based on the standardized approach.
- (f) The Basel III Total risk-based capital ratios include nonqualifying trust preferred capital securities of \$40 million that are subject to a phase-out period that runs through 2021.
- (g) Leverage ratio is calculated based on Tier 1 capital divided by Average quarterly adjusted total assets.

As of January 1, 2020, the 2019 Tailoring Rules became effective for PNC. The most significant changes involve PNC's election to exclude specific AOCI items from CET1 capital and higher thresholds used to calculate CET1 capital deductions. Effective January 1, 2020, PNC must deduct from CET1 capital investments in unconsolidated financial institutions, mortgage servicing rights and deferred tax assets (in each case, net of associated deferred tax liabilities) to the extent such items individually exceed 25% of the institution's adjusted CET1 capital.

PNC's regulatory risk-based capital ratios are calculated using the standardized approach for determining risk-weighted assets. Under the standardized approach for determining credit risk-weighted assets, exposures are generally assigned a pre-defined risk weight.

Exposures to high volatility commercial real estate, nonaccruals, TDRs, past due exposures and equity exposures are generally subject to higher risk weights than other types of exposures.

The regulatory agencies have adopted a rule permitting banks to delay the estimated impact on regulatory capital stemming from implementing CECL. CECL's estimated impact on CET1 capital, as defined by the rule, is the change in retained earnings at adoption plus or minus 25% of the change in CECL ACL at the balance sheet date compared to the CECL ACL at transition. The estimated CECL impact is added to CET1 capital through December 31, 2021, then phased-out over the following three years. PNC elected to adopt this optional transition provision effective as of March 31, 2020. See additional discussion of this rule in the Supervision and Regulation section of Item 1 Business and Item 1A Risk Factors of this Report.

In response to the economic conditions caused by the pandemic, the Federal Reserve has adopted a final rule that revises, on a temporary basis, the calculation of supplementary leverage exposure (the denominator of the SLR) by BHCs to exclude the on-balance sheet amounts of U.S. Treasury securities and deposits at Federal Reserve Banks. The rule was effective as of April 14, 2020 and will remain in effect through March 31, 2021. The OCC also has permitted national banks to exclude such on-balance sheet amounts from the bank's supplementary leverage exposure, provided the bank agrees to obtain OCC approval of capital distributions during the effective period of the exclusion. PNC Bank has not elected to take advantage of this OCC rule.

At December 31, 2020, PNC and PNC Bank, our sole bank subsidiary, were both considered "well capitalized," based on applicable U.S. regulatory capital ratio requirements. To qualify as "well capitalized", PNC must have Basel III capital ratios of at least 6% for Tier 1 risk-based capital and 10% for Total risk-based capital, and PNC Bank must have Basel III capital ratios of at least 6.5% for Common equity Tier 1 risk-based capital, 8% for Tier 1 risk-based capital, 10% for Total risk-based capital and a Leverage ratio of at least 5%.

Federal banking regulators have stated that they expect the largest U.S. BHCs, including PNC, to have a level of regulatory capital well in excess of the regulatory minimum and have required the largest U.S. BHCs, including PNC, to have a capital buffer sufficient to withstand losses and allow them to meet the credit needs of their customers through estimated stress scenarios. We seek to manage our capital consistent with these regulatory principles, and believe that our December 31, 2020 capital levels were aligned with them.

We provide additional information regarding regulatory capital requirements and some of their potential impacts on us in the Supervision and Regulation section of Item 1 Business, Item 1A Risk Factors and Note 20 Regulatory Matters in the Notes To Consolidated Financial Statements in Item 8 of this Report. See the Statistical Information (Unaudited) section in Item 8 of this Report for details on our December 31, 2017 and 2016 Fully Phased-in Basel III Common equity Tier 1 capital ratios.

Market Risk Management

Market risk is the risk of a loss in earnings or economic value due to adverse movements in market factors such as interest rates, credit spreads, foreign exchange rates, commodity prices and equity prices. We are exposed to market risk primarily by our involvement in the following activities, among others:

- · Traditional banking activities of gathering deposits and extending loans,
- · Equity and other investments and activities whose economic values are directly impacted by market factors, and
- · Fixed income securities, derivatives and foreign exchange activities, as a result of customer activities and securities underwriting.

We have established enterprise-wide policies and methodologies to identify, measure, monitor and report market risk. Market Risk Management provides independent oversight by monitoring compliance with established guidelines and reporting significant risks in the business to the Risk Committee of the Board of Directors.

Market Risk Management - Interest Rate Risk

Interest rate risk results primarily from our traditional banking activities of gathering deposits and extending loans. Many factors, including economic and financial conditions, movements in interest rates and consumer preferences, affect the difference between the interest that we earn on assets and the interest that we pay on liabilities and the level of our noninterest-bearing funding sources. Due to the repricing term mismatches and embedded options inherent in certain of these products, changes in market interest rates not only affect expected near-term earnings, but also the economic values of these assets and liabilities.

Our Asset and Liability Management group centrally manages interest rate risk as prescribed in our risk management policies, which are approved by management's Asset and Liability Committee and the Risk Committee of the Board of Directors.

Sensitivity results and market interest rate benchmarks for the fourth quarters of 2020 and 2019 follow:

Table 34: Interest Sensitivity Analysis

	Fourth Quarter 2020	Fourth Quarter 2019
Net Interest Income Sensitivity Simulation (a)		
Effect on net interest income in first year from gradual interest rate change over the following 12 months of:		
100 basis point increase	4.7 %	1.5 %
Effect on net interest income in second year from gradual interest rate change over the preceding 12 months of:		
100 basis point increase	12.5 %	3.8 %
Key Period-End Interest Rates		
One-month LIBOR	0.14 %	1.76 %
Three-month LIBOR	0.24 %	1.91 %
Three-year swap	0.24 %	1.69 %

⁽a) Given the inherent limitations in certain of these measurement tools and techniques, results become less meaningful as interest rates approach zero. Senior management approved the suspension of the 100bps decrease in rate change sensitivities considering the current low rate environment.

In addition to measuring the effect on net interest income assuming parallel changes in current interest rates, we routinely simulate the effects of a number of nonparallel interest rate environments. Table 35 reflects the percentage change in net interest income over the next two 12-month periods assuming (i) the PNC Economist's most likely rate forecast, (ii) implied market forward rates and (iii) yield curve slope flattening (a 50 basis point yield curve slope flattening between one-month and ten-year rates superimposed on current base rates) scenario.

All changes in forecasted net interest income are relative to results in a base rate scenario where current market rates are assumed to remain unchanged over the forecast horizon.

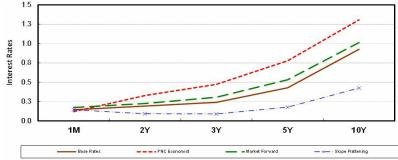
Table 35: Net Interest Income Sensitivity to Alternative Rate Scenarios

		December 31, 2020					
	PNC Economist	Market Forward	Slope Flattening				
First year sensitivity	0.6 %	0.5 %	(0.9) %				
Second year sensitivity	3.3 %	1.9 %	(3.1) %				

When forecasting net interest income, we make assumptions about interest rates and the shape of the yield curve, the volume and characteristics of new business and the behavior of existing on- and off-balance sheet positions. These assumptions determine the future level of simulated net interest income in the base interest rate scenario and the other interest rate scenarios presented in Tables 34 and 35. These simulations assume that as assets and liabilities mature, they are replaced or repriced at then current market rates

The following graph presents the LIBOR/Swap yield curves for the base rate scenario and each of the alternate scenarios one year forward.

Table 36: Alternate Interest Rate Scenarios: One Year Forward



The fourth quarter 2020 interest sensitivity analyses indicate that our Consolidated Balance Sheet is positioned to benefit from an increase in interest rates and an upward sloping interest rate yield curve. We believe that we have the deposit funding base and balance sheet flexibility to adjust, where appropriate and permissible, to changing interest rates and market conditions.

As discussed in Item 1A Risk Factors, the planned discontinuance of the requirement that banks submit rates for the calculation of LIBOR after 2023 presents risks to the financial instruments originated, held or serviced by PNC that use LIBOR as a reference rate. PNC holds instruments and services its instruments and instruments owned by others that may be impacted by the likely discontinuance of LIBOR, including loans, investments, hedging products, floating-rate obligations, and other financial instruments that use LIBOR as a reference rate. The transition from LIBOR as an interest rate benchmark will subject PNC, like other financial participants, to financial, legal, operational, and reputational risks.

In order to address LIBOR cessation and the associated risks, PNC has established a cross-functional governance structure to oversee the overall strategy for the transition from LIBOR and mitigate risks associated with the transition. An initial LIBOR impact and risk assessment has been performed, which identified the associated risks across products, systems, models, and processes. PNC also established an enterprise-level program, which is actively monitoring PNC's overall firm-wide exposure to LIBOR and using these results to plan transitional strategies and track progress versus these goals. Program workstreams were formed by Line of Business to ensure accountability and alignment with the appropriate operational, technology, and customer-facing stakeholders, while establishing a centralized Program Management Office to ensure consistency in execution and communication. Project plans and established milestones have been developed and have continued to evolve and be refined in line with industry developments and internal decisions and progress. PNC is also involved in industry discussions, preparing milestones for readiness and assessing progress against those milestones, along with developing and delivering on internal and external LIBOR cessation communication plans.

Key efforts in 2020 included:

- · Enhancing fallback language in new contracts and reviewing existing legal contracts/agreements to assess fallback language impacts,
- Making preparations for internal operational readiness,
- · Making necessary enhancements to PNC's infrastructure, including systems, models, valuation tools and processes,
- Developing and delivering on internal and external LIBOR cessation communication plans,
- Engaging with PNC clients, industry working groups and regulators, and
- Monitoring developments associated with LIBOR alternatives and industry practices related to LIBOR-indexed instruments.

PNC also has been an active participant in efforts with the Federal Reserve and other regulatory agencies to explore the potential need for a credit-sensitive rate or add-on to SOFR for use in commercial loans. Those efforts led to the formation of the Credit Sensitive Group, which has held a series of workshops to assess how a credit-sensitive rate or add-on to SOFR might be constructed and discuss associated implementation issues.

In addition, in the third quarter of 2020, PNC began offering conforming ARMs using SOFR instead of USD LIBOR in line with Fannie Mae and Freddie Mac requirements. Plans are in place to begin offering private student loans and portfolio loans using non-LIBOR rates in the second quarter of 2021. PNC has provided regular updates to Federal Reserve, OCC and FDIC examination staff regarding its LIBOR cessation and transition plans.

Market Risk Management - Customer-Related Trading Risk

We engage in fixed income securities, derivatives and foreign exchange transactions to support our customers' investing and hedging activities. These transactions, related hedges and the credit valuation adjustment related to our customer derivatives portfolio are marked-to-market daily and reported as customer-related trading activities. We do not engage in proprietary trading of these products.

We use VaR as the primary means to measure and monitor market risk in customer-related trading activities. VaR is used to estimate the probability of portfolio losses based on the statistical analysis of historical market risk factors. A diversified VaR reflects empirical correlations across different asset classes. We calculate a diversified VaR at a 95% confidence interval and the results for 2020 and 2019 were within our acceptable limits.

To help ensure the integrity of the models used to calculate VaR for each portfolio and enterprise-wide, we use a process known as backtesting. The backtesting process consists of comparing actual observations of gains or losses against the VaR levels that were calculated at the close of the prior day. Our VaR measure assumes that exposures remain constant and that recent market variability is a good predictor of future variability. Actual observations include customer related revenue and intraday hedging which helps to reduce losses and can reduce the number of instances actual losses exceed the prior day VaR measure. There were minimal instances during 2020 and 2019 under our diversified VaR measure where actual losses exceeded the prior day VaR measure and those losses were insignificant. Our portfolio and enterprise-wide VaR models utilize a historical approach with a 500 day look back period.

Customer-related trading revenue was \$466 million in 2020 compared with \$285 million in 2019 and is recorded in Other noninterest income and Other interest income on our Consolidated Income Statement. The increase was primarily due to the impact of the changes in credit valuations for customer-related derivative activities and higher derivative client sales revenues.

Market Risk Management - Equity And Other Investment Risk

Equity investment risk is the risk of potential losses associated with investing in both private and public equity markets. In addition to extending credit, taking deposits, underwriting securities and trading financial instruments, we make and manage direct investments in

a variety of transactions, including management buyouts, recapitalizations and growth financings in a variety of industries. We also have investments in affiliated and non-affiliated funds that make similar investments in private equity. The economic and/or book value of these investments and other assets are directly affected by changes in market factors

Various PNC business units manage our equity and other investment activities. Our businesses are responsible for making investment decisions within the approved policy limits and associated guidelines.

A summary of our equity investments follows:

Table 37: Equity Investments Summary

			Change			
Dollars in millions	December 31 2020	December 31 2019		\$	%	
Tax credit investments	\$ 2,870	\$ 2,218	\$	652	29 %	
Private equity and other	3,182	2,958		224	8 %	
Total	\$ 6,052	\$ 5,176	\$	876	17 %	

Tax Credit Investments

Included in our equity investments are direct tax credit investments and equity investments held by consolidated entities. These tax credit investment balances included unfunded commitments totaling \$1.4 billion and \$1.0 billion at December 31, 2020 and 2019, respectively. These unfunded commitments are included in Other liabilities on our Consolidated Balance Sheet

Note 5 Loan Sale and Servicing Activities and Variable Interest Entities in the Notes To Consolidated Financial Statements in Item 8 of this Report has further information on tax credit investments.

Private Equity and Other

The majority of our other equity investments consists of our private equity portfolio. The private equity portfolio is an illiquid portfolio consisting of mezzanine and equity investments that vary by industry, stage and type of investment. Private equity investments carried at estimated fair value totaled \$1.5 billion at both December 31, 2020 and 2019. As of December 31, 2020, \$1.3 billion was invested directly in a variety of companies and \$0.2 billion was invested indirectly through various private equity funds. See the Supervision and Regulation section in Item 1 of this Report for discussion of the potential impacts of the Volcker Rule on our interests in and of private funds covered by the Volcker Rule.

Included in our other equity investments are Visa Class B common shares, which are recorded at cost. Visa Class B common shares that we own are transferable only under limited circumstances until they can be converted into shares of the publicly-traded Class A common shares, which cannot happen until the resolution of the pending interchange litigation. Based upon the December 31, 2020 per share closing price of \$218.73 for a Visa Class A common share, the estimated value of our total investment in the Class B common shares was approximately \$1.2 billion at the current conversion rate of Visa B shares to Visa A shares, while our cost basis was not significant. See Note 15 Fair Value and Note 21 Legal Proceedings in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional information regarding our Visa agreements. The estimated value does not represent fair value of the Visa B common shares given the shares' limited transferability and the lack of observable transactions in the marketplace.

We also have certain other equity investments, the majority of which represent investments in affiliated and non-affiliated funds with both traditional and alternative investment strategies. Net gains related to these investments were not significant during 2020 and 2019.

Impact of Inflation

Our assets and liabilities are primarily financial in nature and typically have varying maturity dates. Accordingly, future changes in prices do not affect the obligations to pay or receive fixed and determinable amounts of money. However, during periods of inflation, there may be a subsequent impact affecting certain fixed costs or expenses, an erosion of consumer and customer purchasing power, and fluctuations in the need or demand for our products and services. Should significant levels of inflation occur, our business could potentially be impacted by, among other things, reducing our tolerance for extending credit or causing us to incur additional credit losses resulting from possible increased default rates.

Financial Derivatives

We use a variety of financial derivatives as part of the overall asset and liability risk management process to help manage exposure to market (primarily interest rate) and credit risk inherent in our business activities. We also enter into derivatives with customers to facilitate their risk management activities.

Financial derivatives involve, to varying degrees, market and credit risk. Derivatives represent contracts between parties that usually require little or no initial net investment and result in one party delivering cash or another type of asset to the other party based on a notional and an underlying as specified in the contract. Therefore, cash requirements and exposure to credit risk are significantly less than the notional amount on these instruments.

Further information on our financial derivatives is presented in Note 1 Accounting Policies, Note 15 Fair Value and Note 16 Financial Derivatives in the Notes To Consolidated Financial Statements in Item 8 of this Report.

Not all elements of market and credit risk are addressed through the use of financial derivatives, and such instruments may be ineffective for their intended purposes due to unanticipated market changes, among other reasons.

Operational Risk Management

Operational risk is the risk to the current or projected financial condition and resilience arising from inadequate or failed internal processes or systems, human errors or misconduct, or adverse external events. Operational risk is inherent to the entire organization.

Operational risk management is embedded in our culture and decision-making processes through a systematic approach whereby operational risks and exposures are: 1) identified and assessed; 2) managed through the design and implementation of controls; 3) measured and evaluated against our risk tolerance limits; and 4) appropriately reported to management and the Risk Committee. Strong operational risk management and well-informed risk-based decisions benefit us by improving the customer experience, enhancing compliance, reducing reputational risk, minimizing losses and establishing an appropriate amount of required operational risk capital held by us.

The Operational Risk Management Framework is designed to provide effective and consistent management of operational risk. The primary purpose of the framework is to enable us to understand our operational risks and manage them to the desired risk profile, in line with our Risk Appetite. Additionally, the guidance established within the framework enables management to make well-informed risk-based business decisions.

The framework provides a disciplined and structured process for us to manage operational risk across eight operational risk domains. These domains provide a comprehensive view of operational risk and allow us to discuss operational risk in a standard way, facilitating reporting and ongoing risk mitigation.

The operational risk domains are:

- · Operations: Risk resulting from inadequate or failed internal processes, misconduct or errors of people or fraud.
- Compliance: Risk of legal or regulatory sanctions, financial loss, or damage to reputation resulting from failure to comply with laws, regulations, rules, self-regulatory standards, or other regulatory requirements.
- Data Management: Risk associated with incomplete or inaccurate data.
- · Model: Risk associated with the design, implementation, and ongoing use and management of a model.
- Technology and Systems: Risk associated with the use, operation, and adoption of technology.
- · Information Security: Risk resulting from the failure to protect information and ensure appropriate access to, and use and handling of information assets.
- Business Continuity: Risk of potential disruptive events to business activities.
- Third Party: Risk arising from failure of third party providers to conduct activity in a safe and sound manner and in compliance with contract provisions and applicable laws and regulations.

We utilize operational risk management programs within the framework, including Risk Control and Self-Assessments, scenario analysis, and internal and external loss event review and analysis, to assess existing risks, determine potential/emerging risks and evaluate the effectiveness of internal controls. The program tools and methodology enable our business managers to identify potential risks and control gaps.

Lines of business are responsible for identifying, owning, managing and monitoring the operational risks and controls associated with its business activities and product or service offerings to within acceptable levels. Centralized functions, such as Business Continuity, Enterprise Third Party Management, and Information Security, are responsible for the development, implementation and management of their individual programs and for the development and maintenance of the policies, procedures, methodologies, tools and technology utilized across the enterprise to identify, assess, monitor and report program risks. Additionally, independent risk management reviews and challenges line of business adherence to the framework to ensure proper controls are in place and appropriate risk mitigation plans are established as necessary.

Conduct, Reputational and Strategic Risk

PNC's risk culture seeks to reinforce the appropriate protocols for responsible and ethical behavior through sound processes and controls. In order to promote a robust risk culture, the Board and executive management establish code of conduct and professional

standards to which all employees must adhere. A strong risk culture discourages misconduct and supports Conduct risk management at PNC. Conduct risk is defined as the risk that employees fail to comply with the ethical standards expected of them. Strong Conduct risk management is important in supporting PNC's reputation and PNC maintains a corporate culture that emphasizes complying with laws, regulations, and managing reputational risks. Reputational risk is the risk to the franchise and/or shareholder value based on a negative perception of PNC by its stakeholders and/or the changing expectations of its stakeholders. While managing PNC's reputation preserves PNC's brand value, Strategic risk is another component of the ERM Framework that is also critical to optimizing shareholder returns. Strategic risk is the risk to earnings that may arise from adverse business decisions, improper implementation of business decisions and/or inadequate response to changes in the business environment. Strategic risk is considered and assessed by our businesses in the annual strategic planning processes and monitored on an on-going basis as those plans are carried out.

Compliance Risk

Enterprise Compliance is responsible for oversight of compliance risk for the organization. Compliance issues are identified and tracked through enterprise-wide monitoring and testing activities. Compliance risk issues are escalated through a comprehensive risk reporting process at both a business and enterprise level and incorporated, as appropriate, into the development and assessment of our operational risk profile. A management committee, co-chaired by the Chief Compliance Officer and the Chief BSA/AML Officer, is responsible for oversight of compliance and fiduciary risk management programs across PNC. Enterprise Compliance, through the Regulatory Change Program, helps PNC understand and proactively address emerging regulatory topics and risks as well as respond to changes in applicable laws and regulations. To understand emerging issues impacting the industry, Enterprise Compliance communicates regularly with various regulators having supervisory or regulatory responsibilities with respect to us, our subsidiaries, or businesses and participates in forums focused on regulatory and compliance matters in the financial services industry.

Information Security Risk

The Information Security component of our Operational Risk Management Framework is responsible for protecting information assets to achieve business objectives, which includes cyber security. PNC's cyber security program is designed to identify risks to sensitive information, protect that information, detect threats and events, and maintain an appropriate response and recovery capability to help ensure resilience against information security incidents. The program includes, among other things, annual security and privacy training for all PNC employees and quarterly phishing exercises to raise employee awareness. Our security program is also regularly examined by federal regulators for compliance with financial regulations and standards. The program also establishes expectations for information asset management, system development security, identity and access management, incident management, threat and vulnerability management, security operations management, and third and fourth party security.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

Our consolidated financial statements are prepared by applying certain accounting policies. Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report describes the most significant accounting policies that we use. Certain of these policies require us to make estimates or economic assumptions that may vary under different assumptions or conditions, and such variations may significantly affect our reported results and financial position for the period or in future periods.

Allowance for Credit Losses

On January 1, 2020, we adopted ASU 2016-13 - Credit Losses, commonly referred to as the CECL standard. The following discussion relates to our ACL, post implementation of CECL. For additional information on our allowances for loan and lease losses and unfunded loan commitments and letters of credit prior to this adoption see Note 1 Accounting Policies and Critical Accounting Estimates and Judgments in our 2019 Form 10-K.

We maintain the ACL at levels that we believe to be appropriate as of the balance sheet date to absorb expected credit losses on our existing investment securities, loans, equipment finance leases (including residual values), other financial assets and unfunded lending related commitments, for the remaining contractual term of the assets or exposures, taking into consideration expected prepayments. Our determination of the ACL is based on historical loss experience, current borrower characteristics, current economic conditions, reasonable and supportable forecasts of future conditions and other relevant factors. We use methods sensitive to changes in economic conditions to interpret these factors to estimate expected credit losses. We evaluate and, when appropriate, enhance the quality of our data and models and other methods used to estimate ACL on an ongoing basis. We apply qualitative factors to reflect in the ACL our best estimate of amounts that we do not expect to collect because of, among other things, idiosyncratic risk factors, changes in economic conditions that may not be reflected in forecasted results, or other potential methodology weaknesses. The ACL estimates are therefore susceptible to various factors, including, but not limited to, the following major factors:

- Current economic conditions and borrower quality: Our forecast of expected losses depends on conditions and portfolio quality as of the estimation date. As current conditions evolve, forecasted losses could be materially affected.
- Scenario weights and design: Our loss estimates are sensitive to the shape and severity of macroeconomic forecasts and thus
 vary significantly between upside and downside scenarios. Change to probability weights assigned to these scenarios and
 timing of peak business cycles reflected by the scenarios could materially affect our loss estimates.

 Portfolio volume and mix: Changes to portfolio volume and mix could materially affect our estimates, as CECL reserves would be recognized upon origination or acquisition.

For all assets and unfunded lending related commitments within the scope of the CECL standard, the applicable ACL is composed of one or a combination of the following components: (i) collectively assessed or pooled reserves, (ii) individually assessed reserves, and (iii) qualitative (judgmental) reserves. Our methodologies and key assumptions for each of these components are discussed in Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report.

Reasonable and Supportable Economic Forecast

Under CECL, we are required to consider reasonable and supportable forecasts in estimating expected credit losses. For this purpose, we have established a framework which includes a three year forecast period and the use of four economic scenarios with associated probability weights, which in combination create a forecast of expected economic outcomes over our reasonable and supportable forecast period. Credit losses estimated in our reasonable and supportable forecast period are sensitive to the shape and severity of the scenarios used and weights assigned to them.

To generate the four economic forecast scenarios we use a combination of quantitative macroeconomic models, other measures of economic activity and forward-looking expert judgment to forecast the distribution of economic outcomes over the reasonable and supportable forecast period. Each scenario is then given an associated probability (weight) in order to represent our current expectation within that distribution over the forecast period. This process is informed by current economic conditions, expected business cycle evolution and the expert judgment of PNC's CECL RAC. This approach seeks to provide a reasonable representation of the forecast of expected economic outcomes and is used to estimate expected credit losses across a variety of loans and securities. Each quarter the scenarios are presented for approval to PNC's CECL RAC, and the committee determines and approves CECL scenarios' weights for use for the current reporting period.

The scenarios used for the period ended December 31, 2020 were designed to reflect the economic recovery that began in May, which consistently outpaced market expectations and remained strong through the end of the year, but has begun to show signs of an impending slowdown. We used a number of economic variables in our scenarios, with the most significant drivers being GDP and unemployment rate measures. Using the weighted-average of our four economic forecast scenarios, we estimated that GDP grew 3.0% in the fourth quarter of 2020 finishing the year down 2.8% from fourth quarter 2019 levels with 2.3% growth in 2021, recovering to pre-recession peak levels in the first quarter of 2022. The weighted-average unemployment rate was estimated to rise to 7.8% in the first quarter of 2021, with the labor market beginning to recover again in third quarter 2021, and ending 2021 at 6.8%. The unemployment rate was estimated to reach 5.7% and 5.0% by the end of 2022 and 2023, respectively. One of the scenarios included in our weighted-average is our baseline prediction of the most likely economic outcome; which includes estimated GDP recovering to pre-pandemic levels in late 2021 with unemployment not expected to return to its pre-pandemic level until at least 2023. See our Business Outlook and the Cautionary Statement Regarding Forward-Looking Information in this Item 7 for additional discussion on our baseline prediction of the most likely economic outcome. While the economy saw significant recovery from the onset of the pandemic in national level macroeconomic indicators, considerable uncertainty remains regarding overall lifetime loss content for both our commercial and consumer portfolios, specifically as it relates to our customers that are less likely to benefit from the economic recovery currently underway. For commercial borrowers, there are substantial concerns around industries that are dependent on in-person gatherings, hospitality and tourism. For consumer borrowers, payment behavior once the CARES Act stimulus wanes is also difficult to predict but we believe the highest uncertainty is concentrated within consumer borrowers who have been afforded accommodation as it relates to payment deferral/forbearance. As such, for both our commercial and consumer loan portfolios, PNC identified and performed significant analysis around these key, highly impacted segments to ensure our reserves were adequate in light of the improved economic environment. We believe that the economic assumptions used in the scenarios for the fourth quarter of 2020, in combination with increased reserves for borrowers in segments most adversely impacted by the pandemic, sufficiently reflect the life of loan losses in the current portfolio.

For internal analytical purposes, we considered what our capital ratios would be if we had an ACL at December 31, 2020 equal to the Federal Reserve's estimated nine quarter credit losses for PNC under the 2020 CCAR supervisory severely adverse scenario of \$12.1 billion, increasing the reserves by approximately \$6.0 billion at year end. This analysis resulted in a CET1 ratio of approximately 10.6% at December 31, 2020, a level well above 7.0%, which is our regulatory minimum of 4.5% plus our SCB of 2.5%. This scenario was not our expectation at December 31, 2020 and does not reflect our current expectation, nor does it capture all the potential unknown variables, but it provides an approximation of a possible outcome under hypothetical severe conditions. The CECL methodology inherently requires a high degree of judgment. As a result, it is possible that we may, at another point in time, reach different conclusions regarding our credit loss estimates.

Residential and Commercial Mortgage Servicing Rights

We elect to measure our MSRs at fair value. This election was made to be consistent with our risk management strategy to hedge changes in the fair value of these assets. The fair value of our MSRs is estimated by using a discounted cash flow valuation model

which calculates the present value of estimated future net servicing cash flows, taking into consideration actual and expected mortgage loan prepayment rates, discount rates, servicing costs, and other factors which are determined based on current market conditions.

We employ risk management strategies designed to protect the value of MSRs from changes in interest rates and related market factors. The values of the MSRs are economically hedged with securities and derivatives, including interest-rate swaps, options, and forward mortgage-backed and futures contracts. As interest rates change, these financial instruments are expected to have changes in fair value negatively correlated to the change in fair value of the hedged MSR portfolios. The hedge relationships are actively managed in response to changing market conditions over the life of the MSRs. Selecting appropriate financial instruments to economically hedge residential or commercial MSRs requires significant management judgment to assess how mortgage rates and prepayment speeds could affect the future values of MSRs. Hedging results can frequently be less predictable in the short term, but over longer periods of time are expected to protect the economic value of the MSRs.

For additional information on our residential and commercial MSRs, see Note 1 Accounting Policies, Note 6 Goodwill and Mortgage Servicing Rights and Note 15 Fair Value in the Notes To Consolidated Financial Statements in Item 8 of this Report.

Fair Value Measurements

We must use estimates, assumptions and judgments when assets and liabilities are required to be recorded at, or adjusted to reflect, fair value. Assets and liabilities carried at fair value inherently result in a higher degree of financial statement volatility. Fair values and the information used to record valuation adjustments for certain assets and liabilities are based on either quoted market prices or are provided by independent third-party sources, including appraisers and valuation specialists, when available. When such third-party information is not available, we estimate fair value primarily by using cash flow and other financial modeling techniques. Changes in underlying factors, assumptions, or estimates in any of these areas could materially impact our future financial condition and results of operations.

We apply ASC 820 – Fair Value Measurements. This guidance defines fair value as the price that would be received to sell a financial asset or paid to transfer a financial liability in an orderly transaction between market participants at the measurement date. This guidance requires a three level hierarchy for disclosure of assets and liabilities recorded at fair value. The classification of assets and liabilities within the hierarchy is based on whether the inputs to the valuation methodology used in the measurement are observable or unobservable. Level 3 assets and liabilities are those where the fair value is estimated using significant unobservable inputs.

For additional information on fair value measurements, see Note 15 Fair Value in the Notes To Consolidated Financial Statements in Item 8 of this Report.

Recently Adopted Accounting Pronouncements

See Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in Item 8 of this Report regarding the impact of new accounting pronouncements which we have adopted.

OFF-BALANCE SHEET ARRANGEMENTS AND VARIABLE INTEREST ENTITIES

We engage in a variety of activities that involve entities that are not consolidated or otherwise reflected in our Consolidated Balance Sheet that are generally referred to as "off-balance sheet arrangements." Additional information on these types of activities is included in the following sections of this Report:

- · Contractual Obligations and Commitments included within the Risk Management section of this Item 7, and
- Note 5 Loan Sale and Servicing Activities and Variable Interest Entities,
- Note 10 Borrowed Funds,
- · Note 11 Commitments, and
- Note 12 Equity, all of which are in the Notes To Consolidated Financial Statements included in Item 8 of this Report.

A summary and further description of VIEs as of December 31, 2020 and 2019 is included in Note 1 Accounting Policies and Note 5 Loan Sale and Servicing and Variable Interest Entities in the Notes To Consolidated Financial Statements included in Item 8 of this Report.

Trust Preferred Securities

See Note 10 Borrowed Funds in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional information on trust preferred securities issued by PNC Capital Trust C including information on contractual limitations potentially imposed on payments (including dividends) with respect to PNC's equity securities.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

We make statements in this Report, and we may from time to time make other statements, regarding our outlook for earnings, revenues, expenses, tax rates, capital and liquidity levels and ratios, asset levels, asset quality, financial position, and other matters regarding or affecting us and our future business and operations that are forward-looking statements within the meaning of the Private Securities Litigation Reform Act. Forward-looking statements are typically identified by words such as "believe," "plan," "expect," "anticipate," "see," "look," "intend," "outlook," "project," "forecast," "estimate," "goal," "will," "should" and other similar words and expressions.

Forward-looking statements are necessarily subject to numerous assumptions, risks and uncertainties, which change over time. Future events or circumstances may change our outlook and may also affect the nature of the assumptions, risks and uncertainties to which our forward-looking statements are subject. Forward-looking statements speak only as of the date made. We do not assume any duty and do not undertake to update forward-looking statements. Actual results or future events could differ, possibly materially, from those anticipated in forward-looking statements, as well as from historical performance. As a result, we caution against placing undue reliance on any forward-looking statements

Our forward-looking statements are subject to the following principal risks and uncertainties.

- Our businesses, financial results and balance sheet values are affected by business and economic conditions, including the following:
 - Changes in interest rates and valuations in debt, equity and other financial markets,
 - Disruptions in the U.S. and global financial markets,
 - Actions by the Federal Reserve Board, U.S. Treasury and other government agencies, including those that impact money supply and market interest rates,
 - Changes in customer behavior due to changing business and economic conditions or legislative or regulatory initiatives,
 - Changes in customers', suppliers' and other counterparties' performance and creditworthiness,
 - Impacts of tariffs and other trade policies of the U.S. and its global trading partners,
 - The length and extent of the economic impacts of the COVID-19 pandemic,
 - The impact of the results of the recent U.S. elections on the regulatory landscape, capital markets, and the response to and management of the COVID-19 pandemic, including whether there will be additional fiscal stimulus from the federal government and, if so, its size, scope and effectiveness, and
 - Commodity price volatility.
- Our forward-looking financial statements are subject to the risk that economic and financial market conditions will be substantially different than those we are currently expecting and do not take into account potential legal and regulatory contingencies. These statements are based on our views that:
 - The U.S. economy is in an economic recovery, following a very severe but very short economic contraction in the first half of 2020 due to the COVID-19 pandemic and public health measures to contain it.
 - Despite the improvement in the economy since the spring of 2020, economic activity remains far below its pre-pandemic level and unemployment remains elevated.
 - Growth will be much weaker in early 2021 because of record COVID-19 cases and continued government restrictions of economic activity. Growth should then
 pick up in the spring of 2021 as vaccines are more widely available and the federal government provides aid to households and small and medium-sized businesses.
 PNC does not expect real GDP to return to its pre-pandemic level until late 2021, and does not expect employment to return to its pre-pandemic level until at least
 2023
 - PNC expects the FOMC to keep the fed funds rate in its current range of 0.00% to 0.25% through at least mid-2024.
- PNC's ability to take certain capital actions, including returning capital to shareholders, is subject to PNC meeting or exceeding a stress capital buffer established by the
 Federal Reserve Board in connection with the Federal Reserve Board's CCAR process. The Federal Reserve also has imposed additional limitations on capital
 distributions through the first quarter of 2021 by CCAR-participating bank holding companies and may extend these limitations, potentially in modified form.
- PNC's regulatory capital ratios in the future will depend on, among other things, the company's financial performance, the scope and terms of final capital regulations then in effect and management actions affecting the composition of PNC's balance sheet. In addition, PNC's ability to determine, evaluate and forecast regulatory capital ratios, and to take actions (such as capital distributions) based on actual or forecasted capital ratios, will be dependent at least in part on the development, validation and regulatory review of related models.
- Legal and regulatory developments could have an impact on our ability to operate our businesses, financial condition, results of operations, competitive position, reputation, or pursuit of attractive acquisition opportunities. Reputational impacts could affect matters such as business generation and retention, liquidity, funding, and ability to attract and retain management. These developments could include:
 - Changes to laws and regulations, including changes affecting oversight of the financial services industry, consumer protection, bank capital and liquidity standards, pension, bankruptcy and other industry aspects, and changes in accounting policies and principles.

- Unfavorable resolution of legal proceedings or other claims and regulatory and other governmental investigations or other inquiries. These matters may result in monetary judgments or settlements or other remedies, including fines, penalties, restitution or alterations in our business practices, and in additional expenses and collateral costs, and may cause reputational harm to PNC.
- Results of the regulatory examination and supervision process, including our failure to satisfy requirements of agreements with governmental agencies.
- Impact on business and operating results of any costs associated with obtaining rights in intellectual property claimed by others and of adequacy of our intellectual property protection in general.
- Business and operating results are affected by our ability to identify and effectively manage risks inherent in our businesses, including, where appropriate, through
 effective use of systems and controls, third-party insurance, derivatives, and capital management techniques, and to meet evolving regulatory capital and liquidity
 standards.
- Our planned acquisition of BBVA presents us with risks and uncertainties related both to the acquisition transaction itself and to the integration of the acquired business into PNC after closing:
 - The business of BBVA, including its U.S. banking subsidiary, BBVA USA, going forward may not perform as we currently project or in a manner consistent with historical performance. As a result, the anticipated benefits, including estimated cost savings, of the transaction may be significantly harder or take longer to achieve than expected or may not be achieved in their entirety as a result of unexpected factors or events, including those that are outside of our control.
 - The combination of BBVA, including its U.S. banking subsidiary, BBVA USA, with that of PNC and PNC Bank may be more difficult to achieve than anticipated or have unanticipated adverse results relating to BBVA, including its U.S. banking subsidiary, BBVA USA, or our existing businesses.
 - Completion of the transaction is dependent on the satisfaction of customary closing conditions, which cannot be assured. The timing of completion of the transaction is dependent on various factors that cannot be predicted with precision at this point.
- In addition to the planned BBVA transaction, we grow our business in part through acquisitions and new strategic initiatives. Risks and uncertainties include those
 presented by the nature of the business acquired and strategic initiative, including in some cases those associated with our entry into new businesses or new geographic
 or other markets and risks resulting from our inexperience in those new areas, as well as risks and uncertainties related to the acquisition transactions themselves,
 regulatory issues, and the integration of the acquired businesses into PNC after closing.
- Competition can have an impact on customer acquisition, growth and retention and on credit spreads and product pricing, which can affect market share, deposits and revenues. Our ability to anticipate and respond to technological changes can also impact our ability to respond to customer needs and meet competitive demands.
- Business and operating results can also be affected by widespread natural and other disasters, pandemics, dislocations, terrorist activities, system failures, security
 breaches, cyberattacks or international hostilities through impacts on the economy and financial markets generally or on us or our counterparties specifically.

We provide greater detail regarding these as well as other factors in this Report, including in Item 1A Risk Factors, the Risk Management section of Item 7, and Note 11 Commitments and Note 21 Legal Proceedings in the Notes To Consolidated Financial Statements in Item 8 of this Report. Our forward-looking statements may also be subject to other risks and uncertainties, including those discussed elsewhere in this Report or in our other filings with the SEC.

ITEM 7A – QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

This information is set forth in the Risk Management section of Item 7 and in Note 1 Accounting Policies, Note 15 Fair Value and Note 16 Financial Derivatives in the Notes To Consolidated Financial Statements in Item 8 of this Report.

ITEM 8 - FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of The PNC Financial Services Group, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of The PNC Financial Services Group, Inc. and its subsidiaries (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2020, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for the allowance for credit losses in 2020.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates

Allowance for Loans and Lease Losses - Commercial Loans

As described in Notes 1 and 4 to the consolidated financial statements, the allowance for loans and lease losses was approximately \$5,361 million as of December 31, 2020, of which \$3,337 million relates to commercial loans. For commercial loans, the determination of the allowance is based on historical loss experience, current borrower risk characteristics, current economic conditions, reasonable and supportable economic forecasts and other relevant factors. As disclosed by management, the Company has established a framework for developing the reasonable and supportable economic forecasts, which includes the use of four economic forecast scenarios and associated probability weights, which in combination create a forecast of expected economic outcomes. To generate the four economic forecast, the Company uses a combination of quantitative macroeconomic models, other measures of economic activity and forward-looking judgment to forecast the distribution of economic outcomes. The economic forecast scenarios which are inputs into the credit loss models, include a number of economic variables with the most significant drivers being GDP and unemployment rate measures. Also included in the allowance for loan and lease losses for commercial loans are qualitative reserves to cover losses that are expected but, in the Company's assessment, may not be adequately represented in the quantitative methods or the economic assumptions. For example, qualitative factors that the Company considers include industry concentration and conditions, changes in market conditions, recent credit quality trends, model imprecision, the impacts of COVID-19 on highly impacted segments, and other factors.

The principal considerations for our determination that performing procedures relating to the allowance for loan and lease losses for commercial loans is a critical audit matter are (i) the significant judgment and estimation by management in developing economic forecast scenarios, determining weighting of each scenario, and estimating qualitative reserves related to the impacts of COVID-19 on certain highly impacted segments, which in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and in evaluating audit evidence obtained and (ii) the audit effort involved professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the allowance for loan and lease losses for commercial loans, including controls over the development and approval of economic forecast scenarios, related weightings, and qualitative reserves. These procedures also included, among others, testing management's process for estimating the allowance for loan and lease losses for commercial loans, including (i) evaluating the appropriateness and methodology of certain loss forecasting models (ii) evaluating the reasonableness of certain borrower risk characteristics, (iii) evaluating the reasonableness of certain forecasted economic variables such as GDP and unemployment measures, (iv) evaluating the reasonableness of management's weighting of economic forecast scenarios used in the loss forecast models, (v) testing the completeness and accuracy of data used in the estimate, and (vi) evaluating certain qualitative reserves made to the model output results to determine the overall allowance for loan and lease losses for commercial loans. The procedures also included the involvement of professionals with specialized skill and knowledge to assist in evaluating certain models, model inputs, economic forecasts, and qualitative reserves in the commercial allowance estimate.

/s/ PricewaterhouseCoopers LLP Pittsburgh, Pennsylvania February 26, 2021

We have served as the Company's auditor since 2007.

CONSOLIDATED INCOME STATEMENT THE PNC FINANCIAL SERVICES GROUP, INC.

		Year ended December 31						
In millions, except per share data		2020		2019		2018		
Interest Income								
Loans	\$	8,927	\$	10,525	\$	9,580		
Investment securities		2,041		2,426		2,261		
Other		339		811		741		
Total interest income		11,307		13,762		12,582		
Interest Expense								
Deposits		643		1,986		1,229		
Borrowed funds		718		1,811		1,632		
Total interest expense		1,361		3,797		2,861		
Net interest income		9,946		9,965		9,721		
Noninterest Income								
Asset management		836		862		883		
Consumer services		1,484		1,555		1,502		
Corporate services		2,167		1,914		1,849		
Residential mortgage		604		368		316		
Service charges on deposits		500		702		714		
Other		1,364		1,473		1,205		
Total noninterest income		6,955		6,874		6,469		
Total revenue		16,901		16,839		16,190		
Provision For Credit Losses		3,175		773		408		
Noninterest Expense								
Personnel		5,673		5,647		5,471		
Occupancy		826		834		818		
Equipment		1,176		1,210		1,103		
Marketing		236		301		285		
Other		2,386		2,582		2,619		
Total noninterest expense		10,297		10,574		10,296		
Income from continuing operations before income taxes and noncontrolling interests		3,429		5,492		5,486		
Income taxes from continuing operations		426		901		928		
Net income from continuing operations		3,003		4,591		4,558		
Income from discontinued operations before taxes		5,777		988		942		
Income taxes from discontinued operations		1,222		161		154		
Net income from discontinued operations		4,555		827		788		
Net income		7,558		5,418		5,346		
Less: Net income attributable to noncontrolling interests		41		49		45		
Preferred stock dividends		229		236		236		
Preferred stock discount accretion and redemptions		4		4		4		
Net income attributable to common shareholders	\$	7,284	\$	5,129	\$	5,061		
Earnings Per Common Share	<u>, </u>	.,.	•					
Basic earnings from continuing operations	\$	6.37	\$	9.59	S	9.11		
Basic earnings from discontinued operations	•	10.62		1.84	Ť	1.68		
Total basic earnings	\$	16.99	\$	11.43	\$	10.79		
Diluted earnings from continuing operations	\$	6.36	\$		\$	9.06		
Diluted earnings from discontinued operations	Ψ	10.60	Ψ	1.82	Ψ	1.65		
Total diluted earnings	\$	16.96	\$	11.39	\$	10.71		
Average Common Shares Outstanding	Ψ	10.70	Ψ	11.57	Ψ	10.71		
Basic Basic		427		447		467		
Diluted		427		448		470		
Dillica		72/		740		7/0		

See accompanying Notes To Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

THE PNC FINANCIAL SERVICES GROUP, INC.

		Ye	ear ended December	31	
In millions		2020	2019)	2018
Net income from continuing operations	\$	3,003	\$ 4,591	\$	4,558
Other comprehensive income (loss), before tax and net of reclassifications into Net income					
Net change in debt securities		1,811	1,489		(540)
Net change in cash flow hedge derivatives		497	297		(178)
Pension and other postretirement benefit plan adjustments		82	158		16
Net change in Other		10	17		18
Other comprehensive income (loss) from continuing operations, before tax and net of reclassifications into Net income		2,400	1,961		(684)
Income tax benefit (expense) from continuing operations related to items of other comprehensive income		(544)	(441)	1	144
Other comprehensive income (loss) from continuing operations, after tax and net of reclassifications into Net income		1,856	1,520		(540)
Net income from discontinued operations		4,555	827		788
Other comprehensive income (loss) from discontinued operations, before tax and net of reclassifications into Net income		148	5		(55)
Income tax benefit (expense) from discontinued operations related to items of other comprehensive income		(33)	(1)	1	12
Other comprehensive income (loss) from discontinued operations, after tax and net of reclassifications into Net income		115	4		(43)
Other comprehensive income (loss), after tax and net of reclassifications into Net income		1,971	1,524		(583)
Comprehensive income		9,529	6,942		4,763
Less: Comprehensive income attributable to noncontrolling interests	•	41	49		45
Comprehensive income attributable to PNC	\$	9,488	\$ 6,893	\$	4,718

See accompanying Notes To Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEET

THE PNC FINANCIAL SERVICES GROUP, INC.

In millions, except par value	Decer	nber 31 2020		December 31 2019
Assets		2020		2017
Cash and due from banks	\$	7,017	\$	5,061
Interest-earning deposits with banks		5,173	_	23,413
Loans held for sale (a)		1,597		1,083
Asset held for sale (b)		,		8,558
Investment securities – available for sale	8'	7,358		69,163
Investment securities – held to maturity		1,441		17,661
Loans (a)	24	1,928		239,843
Allowance for loan and lease losses (c)	(:	5,361)		(2,742)
Net loans	230	6,567		237,101
Equity investments		6,052		5,176
Mortgage servicing rights		1,242		1,644
Goodwill		9,233		9,233
Other (a)	31	0,999		32,202
Total assets	\$ 46	6,679	\$	410,295
Liabilities				-
Deposits				
Noninterest-bearing	\$ 11:	2,637	\$	72,779
Interest-bearing	25:	2,708		215,761
Total deposits	36:	5,345		288,540
Borrowed funds				
Federal Home Loan Bank borrowings		3,500		16,341
Bank notes and senior debt	24	4,271		29,010
Subordinated debt		6,403		6,134
Other (d)		3,021		8,778
Total borrowed funds	3	7,195		60,263
Allowance for unfunded lending related commitments (c)		584		318
Accrued expenses and other liabilities		9,514		11,831
Total liabilities	41:	2,638		360,952
Equity				
Preferred stock (e)				
Common stock (\$5 par value, Authorized 800 shares, issued 543 shares)		2,713		2,712
Capital surplus	15,884	Į.		16,369
Retained earnings	4	6,848		42,215
Accumulated other comprehensive income		2,770		799
Common stock held in treasury at cost: 119 and 109 shares	(14	4,205)		(12,781)
Total shareholders' equity	54	4,010		49,314
Noncontrolling interests		31		29
Total equity	5-	4,041		49,343
Total liabilities and equity	\$ 46	6,679	\$	410,295

⁽a)

See accompanying Notes To Consolidated Financial Statements.

Our consolidated assets included the following for which we have elected the fair value option: Loans held for sale of \$ 1.2 billion, Loans of \$ 1.4 billion and Other assets of \$ 0.1 billion at December 31, 2020 and Loans held for sale of \$ 1.1 billion, Loans of \$ 0.7 billion and Other assets of \$ 0.1 billion at December 31, 2019.

Represents our held for sale investment in BlackRock. In the second quarter of 2020, PNC divested its entire investment in BlackRock. Prior period BlackRock investment balances have been reclassified to the Asset held for sale line in accordance with ASC 205-20, Presentation of Financial Statements - Discontinued Operations. Refer to Note 1 Accounting Policies and Note 2 Acquisition and Divestiture Activity for additional details.

Amounts as of December 31, 2020 reflects the impact of adopting Accounting Standards Update 2016-13, Financial Instruments - Credit Losses, which is commonly referred to as the CECL standard and our transition from an

⁽c) incurred loss methodology for these reserves to an expected credit loss methodology. Refer to Note 1 Accounting Policies in this Report for additional details regarding the CECL standard.

Our consolidated liabilities at December 31, 2020 and December 31, 2019 included Other borrowed funds of less than \$ 0.1 billion and \$0.1 billion, for which we have elected the fair value option, respectively.

⁽d)

Par value less than \$ 0.5 million at each date.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

THE PNC FINANCIAL SERVICES GROUP, INC.

Image: Properties of the properties of th					Shareho	olders' Equity			1		
Cumulative effect of ASU adoptions (b)	In millions	Outstanding Common		Surplus - Preferred	Surplus - Common Stock and		Other Comprehensive				
Balance at January 1, 2018 (a)	Balance at December 31, 2017 (a)	473	\$ 2,710 \$	3,985 \$	12,389 \$	35,481 \$	(148) \$	(6,904)	\$	72 \$	47,585
Net income Other comprehensive income (loss), net of fax Cash dividends declared - Common Cash dividends declared - Preferred Cash dividends declared - Preferred declared - Preferred declared - Preferred stock discount accretion Common stock activity (c) Cash dividends declared - Preferred Cash dividends declared - Preferred declared - Preferred declared - Preferred stock discount accretion Cash dividends declared - Preferred Cash dividends declared - Preferred Cash dividends declared - Preferred declared - Common declared - Preferred declared - Preferred declared - Common declared - Preferred declared - Common declared - Common declared - Preferred declared - Common declared -	Cumulative effect of ASU adoptions (b)					(22)	6				(16)
Charbon Char	Balance at January 1, 2018 (a)	473	\$ 2,710 \$	3,985 \$	12,389 \$	35,459 \$	(142) \$	(6,904)	\$	72 \$	47,569
Cash dividends declared - Ommon Cash dividends declared - Preferred Cash dividends declared - Preferred Cash dividends declared - Preferred stock discount accretion 4	Net income					5,301				45	5,346
Cash dividends declared - Preferred stock discount accretion	Other comprehensive income (loss), net of tax						(583)				(583)
Preferred stock discount accretion	Cash dividends declared - Common					(1,601)					(1,601)
Common stock activity (c)	Cash dividends declared - Preferred					(236)					(236)
Treasury stock activity	Preferred stock discount accretion			4		(4)					
Other (3) (16) (75) (94) Balance at December 31, 2018 (a) 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,919 \$ (725) \$ (9,454) \$ 42 \$ 47,770 Cumulative effect of ASU adoptions (d) 62 62 62 62 Balance at January 1, 2019 (a) 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,981 (725) \$ (9,454) \$ 42 \$ 47,770 Net income 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,981 (725) \$ (9,454) \$ 42 \$ 47,832 Net income 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,981 (725) \$ (9,454) \$ 42 \$ 4,7832 Net income 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,981 \$ (725) \$ (9,454) \$ 42 \$ 5,418 Other comprehensive income, net of tax 4 4 44 44 44 44 44 44 44 44 44 44 44 44 44	Common stock activity (c)		1		19						20
Balance at December 31, 2018 (a) 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,919 \$ (725) \$ (9,454) \$ 42 \$ 47,770 Cumulative effect of ASU adoptions (d)	Treasury stock activity	(16)			(101)			(2,550)			(2,651)
Cumulative effect of ASU adoptions (d)	Other			(3)	(16)					(75)	(94)
Balance at January 1, 2019 (a) 457 \$ 2,711 \$ 3,986 \$ 12,291 \$ 38,981 \$ (725) \$ (9,454) \$ 42 \$ 47,832	Balance at December 31, 2018 (a)	457	\$ 2,711 \$	3,986 \$	12,291 \$	38,919 \$	(725) \$	(9,454)	\$	42 \$	47,770
Net income Other comprehensive income, net of tax Cash dividends declared - Common Cash dividends declared - Preferred Common tock activity (c) Cash dividends declared - Common Cash dividends declared - Preferred Common stock activity (c) Cash dividends declared - Preferred Common stock activity (c) Cash dividends declared - Preferred Common stock activity (c) Common stock activity (c) Common stock activity (c) Cash dividends declared - Common Cash dividends	Cumulative effect of ASU adoptions (d)					62					62
Other comprehensive income, net of tax 1,524 1,524 1,524 1,524 Cash dividends declared - Common (1,895) (1,895) (1,895) (1,895) (1,895) (1,895) (236) (237) (237) (237) (237) (237) (237) (237) (237) (247) (248) (249) (248) (249) (249) (249) (249) (249) (249) (249) (249) (249)	Balance at January 1, 2019 (a)	457	\$ 2,711 \$	3,986 \$	12,291 \$	38,981 \$	(725) \$	(9,454)	\$	42 \$	47,832
Cash dividends declared - Common (1,895) (1,895) Cash dividends declared - Preferred (236) (236) Preferred stock discount accretion 4 (4) Common stock activity (c) 1 20 (3,327) (3,324) Other 3 62 (62) 3 (62) 3 (42) 3 62 (67) 3 (82) (87) 3 49 \$ (1,781) \$ 49,343 Cumulative effect of ASU adoptions (e) (671) (671) (671) (671) Balance at January 1, 2020 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 41,544 \$ 79 \$ (12,781) \$ 29 \$ 48,672 Net income (671) (1,971) (1,971) (2,98) (1,980) <td>Net income</td> <td></td> <td></td> <td></td> <td></td> <td>5,369</td> <td></td> <td></td> <td></td> <td>49</td> <td>5,418</td>	Net income					5,369				49	5,418
Cash dividends declared - Preferred (236)	Other comprehensive income, net of tax						1,524				1,524
Preferred stock discount accretion 4 (4) (2) 21 Common stock activity (c) 1 20 (3,327) (3,324) Other 3 62 (62) 3 Balance at December 31, 2019 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 42,215 \$ 799 \$ (12,781) \$ 29 \$ 49,343 Cumulative effect of ASU adoptions (e) (67)	Cash dividends declared - Common					(1,895)					(1,895)
Common stock activity (c) 1 20 3 (3,327) (3,324) Treasury stock activity (24) 3 62 (62) 3 Other 3 62 79 (12,781) 29 49,343 Balance at December 31, 2019 (a) 433 2,712 3,993 12,376 42,215 799 (12,781) 29 48,671 Cumulative effect of ASU adoptions (e) (671)	Cash dividends declared - Preferred					(236)					(236)
Treasury stock activity (24) 3 (3,327) (3,324) Other 3 62 (62) 3 Balance at December 31, 2019 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 42,215 \$ 799 \$ (12,781) \$ 29 \$ 49,343 Cumulative effect of ASU adoptions (e) (671) (671) (671) (671) Balance at January 1, 2020 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 41,544 \$ 799 \$ (12,781) \$ 29 \$ 48,672 Net income 7,517 1,971 41 7,558 Other comprehensive income, net of tax (1,980) 1,971 1,971 Cash dividends declared - Common (1,980) (1,980) (1,980) Cash dividends declared - Preferred (229) (229) (229) Preferred stock discount accretion 4 (4) (4) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Ser	Preferred stock discount accretion			4		(4)					
Other 3 62 (62) 3 Balance at December 31, 2019 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 42,215 \$ 799 \$ (12,781) \$ 29 \$ 49,343 Cumulative effect of ASU adoptions (e) (671) (671) (671) Balance at January 1, 2020 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 41,544 \$ 799 \$ (12,781) \$ 29 \$ 48,672 Net income 7,517 1,971 41 7,558 Other comprehensive income, net of tax 1,971 1,971 1,971 Cash dividends declared - Common (1,980) 1,980 1,980 Cash dividends declared - Preferred (229) 24 Preferred stock discount accretion 4 (4) 4 Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) (39) (125)	Common stock activity (c)		1		20						21
Balance at December 31, 2019 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 42,215 \$ 799 \$ (12,781) \$ 29 \$ 49,343 Cumulative effect of ASU adoptions (e) (671) (671) Balance at January 1, 2020 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 41,544 \$ 799 \$ (12,781) \$ 29 \$ 48,672 Net income 7,517 41 7,558 Other comprehensive income, net of tax 1,971 1,971 Cash dividends declared - Common (1,980) (1,980) (1,980) (1,980) (1,980) (229) Preferred stock discount accretion 4 (4) (229) Treasury stock activity (c) 1 23	Treasury stock activity	(24)			3			(3,327)			(3,324)
Cumulative effect of ASU adoptions (e) (671) (671) Balance at January 1, 2020 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 41,544 \$ 799 \$ (12,781) \$ 29 \$ 48,672 Net income 7,517 1,971 41 7,558 Other comprehensive income, net of tax 1,971 1,971 1,971 Cash dividends declared - Common (1,980) (229) (229) Preferred stock discount accretion 4 (4) (229) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) (480)	Other			3	62					(62)	3
Balance at January 1, 2020 (a) 433 \$ 2,712 \$ 3,993 \$ 12,376 \$ 41,544 \$ 799 \$ (12,781) \$ 29 \$ 48,672 Net income 7,517 \$ 41 7,558 Other comprehensive income, net of tax 1,971 \$	Balance at December 31, 2019 (a)	433	\$ 2,712 \$	3,993 \$	12,376 \$	42,215 \$	799 \$	(12,781)	\$	29 \$	49,343
Net income 7,517 41 7,558 Other comprehensive income, net of tax 1,971 1,971 Cash dividends declared - Common (1,980) (1,980) Cash dividends declared - Preferred (229) (229) Preferred stock discount accretion 4 (4) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) (480) Other (86) (39) (125)	Cumulative effect of ASU adoptions (e)					(671)					(671)
Other comprehensive income, net of tax 1,971 1,971 Cash dividends declared - Common (1,980) (1,980) Cash dividends declared - Preferred (229) (229) Preferred stock discount accretion 4 (4) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) Other (86) (39) (125)	Balance at January 1, 2020 (a)	433	\$ 2,712 \$	3,993 \$	12,376 \$	41,544 \$	799 \$	(12,781)	\$	29 \$	48,672
Cash dividends declared - Common (1,980) (1,980) Cash dividends declared - Preferred (229) (229) Preferred stock discount accretion 4 (4) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) Other (86) (39) (125)	Net income					7,517				41	7,558
Cash dividends declared - Preferred (229) Preferred stock discount accretion 4 (4) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) Other (86) (39) (125)	Other comprehensive income, net of tax						1,971				1,971
Preferred stock discount accretion 4 (4) Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) (480) Other (86) (39) (125)	Cash dividends declared - Common					(1,980)					(1,980)
Common stock activity (c) 1 23 24 Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) (480) Other (86) (39) (125)	Cash dividends declared - Preferred					(229)					(229)
Treasury stock activity (9) 54 (1,424) (1,370) Preferred stock redemption - Series Q (f) (480) (480) Other (86) (39) (125)	Preferred stock discount accretion			4		(4)					
Preferred stock redemption - Series Q (f) (480) (480) Other (86) (39) (125)	Common stock activity (c)		1		23						24
Other (86) (39) (125)	Treasury stock activity	(9)			54			(1,424)			(1,370)
	Preferred stock redemption - Series Q (f)			(480)							(480)
Balance at December 31, 2020 (a) 424 \$ 2,713 \$ 3,517 \$ 12,367 \$ 46,848 \$ 2,770 \$ (14,205) \$ 31 \$ 54,041	Other				(86)					(39)	(125)
	Balance at December 31, 2020 (a)	424	\$ 2,713 \$	3,517 \$	12,367 \$	46,848 \$	2,770 \$	(14,205)	\$	31 \$	54,041

- The par value of our preferred stock outstanding was less than \$ 0.5 million at each date and, therefore, is excluded from this presentation. Represents the cumulative effect of adopting ASU 2014-09, ASU 2016-01, ASU 2017-12 and ASU 2018-02. Common stock activity totaled less than 0.5 million shares issued.
- (c) (d)
- Represents the impact of the adoption ASU 2016-02 related primarily to deferred gains on previous sale-leaseback transactions.

 Represents the impact of the adoption ASU 2016-13 Financial Instruments Credit Losses. See the Recently Adopted Accounting Standards portion of Note 1 Accounting Policies in this Report for additional detail on this adoption.

 On September 1, 2020, PNC redeemed all 4,800 shares of its Series Q Preferred Stock, as well as all 19.2 million Depositary Shares representing fractional interest in such shares.
- (f)

See accompanying Notes To Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS THE PNC FINANCIAL SERVICES GROUP, INC.

	Year ended December 31			
In millions		2020	2019	2018
Operating Activities				
Net income	\$	7,558 \$	5,418 \$	5,346
Adjustments to reconcile net income to net cash provided (used) by operating activities				
Provision for credit losses		3,175	773	408
Depreciation and amortization		1,497	1,315	1,129
Deferred income taxes (benefit)		(2,239)	303	133
Net gains on sales of securities		(305)		
Changes in fair value of mortgage servicing rights		799	645	172
Gain on sale of BlackRock		(5,740)		
Undistributed earnings of BlackRock		(174)	(531)	(525)
Net change in				
Trading securities and other short-term investments		957	560	(893)
Loans held for sale		(372)	(123)	1,635
Other assets		(927)	(788)	108
Accrued expenses and other liabilities		(254)	132	295
Other		684	(341)	32
Net cash provided (used) by operating activities	\$	4,659 \$	7,363 \$	7,840
Investing Activities				
Sales				
Securities available for sale	\$	13,851 \$	7,755 \$	7,505
Net proceeds from sale of BlackRock		14,225		
Loans		1,894	1,664	1,323
Repayments/maturities				
Securities available for sale		30,901	11,974	9,388
Securities held to maturity		60	3,348	2,447
Purchases				
Securities available for sale		(45,356)	(23,739)	(23,418)
Securities held to maturity		(53)	(1,751)	(3,370)
Loans		(1,982)	(1,027)	(690)
Net change in				, ,
Federal funds sold and resale agreements		1,738	4,899	(5,837)
Interest-earning deposits with banks		(61,760)	(12,520)	17,702
Loans		(3,376)	(14,963)	(7,335)
Net cash received from divestiture activity		, , ,	75	,
Other		(1,264)	(705)	(1,684)
Net cash provided (used) by investing activities	\$	(51,122) \$	(24,990) \$	(3,969)

(continued on following page)

CONSOLIDATED STATEMENT OF CASH FLOWS

THE PNC FINANCIAL SERVICES GROUP, INC. (continued from previous page)

		Year en				
In millions		2020		2019		2
Financing Activities						
Net change in						
Noninterest-bearing deposits	\$	39,851	\$	(1,166)	\$	(6,0)
Interest-bearing deposits		36,947		21,882		8,69
Federal funds purchased and repurchase agreements		(5,861)		4,260		39
Short-term Federal Home Loan Bank borrowings		(6,300)		4,800		1,50
Commercial paper						(10
Other borrowed funds		123		(495)		2
Sales/issuances						
Federal Home Loan Bank borrowings		9,060		12,040		9,50
Bank notes and senior debt		3,487		8,977		3,23
Subordinated debt				744		1,24
Other borrowed funds		647		1,131		50
Preferred stock						
Common and treasury stock		65		90		ϵ
Repayments/maturities						
Federal Home Loan Bank borrowings		(15,601)		(22,000)		(10,53
Bank notes and senior debt		(9,047)		(5,600)		(6,17
Subordinated debt				(700)		(57
Other borrowed funds		(639)		(1,174)		(54
Preferred stock redemption		(480)				
Acquisition of treasury stock		(1,624)		(3,578)		(2,87
Preferred stock cash dividends paid		(229)		(236)		(23
Common stock cash dividends paid		(1,980)		(1,895)		(1,60
Net cash provided (used) by financing activities	\$	48,419	\$	17,080	\$	(3,51
Net Increase (Decrease) In Cash And Due From Banks And Restricted Cash	\$	1,956	\$	(547)	\$	35
Net cash provided by discontinued operations		11,542		299		26
Net cash provided (used) by continuing operations		(9,586)		(846)		9
Cash and due from banks and restricted cash at beginning of period		5,061		5,608		5,24
Cash and due from banks and restricted cash at end of period	\$	7,017	\$	5,061	\$	5,60
Cash and due from banks and restricted cash	*	.,		-,,,,,		
Cash and due from banks at end of period (unrestricted cash)	\$	6,636	\$	5,061	\$	5,60
Restricted cash	\$	381	Ψ	5,001	Ψ	2,00
Cash and due from banks and restricted cash at end of period	\$	7.017	\$	5,061	\$	5,60
Supplemental Disclosures	Ψ	7,017	Ψ	3,001	Ψ	3,00
Interest paid	\$	1,292	\$	3,742	\$	2,83
Income taxes paid	\$	3,410	\$	430		37
Income taxes refunded	\$	10	\$	17		46
Leased assets obtained in exchange for new operating lease liabilities	\$	122	\$	317	φ	7(
Right-of-use assets recognized at adoption of ASU 2016-02	,	122	\$	2,004		
			Þ	2,004		
Non-cash Investing and Financing Items Transfer from loans to loans held for sale, net	S	1.379	S	958	S	40
Transfer from loans to loans neld for sale, net Transfer from loans to foreclosed assets	\$ \$	1,3 /9	\$		\$	19
	\$ \$	289	\$	328	Þ	19
Transfer from trading securities to investment securities	3	289	Þ	328		

See accompanying Notes To Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

THE PNC FINANCIAL SERVICES GROUP, INC.

See the Glossary on page 196 for additional information on certain terms and acronyms used throughout the Financial Statements and related Notes.

BUSINESS

PNC is one of the largest diversified financial services companies in the U.S. and is headquartered in Pittsburgh, Pennsylvania.

We have businesses engaged in retail banking, including residential mortgage, corporate and institutional banking and asset management, providing many of our products and services nationally. Our retail branch network is located primarily in markets across the Mid-Atlantic, Midwest and Southeast. We also have strategic international offices in four countries outside the U.S.

NOTE 1 ACCOUNTING POLICIES

Basis of Financial Statement Presentation

Our consolidated financial statements include the accounts of the parent company and its subsidiaries, most of which are wholly-owned, certain partnership interests and variable interest entities.

We prepared these consolidated financial statements in accordance with GAAP. We have eliminated intercompany accounts and transactions. We have also reclassified certain prior year amounts to conform to the current period presentation, which did not have a material impact on our consolidated financial condition or results of operations.

We have also considered the impact of subsequent events on these consolidated financial statements.

Use of Estimates

We prepared these consolidated financial statements using financial information available at the time of preparation, which requires us to make estimates and assumptions that affect the amounts reported. Our most significant estimates pertain to our fair value measurements and the ACL. Actual results may differ from the estimates and the differences may be material to the consolidated financial statements.

Discontinued Operations

A disposal of an asset or business that meets the criteria for held for sale classification is reported as discontinued operations when the disposal represents a strategic shift that has had, or will have a major effect on our operating results. We report an asset as held for sale when management has approved or received approval to sell the asset and is committed to a formal plan, the asset is available for immediate sale, the asset is being actively marketed, the sale is anticipated to occur during the ensuing year and certain other specified criteria are met. An asset classified as held for sale is recorded at the lower of its carrying amount or estimated fair value less cost to sell. If the carrying amount of the asset exceeds its estimated fair value, the asset is written down to its fair value upon the held for sale designation. Our BlackRock held for sale asset is recorded at its carrying amount as we accounted for this investment under the equity method of accounting and the fair value of the asset exceeded the carrying value at each balance sheet

When presenting discontinued operations, assets classified as held for sale are segregated in the Consolidated Balance Sheet commencing in the period in which the asset meets all of the held for sale criteria described above and prior periods are recast. The results of discontinued operations are reported in discontinued operations in the Consolidated Income Statement for current and prior periods commencing in the period in which the asset or business is either disposed of or is classified as held for sale, including any gain or loss recognized on the sale or adjustment of the carrying amount to fair value less cost to sell.

Recently Adopted Accounting Standards

Accounting Standards Update	Description	Financial Statement Impact
Credit Losses - ASU 2016-13 Issued June 2016 Codification Improvements - ASU 2019-04 Various improvements related to Credit Losses (Topics 1, 2 and 5) Issued April 2019 Targeted Transition Relief - Credit Losses - ASU 2019-05 Issued May 2019 Codification Improvements - ASU 2019-11 Issued November 2019	Commonly referred to as the CECL standard. Replaces measurement, recognition and disclosure guidance for credit related reserves (i.e., ALLL and the allowance for unfunded loan commitments and letters of credit) and OTTI for debt securities. Requires the use of an expected credit loss methodology; specifically, current expected credit losses for the remaining life of the asset will be recognized starting from the time of origination or acquisition.	 Adopted January 1, 2020 under the modified retrospective approach. The cumulative-effect adjustment to retained earnings totaled \$671 million at adoption. Amended presentation and disclosures are required prospectively. Refer to the disclosures in this Note 1, Note 3 Investment Securities and Note 4 Loans and Related Allowance for Credit Losses for additional information. With the adoption of CECL, we discontinued the accounting for purchased impaired loans and elected the one-time fair value option election for some of these loans and certain residential real estate collateral dependent loans. Loans that were previously accounted for as purchased impaired where the fair value option election was not made are now accounted for
Accounting Standards Update	<u>Description</u>	Financial Statement Impact
Codification Improvements - ASU 2019-04 Topic 3: Codification Improvements to ASU 2017-12 and Other Hedging Items Issued April 2019	Targeted improvements related to: Partial-term fair value hedges of interest rate risk Amortization of fair value hedge basis adjustments Disclosure of fair value hedge basis adjustments Consideration of the hedged contractually specified interest rate under the hypothetical derivative method Application of a first-payments-received cash flow hedging technique to overall cash flows on a group of variable interest payments Update to transition guidance for ASU 2017-12 This ASU permits a one-time transfer out of held to maturity securities to provide entities the opportunity to hedge fixed rate, prepayable securities under a last of layer hedging strategy (although an entity is not required to hedge such securities subsequent to transfer).	Adopted January 1, 2020. As permitted by the eligibility requirements in this guidance, at adoption we elected to transfer debt securities with an amortized cost of \$16.2 billion (fair value of \$16.5 billion) from held to maturity to the available for sale portfolio. The transfer resulted in a pretax increase to AOCI of \$306 million. There were no other impacts to PNC's consolidated financial statements from the adoption of this guidance.

Accounting Standards Update	<u>Description</u>	Financial Statement Impact
Goodwill - ASU 2017-04 Issued January 2017	Eliminates Step 2 from the goodwill impairment test to simplify the subsequent measurement of goodwill under which a loss was recognized only if the estimated implied fair value of the goodwill is below its carrying value. Requires impairment to be recognized if the reporting unit's carrying value exceeds the fair value.	Adopted January 1, 2020. The adoption of this standard did not impact our consolidated results of operations or our consolidated financial position.
Accounting Standards Update	<u>Description</u>	Financial Statement Impact
Reference Rate Reform - ASU 2020-04 Issued March 2020 Reference Rate Reform Scope - ASU 2021-01 Issued January 2021	 Provides optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform (codified in ASC 848). Includes optional expedients related to contract modifications that allow an entity to account for modifications (if certain criteria are met) as if the modifications were only minor (assets within the scope of ASC 310, Receivables), were not substantial (assets within the scope of ASC 470, Debt) and/or did not result in remeasurements or reclassifications (assets within the scope of ASC 842, Leases, and other Topics) of the existing contract. Includes optional expedients related to hedging relationships within the scope of ASC 815, Derivatives & Hedging, whereby changes to the critical terms of a hedging relationship do not require dedesignation if certain criteria are met. In addition, potential sources of ineffectiveness as a result of reference rate reform may be disregarded when performing some effectiveness assessments. Includes optional expedients and exceptions for contract modifications and hedge accounting that apply to derivative instruments impacted by the market-wide discounting transition. Allows for a one-time election to sell, transfer, or both sell and transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform and that are classified as held to maturity before January 1, 2020. Guidance in these ASUs are effective as of March 12, 2020 through December 31, 2022. 	

The following table presents the impact of adopting the CECL standard on January 1, 2020 on our allowance and retained earnings.

Table 38: Impact of the CECL Standard Adoption

illions		December 31, 2019	Transition Adjustment	January 1, 2020	
Allowance for credit losses					
Allowance for loan and lease losses					
Commercial	\$	1,812 \$	(304) \$	1,508	
Consumer		930	767	1,697	
Total allowance for loan and lease losses		2,742	463	3,205	
Unfunded lending related commitments		318	179	497	
Other			19	19	
Total allowance for credit losses	\$	3,060 \$	661 \$	3,721	
In millions		December 31, 2019	Transition Adjustment	January 1, 2020	
Impact to retained earnings (a)	\$	42,215 \$	(671) \$	41,544	

⁽a) Transition adjustment includes the increase in the total ACL of \$ 0.7 billion and the impact of the fair value option election of \$ 0.2 billion, offset by the tax impact of \$ 0.2 billion.

Cash, Cash Equivalents and Restricted Cash

Cash and due from banks are considered cash and cash equivalents for financial reporting purposes because they represent a primary source of liquidity. Certain cash balances within Cash and due from banks on our Consolidated Balance Sheet are restricted as to withdrawal or usage by legally binding contractual agreements or regulatory requirements.

Investments

We hold interests in various types of investments. The accounting for these investments is dependent on a number of factors including, but not limited to, items such as:

- · Ownership interest,
- Our plans for the investment, and
- The nature of the investment.

Debt Securities

Debt securities are recorded on a trade-date basis. We classify debt securities as either trading, held to maturity, or available for sale. Debt securities that we purchase for certain risk management activities or customer-related trading activities are classified as trading securities, are reported in the Other assets line item on our Consolidated Balance Sheet, and are carried at fair value. Realized and unrealized gains and losses on trading securities are included in Other noninterest income. We classify debt securities as held to maturity when we have the positive intent and ability to hold the securities to maturity, and carry them at amortized cost, less any allowance. Debt securities not classified as held to maturity or trading are classified as securities available for sale, and are carried at fair value. Unrealized gains and losses on available for sale securities are included in AOCI net of income taxes.

We include all interest on debt securities, including amortization of premiums and accretion of discounts on investment securities, in net interest income using the constant effective yield method generally calculated over the contractual lives of the securities. Effective yields reflect either the effective interest rate implicit in the security at the date of acquisition or, for debt securities where an OTTI was recorded, the effective interest rate determined based on improved cash flows subsequent to an impairment. We compute gains and losses realized on the sale of available for sale debt securities on a specific security basis. These securities gains/(losses) are included in Other noninterest income on the Consolidated Income Statement.

As discussed in the Recently Adopted Accounting Standards section of this Note 1, we adopted the CECL standard as of January 1, 2020, which requires expected credit losses on both held to maturity and available for sale securities to be recognized through a valuation allowance, ACL, instead of as a direct write-down to the amortized cost basis of the security. An available for sale security is considered impaired if the fair value is less than its amortized cost basis. If any portion of the decline in fair value is related to credit, the amount of allowance is determined as the portion related to credit, limited to the difference between the amortized cost basis and the fair value of the security. If we have the intent to sell or believe it is more likely than not we will be required to sell an impaired available for sale security before recovery of the amortized cost basis, the credit loss is recorded as a direct write-down of the amortized cost basis. Credit losses on investment securities are recognized through the Provision for credit losses on our Consolidated Income Statement. Declines in the fair value of available for sale securities that are not considered credit related are recognized in AOCI on our Consolidated Balance Sheet. The CECL standard is applied prospectively to debt securities and, as a result, the amortized cost basis of investment securities for which OTTI had previously been recorded did not change upon adoption.

Prior to the adoption of CECL, we reviewed all debt securities that were in an unrealized loss position for OTTI. An investment security was deemed impaired if the fair value of the investment was less than its amortized cost. After an investment security was determined to be impaired, we evaluated whether the decline in value was other-than-temporary. Declines in the fair value of debt securities that were deemed other-than-temporary and were attributable to credit deterioration were recognized in Other noninterest income on our Consolidated Income Statement in the period in which the determination was made. Declines in fair value which were deemed other-than-temporary and attributable to factors other than credit deterioration were recognized in AOCI on our Consolidated Balance Sheet.

We consider a security to be past due in terms of payment based on its contractual terms. A security may be placed on nonaccrual, with interest no longer recognized until received, when collectability of principal or interest is doubtful. As of December 31, 2020, nonaccrual or past due held-to-maturity securities were immaterial.

A security may be partially or fully charged off against the allowance if it is determined to be uncollectible, including, for an available for sale security, if we have the intent to sell or believe it is more likely than not we will be required to sell the security before recovery of the amortized cost basis. Recoveries of previously charged-off available for sale securities are recognized when received, while recoveries on held to maturity securities are recognized when expected.

See the Allowance for Credit Losses section of this Note 1 for further discussion regarding the methodologies used to determine the

The PNC Financial Services Group, Inc. – 2020 Form 10-K 103

allowance for investment securities. See Note 3 Investment Securities for additional information about the investment securities portfolio and the related ACL.

Equity Securities and Partnership Interests

We account for equity securities, equity investments, private equity investments, and investments in limited partnerships, limited liability companies and other investments that are not required to be consolidated under one of the following methods:

- We use the equity method for general and limited partner ownership interests and limited liability companies in which we are considered to have significant influence
 over the operations of the investee. Under the equity method, we record our equity ownership share of net income or loss of the investee in Noninterest income and any
 dividends received on equity method investments are recorded as a reduction to the investment balance. When an equity investment experiences an other-than-temporary
 decline in value, we may be required to record a loss on the investment.
- We measure equity securities that have a readily determinable fair value at fair value through Net income. Both realized and unrealized gains and losses are included in Noninterest income. Dividend income on these equity securities is included in Other interest income on our Consolidated Income Statement.
- We generally use the practicability exception to fair value measurement for all other investments without a readily determinable fair value. When we elect this alternative
 measurement method, the investment is recorded at cost and the carrying value is adjusted for impairment, if any, plus or minus changes in value resulting from
 observable price changes in orderly transactions for identical or similar instruments of the same issuer. These investments are written down to fair value if a qualitative
 assessment indicates impairment and the fair value is less than the carrying value. The amount of the write-down is accounted for as a loss included in Noninterest
 income. Distributions received on these investments are included in Noninterest income.

Investments described above are included in Equity investments on our Consolidated Balance Sheet.

Private Equity Investments

We report private equity investments, which include direct investments in companies, affiliated partnership interests and indirect investments in private equity funds, at estimated fair value. These estimates are based on available information and may not necessarily represent amounts that we will ultimately realize through distribution, sale or liquidation of the investments. Fair values of publicly-traded direct investments are determined using quoted market prices and are subject to various discount factors arising from security level restrictions, when appropriate. The valuation procedures applied to direct investments and indirect investments are detailed in Note 15 Fair Value. We include all private equity investments within Equity investments on our Consolidated Balance Sheet. Changes in fair value of private equity investments are recognized in Other noninterest income.

We consolidate affiliated partnerships when we have determined that we have control of the partnership or are the primary beneficiary if the entity is a VIE. The portion we do not own is reflected in Noncontrolling interests on our Consolidated Balance Sheet.

Loans

Loans are classified as held for investment when management has both the intent and ability to hold the loan for the foreseeable future, or until maturity or payoff.

Management's intent and view of the foreseeable future may change based on changes in business strategies, the economic environment, market conditions and the availability of government programs.

Measurement of delinquency status is based on the contractual terms of each loan. Loans that are 30 days or more past due in terms of payment are considered delinquent. See Note 4 Loans and Related Allowance for Credit Losses for additional information on how COVID-19 hardship related loan modifications are reported from a delinquency perspective as of December 31, 2020.

Loans held for investment, excluding PCD loans, are recorded at amortized cost basis unless we elect to measure these under the fair value option. Amortized cost basis represents principal amounts outstanding, net of unearned income, unamortized deferred fees and costs on originated loans, premiums or discounts on purchased loans and charge-offs. Amortized cost basis does not include accrued interest, as we include accrued interest in Other assets on our Consolidated Balance Sheet. Interest on performing loans is accrued based on the principal amount outstanding and recorded in Interest income as earned using the constant effective yield method. Loan origination fees, direct loan origination costs, and loan premiums and discounts are deferred and accreted or amortized into Net interest income using the constant effective yield method, over the contractual life of the loan. The processing fee received for loans originated through PPP lending under the CARES Act is deferred and accreted into Net interest income using the effective yield method, over the contractual life of the loan. Loans under the fair value option are reported at their fair value, with any changes to fair value reported as Noninterest income on the Consolidated Income Statement, and are excluded from measurement of ALLL.

In addition to originating loans, we also acquire loans through the secondary loan market, portfolio purchases or acquisitions of other financial services companies. Certain acquired loans that have experienced a more-than-insignificant deterioration of credit quality since origination (i.e., PCD) are recognized at an amortized cost basis equal to their purchase price plus an ALLL measured at the

acquisition date. Subsequent decreases in expected cash flows that are attributable, at least in part, to credit quality are recognized through a charge to the provision for credit losses resulting in an increase in the ALLL. Subsequent increases in expected cash flows are recognized as a provision recapture of previously recorded ALLL.

We consider a loan to be collateral dependent when we determine that substantially all of the expected cash flows will be generated from the operation or sale of the collateral underlying the loan, the borrower is experiencing financial difficulty and we have elected to measure the loan at the estimated fair value of collateral (less costs to sell if sale or foreclosure of the property is expected).

Additionally, we consider a loan to be collateral dependent when foreclosure or liquidation of the underlying collateral is probable.

A TDR is a loan whose terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulty. A concession has been granted when we do not expect to collect all amounts due, including original interest accrued at the original contract rate, as a result of the restructuring, or there is a delay in payment that is more than insignificant. TDRs result from our loss mitigation activities, and include rate reductions, principal forgiveness, postponement/reduction of scheduled amortization, and extensions, which are intended to minimize economic loss and to avoid foreclosure or repossession of collateral. Additionally, TDRs also result from borrowers that have been discharged from personal liability through Chapter 7 bankruptcy and have not formally reaffirmed their loan obligations to us. In those situations where principal is forgiven, the amount of such principal forgiveness is immediately charged off.

Potential incremental losses or recoveries on TDRs have been factored into the ALLL estimates for each loan class under the methodologies described in this Note. Once a loan becomes a TDR, it will continue to be reported as a TDR until it is ultimately repaid in full, the collateral is foreclosed upon or it is fully charged off.

PNC excludes consumer loans held for sale, loans accounted for under the fair value option and certain government insured or guaranteed loans from our TDR population. PCD loans do not require additional considerations and thus are evaluated for inclusion in our TDR population. In addition, PNC has elected not to apply a TDR designation to loans that have been restructured due to a COVID-19 hardship pursuant to specific criteria under the CARES Act. Since loans restructured due to a COVID-19 related hardship were not identified as TDRs, they are not placed on nonaccrual at the time of modification unless payment in full of principal or interest is not expected. These loans continue to be subject to our existing nonaccrual policy.

See the following for additional information related to loans, including further discussion regarding our policies, the methodologies and significant inputs used to determine the ALLL and additional details on the composition of our loan portfolio:

- Nonperforming Loans and Leases section of this Note 1,
- · Allowance for Credit Losses section of this Note 1, and
- Note 4 Loans and Related Allowance for Credit Losses.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 105

Nonperforming Loans and Leases

The matrix that follows summarizes our policies for classifying certain loans as nonperforming loans and/or discontinuing the accrual of loan interest income.

	Commercial
Loans classified as nonperforming and accounte for as nonaccrual	ed • Loans accounted for at amortized cost where: - The loan is 90 days or more past due. - The loan is rated substandard or worse due to the determination that full collection of principal and interest is not probable as demonstrated by the following conditions: • The collection of principal or interest is 90 days or more past due, • Reasonable doubt exists as to the certainty of the borrower's future debt service ability, according to the terms of the credit arrangement, regardless of whether 90 days have passed or not, • The borrower has filed or will likely file for bankruptcy, • The bank advances additional funds to cover principal or interest, • We are in the process of liquidating a commercial borrower or • We are pursuing remedies under a guarantee.
Loans excluded from nonperforming classification but accounted for as nonaccrual	 Loans accounted for under the fair value option and full collection of principal and interest is not probable. Loans accounted for at the lower of cost or market less costs to sell (held for sale) and full collection of principal and interest is not probable.
Loans excluded from nonperforming classification and nonaccrual accounting	 Loans that are well secured and in the process of collection. Certain government insured loans where substantially all principle and interest is insured. Commercial purchasing card assets which do not accrue interest.
	Consumer
Loans classified as nonperforming and accounte for as nonaccrual	 Loans accounted for at amortized cost where full collection of contractual principal and interest is not deemed probable as demonstrated in the policies below: The loan is 90 days past due for home equity and installment loans, and 180 days past due for well secured residential real estate loans, The loan has been modified and classified as a TDR, The loan has been modified to defer prior payments in forbearance to the end of the loan term, Notification of bankruptcy has been received, The bank holds a subordinate lien position in the loan and the first lien mortgage loan is seriously stressed (i.e., 90 days or more past due), Other loans within the same borrower relationship have been placed on nonaccrual or charge-offs have been taken on them, The bank has ordered the repossession of non-real estate collateral securing the loan or

and nonaccrual accounting

but accounted for as nonaccrual

- The bank has charged-off the loan to the value of the collateral.
 Loans excluded from nonperforming classification Loans accounted for under the fair value option and full collection of principal and interest is not probable.
 - Loans accounted for at the lower of cost or market less costs to sell (held for sale) and full collection of principal and interest is not probable.
- Loans excluded from nonperforming classification Certain government insured loans where substantially all principal and interest is insured.
 - · Residential real estate loans that are well secured and in the process of collection.
 - Consumer loans and lines of credit, not secured by residential real estate or automobiles, as permitted by regulatory guidance.

Commercial

We generally charge-off commercial (commercial and industrial, commercial real estate and equipment lease financing) nonperforming loans when we determine that a specific loan, or portion thereof, is uncollectible. This determination is based on the specific facts and circumstances of the individual loans. In making this determination, we consider the viability of the business or project as a going concern, the past due status when the asset is not well-secured, the expected cash flows to repay the loan, the value of the collateral and the ability and willingness of any guarantors to perform.

Additionally, in general, for smaller commercial loans of \$100,000 or less, a full charge-off occurs at 80 days past due for term loans and revolvers. For smaller commercial leases of \$1 million or less, a full charge-off occurs at 120 days past due. Small business credit card balances are charged-off at 180 days past due.

Consumer

We generally charge-off secured consumer (home equity, residential real estate and automobile) nonperforming loans to the fair value of collateral less costs to sell, if lower than the amortized cost basis of the loan outstanding, when delinquency of the loan, combined with other risk factors (e.g., bankruptcy, lien position or troubled debt restructuring), indicates that the loan, or some portion thereof, is uncollectible as per our historical experience, or the collateral has been repossessed. We charge-off secured consumer loans no later than 180 days past due. Most consumer loans and lines of credit, not secured by automobiles or residential real estate, are charged-off once they have reached 120-180 days past due.

For secured collateral dependent loans, collateral values are updated at least annually and subsequent declines in collateral values are charged-off resulting in incremental provision for credit loss. Subsequent increases in collateral values may be reflected as an adjustment to the ALLL to reflect the expectation of recoveries in an amount greater than previously expected, limited to amounts previously charged-off.

Accounting for Nonperforming Assets and Leases and Other Nonaccrual Loans

For nonaccrual loans, interest income accrual and deferred fee/cost recognition is discontinued. Additionally, the current year accrued and uncollected interest is reversed through Net interest income and prior year accrued and uncollected interest is charged-off, except for credit cards, where we reverse any accrued interest through Net interest income at the time of charge-off, as per industry standard practice. Nonaccrual loans that are also collateral dependent may be charged-off to reduce the basis to the fair value of collateral less costs to sell

If payment is received on a nonaccrual loan, generally the payment is first applied to the remaining principal balance; payments are then applied to recover any charged-off amounts related to the loan. Finally, if both principal balance and any charge-offs have been recovered, then the payment will be recorded as fee and interest income. For certain consumer loans, the receipt of interest payments is recognized as interest income on a cash basis. Cash basis income recognition is applied if a loan's amortized cost basis is deemed fully collectible and the loan has performed for at least six months.

For TDRs, payments are applied based upon their contractual terms unless the related loan is deemed non-performing. TDRs are generally included in nonperforming and nonaccrual loans. However, after a reasonable period of time, generally six months, in which the loan performs under restructured terms and meets other performance indicators, it is returned to performing/accruing status. This return to performing/accruing status demonstrates that the bank expects to collect all of the loan's remaining contractual principal and interest. TDRs resulting from (i) borrowers that have been discharged from personal liability through Chapter 7 bankruptcy and have not formally reaffirmed their loan obligations to us, and (ii) borrowers that are not currently obligated to make both principal and interest payments under the restructured terms are not returned to accrual status.

Other nonaccrual loans are generally not returned to accrual status until the borrower has performed in accordance with the contractual terms and other performance indicators for at least six months, the period of time which was determined to demonstrate the expected collection of the loan's remaining contractual principal and interest. Nonaccrual loans with partially charged-off principal are not returned to accrual. When a nonperforming loan is returned to accrual status, it is then considered a performing loan.

Foreclosed assets consist of any asset seized or property acquired through a foreclosure proceeding or acceptance of a deed-in-lieu of foreclosure. OREO comprises principally commercial and residential real estate properties obtained in partial or total satisfaction of loan obligations. After obtaining a foreclosure judgment, or in some jurisdictions the initiation of proceedings under a power of sale in the loan instruments, the property will be sold. When we are awarded title or completion of deed-in-lieu of foreclosure, we transfer the loan to foreclosed assets included in Other assets on our Consolidated Balance Sheet. Property obtained in satisfaction of a loan is initially recorded at estimated fair value less cost to sell. Based upon the estimated fair value less cost to sell, the amortized cost basis of the loan is adjusted and a charge-off/recovery is recognized to the ALLL. We estimate fair values primarily based on appraisals, or sales agreements with third parties. Subsequently, foreclosed assets are valued at the lower of the amount recorded at acquisition date or estimated fair value less cost to sell. Valuation adjustments on these assets and gains or losses realized from disposition of such property are reflected in Other noninterest expense.

For certain mortgage loans that have a government guarantee, we establish a separate other receivable upon foreclosure. The receivable is measured based on the loan balance (inclusive of principal and interest) that is expected to be recovered from the guarantor.

See Note 4 Loans and Related Allowance for Credit Losses in this Report for additional information on nonperforming assets, TDRs and credit quality indicators related to our loan portfolio.

Allowance for Credit Losses

Our ACL, in accordance with the CECL standard, is based on historical loss experience, current borrower risk characteristics, current economic conditions, reasonable and supportable forecasts of future conditions and other relevant factors. We maintain the ACL at an

appropriate level for expected losses on our existing investment securities, loans, equipment finance leases (including residual values), other financial assets and unfunded lending related commitments, for the estimated contractual term of the assets or exposures as of the balance sheet date. The remaining contractual term of assets in scope of CECL is estimated considering contractual maturity dates, prepayment expectations, utilization or draw expectations and any embedded extension options that do not allow us to unilaterally cancel the extension options. For products without a fixed contractual maturity date (e.g., credit cards), we rely on historical payment behavior to determine the length of the paydown or default time period.

We estimate expected losses on a pooled basis using a combination of (i) the expected losses over a reasonable and supportable forecast period, (ii) a period of reversion to long run average expected losses where applicable and (iii) the long run average expected

losses for the remaining estimated contractual term. For all assets and unfunded lending related commitments in the scope of CECL, the ACL also includes individually assessed reserves and qualitative reserves, as applicable.

We use forward-looking information in estimating expected credit losses for our reasonable and supportable forecast period. For this purpose, we use forecasted scenarios produced by PNC's Economics Team, which are designed to reflect business cycles and their related estimated probabilities. The forecast length that we have determined to be reasonable and supportable is three years. As noted in the methodology discussions that follow, forward-looking information is incorporated into the expected credit loss estimates. Such forward looking information includes forecasted relevant macroeconomic variables, which are estimated using quantitative techniques, analysis from PNC economists and management judgment.

The reversion period is used to bridge our three year reasonable and supportable forecast period and the long run average expected credit losses. We may consider a number of factors in determining the duration of the reversion period, such as contractual maturity of the asset, observed historical patterns and the estimated credit loss rates at the end of the forecast period relative to the beginning of the long run average period. The reversion period is typically 1-3 years, if not immediate.

The long run average expected credit losses are derived from long run historical credit loss information adjusted for the credit quality of the current portfolio, and therefore do not consider current and forecasted economic conditions.

See the following sections related to investment securities, loans, trade receivables, other financial assets and unfunded lending related commitments for details about specific methodologies.

Allowance for Investment Securities

A significant portion of our investment securities are issued or guaranteed by either the U.S. government (U.S. Treasury or GNMA) or a government-sponsored agency (FNMA or FHLMC). Taking into consideration historical information and current and forecasted conditions, we do not expect to incur any credit losses on these securities.

Investment securities that are not issued or guaranteed by the U.S. government or a government-sponsored agency consist of both securitized products, such as non-agency mortgage and asset-backed securities, as well as non-securitized products, such as corporate and municipal debt securities. A discounted cash flow approach is primarily used to determine the amount of the allowance required. The estimates of expected cash flows are determined using macroeconomic sensitive models taking into consideration the reasonable and supportable forecast period and scenarios discussed above. Additional factors unique to a specific security may also be taken into consideration when estimating expected cash flows. The cash flows expected to be collected, after considering expected prepayments, are discounted at the effective interest rate. For an available-for-sale security, the amount of the allowance is limited to the difference between the amortized cost basis of the security and its estimated fair value.

See Note 3 Investment Securities in this Report for additional information about the investment securities portfolio.

Allowance for Loan and Lease Losses

Our pooled expected loss methodology is based upon the quantification of risk parameters, such as PD, LGD and EAD for a loan or loan segment. We also consider the impact of prepayments and amortization on contractual maturity in our expected loss estimates. We use historical credit loss information, current borrower risk characteristics and forecasted economic variables for the reasonable and supportable forecast period, coupled with analytical methods, to estimate these risk parameters by loan or loan segments. PD, LGD and EAD parameters are calculated for each forecasted scenario and the long run average period, and combined to generate expected loss estimates by scenario. The following matrix provides key credit risk characteristics that we use to estimate these risk parameters.

Loan Class	Probability of Default	Loss Given Default	Exposure at Default
		Commercial	
Commercial and industrial / Equipment lease financing	For wholesale obligors: internal risk ratings based on borrower characteristics and industry For retail small balance obligors: credit score, delinquency status, and product type	Collateral type, collateral value, industry, size and outstanding exposure for secured loans Capital structure, industry and size for unsecured loans For retail small balance obligors, product type and credit scores	Outstanding balances, commitment, contractual maturities and historical prepayment experience for loans Current utilization and historical pre-default draw experience for lines
Commercial real estate	Property performance metrics, property type, market and risk pool for the forecast period Internal risk ratings based on borrower characteristics for the long run average	Property values and anticipated liquidation costs	Outstanding balances, commitment, contractual maturities and historical prepayment experience for loans
		Consumer	
Home equity / Residential real estate	Borrower credit scores, delinquency status, origination vintage, LTV and contractual maturity	• Collateral characteristics, LTV and costs to sell	Outstanding balances, contractual maturities and historical prepayment experience for loans Current utilization and historical pre-default draw experience for lines
Automobile	Borrower credit scores, delinquency status, borrower income, LTV and contractual maturity	• New vs. used, LTV and borrower credit scores	Outstanding balances, contractual maturities and historical prepayment experience
Credit card	Borrower credit scores, delinquency status, utilization, payment behavior and months on book	Borrower credit scores and credit line amount	Pay-down curves are developed using a pro- rata method and estimated using borrower behavior segments, payment ratios and borrower credit scores
Education / Other consumer	• Net charge-off and pay-down rates by vintage a	are used to estimate expected losses in lieu of discr	ete risk parameters

The following matrix describes the key economic variables that are consumed during our forecast period by loan class, as well as other assumptions that are used for our reversion and long run average approaches.

Loan Class	Forecast Period - Key Economic Variables	Reversion Method	Long Run Average
		Commercial	
Commercial and industrial / Equipment lease financing	• GDP and Gross Domestic Income measures, employment related variables and personal income and consumption measures	• Immediate reversion	Average parameters determined based on internal and external historical data Modeled parameters using long run economic conditions for retail small balance obligors
Commercial real estate	• CRE Price Index, unemployment rates, GDP, corporate bond yield and interest rates	Immediate reversion	Average parameters determined based on internal and external historical data
		Consumer	
Home equity / Residential real estate	• Unemployment rates, HPI and interest rates	• Straight-line over 3 years	• Modeled parameters using long run economic conditions
Automobile	• Unemployment rates, HPI, personal consumption expenditure and Manheim used car index	• Straight-line over 1 year	Average parameters determined based on internal and external historical data
Credit card	Unemployment rates, personal consumption expenditure and HPI	• Straight-line over 2 years	Modeled parameters using long run economic conditions
Education / Other consumer	• Net charge-off and pay-down rates by vintage are	used to estimate expected losses in lieu of disc	erete risk parameters

After the forecast period, we revert to the long run average over the reversion period noted above, which is the period between the end of the forecast period and when losses are estimated to have completely reverted to the long run average.

Once we have developed a combined estimate of credit losses (e.e., for the forecast period, reversion period and long run average) under each of the forecasted scenarios, we produce a probability-weighted credit loss estimate by loan class. We then add or deduct any qualitative components and other adjustments, such as individually assessed loans, to produce the ALLL. See the Individually Assessed Component and Qualitative Component discussions that follow in this Note 1 for additional information about those adjustments.

Discounted Cash Flow

In addition to TDRs, we also use a discounted cash flow methodology for our home equity and residential real estate loan classes. We determine effective interest rates considering contractual cash flows adjusted for estimated prepayments. Changes in the ALLL due to the impact of the passage of time under the discounted cash flow estimate are recognized through the provision for credit losses.

Individually Assessed Component

Loans and leases that do not share similar risk characteristics with a pool of loans are individually assessed as follows:

- For commercial nonperforming loans greater than or equal to a defined dollar threshold, reserves are based on an analysis of the present value of the loan's expected future cash flows or the fair value of the collateral, if appropriate under our policy for collateral dependent loans. Nonperforming commercial loans below the defined threshold, and accruing TDRs are reserved for under a pooled basis.
- For consumer nonperforming loans classified as collateral dependent, charge-off and ALLL related to recovery of amounts previously charged-off are evaluated through an analysis of the fair value of the collateral less costs to sell.

Qualitative Component

While our reserve methodologies strive to reflect all relevant credit risk factors, there continues to be uncertainty associated with, but not limited to, potential imprecision in the estimation process due to the inherent time lag of obtaining information and normal variations between expected and actual outcomes. We may hold additional reserves that are designed to provide coverage for losses attributable to such risks. The ACL also takes into account factors that may not be directly measured in the determination of individually assessed or pooled reserves. Such qualitative factors may include, but are not limited to:

- · Industry concentrations and conditions, including the impacts of COVID-19 on highly impacted segments,
- · Changes in market conditions, including regulatory and legal requirements,
- Changes in the nature and volume of our portfolio,
- Recent credit quality trends, including the impact of COVID-19 hardship related loan modifications,
- · Recent loss experience in particular portfolios, including specific and unique events,
- Recent macro-economic factors that may not be reflected in the forecast information,
- · Limitations of available input data, including historical loss information and recent data such as collateral values,
- Model imprecision and limitations,
- Changes in lending policies and procedures, including changes in loss recognition and mitigation policies and procedures,
- Timing of available information, including the performance of first lien positions.

See Note 4 Loans and Related Allowance for Credit Losses for additional information about our loan portfolio and the related allowance.

Allowance for Loan and Lease Losses (Incurred Loss Methodology)

Prior to the adoption of CECL, we maintained the ALLL at a level that we believed to be appropriate to absorb estimated probable credit losses incurred in the loan and lease portfolios as of the balance sheet date. These evaluations were inherently subjective, as they required material estimates, and included, among others: PD, LGD, EAD, movement through delinquency stages, amounts and timing of expected future cash flows, value of collateral and qualitative factors.

For all loans and leases, except purchased impaired loans, the ALLL was the sum of three components:

- Asset specific/individual impaired reserves: Nonperforming loans that were considered impaired under ASC 310 Receivables, which included all commercial and consumer TDRs, were evaluated for specific reserves.
- Quantitative (formulaic or pooled) reserves: Quantitative reserves in the commercial portfolio were determined through quantitative loss modeling utilizing PD, LGD, and the outstanding balance of the loan, while quantitative reserves in the consumer portfolio were determined primarily using transition matrices, including a roll-rate model.
- · Qualitative (judgmental) reserves.

The reserve calculation and determination process was dependent on the use of key assumptions. Key reserve assumptions and estimation processes reacted to and were influenced by observed changes in loan portfolio performance experience, the financial strength of the borrowers and economic conditions.

Accrued Interest

When accrued interest is reversed or charged-off in a timely manner, the CECL standard provides a practical expedient to exclude accrued interest from ACL measurement. We consider our nonaccrual and charge-off policies to be timely for all of our investment securities, loans and leases, with the exception of consumer credit cards, education loans and certain unsecured consumer lines of credit. We consider the length of time before nonaccrual/charge-off and the use of appropriate other triggering events for nonaccrual and charge-offs in making this determination. Pursuant to these policy elections, we calculate reserves for accrued interest on credit cards, education loans and certain unsecured consumer lines of credit, which are then included within the ALLL. See the Debt Securities and Nonperforming Loans and Leases sections of this Note 1 for additional information on our nonaccrual and charge-off policies.

Additionally, pursuant to our use of a discounted cash flow methodology in estimating credit losses for our home equity and residential real estate loan classes, applicable reserves for accrued interest are also included within the ALLL for these loan classes.

Purchased Credit Deteriorated Loans or Securities

The allowance for PCD loans or securities is determined at the time of acquisition (including January 1, 2020 when certain purchased impaired loans were grandfathered and transitioned to PCD upon adoption of CECL), as the estimated expected credit loss of the outstanding balance or par value, based on the methodologies described previously for loans and securities. In accordance with CECL, the allowance recognized at acquisition is added to the acquisition date purchase price to determine the asset's amortized cost basis.

Prior to the adoption of CECL, acquired purchased impaired loans were recorded at fair value. When evidence of credit quality deterioration and evidence that it was probable that we would be unable to collect all contractual amounts due existed, we considered the loans to be purchased credit impaired and we estimated the amount and timing of undiscounted expected cash flows at acquisition for each loan either individually or on a pool basis. The excess of undiscounted cash flows expected to be collected over its carrying value represented the accretable yield which was recognized into interest income over the remaining life of the loan (or pool of loans) using the constant effective yield method. Subsequent decreases in expected cash flows that were attributable to credit quality were recognized as impairments resulting in an increase in the ALLL. Subsequent increases in expected cash flows were recognized as a provision recapture of previously recorded ALLL or prospectively through an adjustment of the loan's or pool's yield over its remaining life.

Allowance for Unfunded Lending Related Commitments

We maintain the allowance for unfunded lending related commitments on off-balance sheet credit exposures that are not unconditionally cancelable (e.g., unfunded loan commitments, letters of credit and certain financial guarantees), at a level we believe is appropriate as of the balance sheet date to absorb expected credit losses on these exposures. Other than the estimation of the probability of funding, this reserve is estimated in a manner similar to the methodology used for determining reserves for loans and leases. See the Allowance for Loan and Lease Losses section of this Note 1 for the key credit risk characteristics for unfunded lending related commitments. The allowance for unfunded lending related commitments is recorded as a liability on the Consolidated Balance Sheet. Net adjustments to this reserve are included in the provision for credit losses.

See Note 4 Loans and Related Allowance for Credit Losses for additional information about this allowance.

Prior to the adoption of CECL, we maintained the allowance for unfunded loan commitments and letters of credit at a level we believed was appropriate to absorb estimated probable credit losses incurred as of the balance sheet date. We determined the allowance based on periodic evaluations of the unfunded credit facilities, including an assessment of the probability of commitment usage, credit risk factors, and, solely for commercial lending, the terms and expiration dates of the unfunded credit facilities. Other than the estimation of the probability of funding, the reserve for unfunded loan commitments was estimated in a manner similar to the methodology used for determining reserves for funded exposures. The allowance for unfunded loan commitments and letters of credit was recorded as a liability on the Consolidated Balance Sheet. Net adjustments to the allowance for unfunded loan commitments and letters of credit were included in the provision for credit losses.

Allowance for Other Financial Assets

We determine the allowance for other financial assets (e.g., trade receivables, servicing advances on PNC-owned loans, balances with banks) considering historical loss information and other available indicators. In certain cases where there are no historical, current or forecast indicators of an expected credit loss, we may estimate the reserve to be close to zero. As of December 31, 2020, the allowance for other financial assets was immaterial.

Loans Held for Sale

We designate loans as held for sale when we have the intent and ability to sell them. At the time of designation to held for sale, any allowance is reversed, and a valuation allowance for the shortfall between the amortized cost basis and the net realizable value is recognized, excluding the amounts already charged off. Similarly, when loans are no longer considered held for sale, the valuation allowance (net of writedowns) is reversed, and an allowance for credit losses is established, excluding the amounts already charged-off. Write-downs on these loans (if required) are recorded as charge-offs through the valuation allowance. Adjustments to the valuation allowance on held for sale loans are recognized in Other noninterest income.

We have elected to account for certain commercial and residential mortgage loans held for sale at fair value. The changes in the fair value of the commercial mortgage loans are measured and recorded in Other noninterest income while such changes for the residential mortgage loans are measured and recorded in Residential mortgage noninterest income each period. See Note 15 Fair Value for additional information.

Interest income with respect to loans held for sale is accrued based on the principal amount outstanding and the loan's contractual interest rate.

In certain circumstances, loans designated as held for sale may be transferred to held for investment based on a change in strategy. We transfer these loans at the lower of cost or estimated fair value; however, any loans originated or purchased for the held for sale portfolio and for which the fair value option has been elected remain at fair value for the life of the loan

Loan Sales, Loan Securitizations and Retained Interests

We recognize the sale of loans or other financial assets when the transferred assets are legally isolated from our creditors and the appropriate accounting criteria are met. We have sold mortgage and other loans through securitization transactions. In a securitization, financial assets are transferred into trusts or to SPEs in transactions to effectively legally isolate the assets from us.

In a securitization, the trust or SPE issues beneficial interests in the form of senior and subordinated securities backed or collateralized by the assets sold to the trust. The senior classes of the asset-backed securities typically receive investment grade credit ratings at the time of issuance. These ratings are generally achieved through the creation of lower-rated subordinated classes of asset-backed securities, as well as subordinated or residual interests. In certain cases, we may retain a portion or all of the securities issued, interest-only strips, one or more subordinated tranches, servicing rights and, in some cases, cash reserve accounts. Securitized loans are removed from the balance sheet and a net gain or loss is recognized in Noninterest income at the time of initial sale. Gains or losses recognized on the sale of the loans depend on the fair value of the loans sold and the retained interests at the date of sale. We generally estimate the fair value of the retained interests based on the present value of future expected cash flows using assumptions as to discount rates, interest rates, prepayment speeds, credit losses and servicing costs, if applicable.

With the exception of loan sales to certain U.S. government-chartered entities, our loan sales and securitizations are generally structured without recourse to us except for representations and warranties and with no restrictions on the retained interests. We originate, sell and service commercial mortgage loans under the FNMA DUS program. Under the provisions of the DUS program, we participate in a loss-sharing arrangement with FNMA. When we are obligated for loss-sharing or recourse, our policy is to record such liabilities initially at fair value and subsequently reserve for estimated losses in accordance with guidance contained in applicable GAAP.

Variable Interest Entities

A VIE is a corporation, partnership, limited liability company, or any other legal structure used to conduct activities or hold assets generally that either:

- Does not have equity investors with voting rights that can directly or indirectly make decisions about the entity's most significant economic activities through those voting rights or similar rights, or
- Has equity investors that do not provide sufficient equity for the entity to finance its activities without additional subordinated financial support.

A VIE often holds financial assets, including loans or receivables, real estate or other property.

VIEs are assessed for consolidation under ASC 810 – Consolidation when we hold a variable interest in these entities. We consolidate a VIE if we are its primary beneficiary. The primary beneficiary of a VIE is determined to be the party that meets both of the following criteria: (i) has the power to make decisions that most significantly affect the economic performance of the VIE; and (ii) has the obligation to absorb losses or the right to receive benefits that in either case could potentially be significant to the VIE. Upon consolidation of a VIE, we recognize all of the VIE's assets, liabilities and noncontrolling interests on our Consolidated Balance Sheet. On a quarterly basis, we determine whether any changes occurred requiring a reassessment of whether we are the primary beneficiary of an entity.

See Note 5 Loan Sale and Servicing Activities and Variable Interest Entities for information about VIEs that we consolidate as well as those that we do not consolidate but in which we hold a significant variable interest.

Mortgage Servicing Rights

We provide servicing under various loan servicing contracts for commercial and residential loans. These contracts are either purchased in the open market or retained as part of a loan securitization or loan sale. All acquired or originated servicing rights are measured at fair value. Fair value is based on the present value of the expected future net cash flows, including assumptions as to:

- · Deposit balances and interest rates for escrow and commercial reserve earnings,
- · Discount rates,
- · Estimated prepayment speeds, and
- Estimated servicing costs.

We measure commercial and residential MSRs at fair value in order to reduce any potential measurement mismatch between our economic hedges and the MSRs. We manage the risk by hedging the fair value of MSRs with derivatives and securities which are expected to increase in value when the value of the servicing right declines. Changes in the fair value of MSRs are recognized as gains/(losses). The fair value of these servicing rights is estimated by using a discounted cash flow valuation model which calculates the present value of estimated future net servicing cash flows, taking into consideration actual and expected mortgage loan prepayment rates, discount rates, servicing costs and other factors which are determined based on current market conditions. See Note 6 Goodwill and Mortgage Servicing Rights for additional information.

Goodwill

Goodwill arising from business acquisitions represents the value attributable to unidentifiable intangible elements in the business acquired. At least annually, in the fourth quarter, or more frequently if events occur or circumstances have changed significantly from the annual test date, management performs the goodwill impairment test at a reporting unit level.

The PNC Financial Services Group, Inc. – 2020 Form 10-K 113

PNC may first perform a qualitative analysis to evaluate whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If, after considering all relevant events and circumstances, PNC determines it is not more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, then performing a quantitative impairment test is not necessary. If PNC elects to bypass the qualitative analysis, or concludes via qualitative analysis that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, a quantitative goodwill impairment test is performed. Inputs are generated and used in calculating the fair value of the reporting unit, which is compared to its carrying amount. The fair value of our reporting units is determined by using discounted cash flows and/or market comparability methodologies. If the fair value is greater than the carrying amount, then the reporting unit's goodwill is deemed not to be impaired. If the fair value is less than the carrying amount, an entity should recognize an impairment charge for the amount by which the carrying amount of goodwill exceeds the reporting unit's fair value. The loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. See Note 6 Goodwill and Mortgage Servicing Rights for additional information.

Leases

Lessor Arrangements

We provide financing for various types of equipment, including aircraft, energy and power systems and vehicles through a variety of lease arrangements. Finance leases are carried at the aggregate of lease payments plus estimated residual value of the leased equipment, less unearned income. Leveraged leases, a form of financing leases, are carried net of nonrecourse debt. We recognize income over the term of the lease using the constant effective yield method. Lease residual values are reviewed for impairment at least annually. Gains or losses on the sale of leased assets are included in Other noninterest income. Valuation adjustments on operating lease residuals are included in Other noninterest expense while valuation adjustments on the net investment of a direct financing or sales-type lease are included in Provision for credit losses. Prior to the adoption of CECL, valuation adjustments on lease residuals were included in Other noninterest expense.

Lessee Arrangements

We lease retail branches, datacenters, office space, land and equipment under operating and finance leases. At adoption of ASU 2016-02 on January 1, 2019, we elected the practical expedient to account for the lease and nonlease components of existing real estate leases and leases of advertising assets, such as signage, as a single lease component. Effective January 1, 2019, lease and nonlease components of new lease agreements are accounted for separately. Lease components consist of fixed payments including rent, real estate taxes and insurance costs and nonlease components consist of common-area maintenance costs. In addition, we elected the practical expedient to not apply the recognition requirements under the standard to short-term leases. Leases with an initial term of 12 months or less are not recorded on the balance sheet, as we recognize lease expense for these leases on a straight-line basis over the lease term. Generally, we have elected to use the Overnight Indexed Swap rate corresponding to the term of the lease at the lease measurement date as our incremental borrowing rate to measure the right-of-use-asset and lease liability.

See Note 7 Leases for additional information on our leasing arrangements.

Depreciation and Amortization

For financial reporting purposes, we depreciate premises and equipment, net of salvage value, principally using the straight-line method over their estimated useful lives.

We use estimated useful lives for furniture and equipment ranging from one to 10 years, and depreciate buildings over an estimated useful life of up to 40 years. We amortize leasehold improvements over their estimated useful lives of up to 15 years or the respective lease terms, whichever is shorter.

We purchase, as well as internally develop and customize, certain software to enhance or perform internal business functions. Software development costs incurred in the planning and post-development project stages are charged to Noninterest expense. Costs associated with designing software configuration and interfaces, installation, coding programs and testing systems are capitalized and amortized using the straight-line method over periods ranging from one to 10 years.

We review the remaining useful lives and carrying values of premises and equipment to determine whether an event has occurred that would indicate a change in useful life is warranted or if any impairment exists.

Other Comprehensive Income

Other comprehensive income, on an after-tax basis, primarily consists of unrealized gains or losses on debt securities, unrealized gains or losses on derivatives designated as cash flow hedges, and changes in pension and other postretirement benefit plan liability adjustments. Details of each component are included in Note 13 Other Comprehensive Income.

Treasury Stock

We record common stock purchased for treasury at cost. At the date of subsequent reissue, the treasury stock account is reduced by the cost of such stock on the first-in, first-out basis

Earnings Per Common Share

Basic earnings per common share is calculated using the two-class method to determine income attributable to common shareholders. Unvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents are considered participating securities under the two-class method. Distributed dividends and dividend equivalents related to participating securities and an allocation of undistributed net income to participating securities reduce the amount of income attributable to common shareholders. In a period with a loss, no allocation will be made to the participating securities, as they do not have a contractual obligation to absorb losses. Income attributable to common shareholders is then divided by the weighted-average common shares outstanding for the period.

Diluted earnings per common share is calculated under the more dilutive of either the treasury method or the two-class method. For the diluted calculation, we increase the weighted-average number of shares of common stock outstanding by the assumed conversion of outstanding convertible preferred stock from the beginning of the year or date of issuance, if later, and the number of shares of common stock that would be issued assuming the exercise of stock options and warrants and the issuance of incentive shares using the treasury stock method. These adjustments to the weighted-average number of shares of common stock outstanding are made only when such adjustments will dilute earnings per common share. For periods in which there is a loss from continuing operations, any potential dilutive shares will be included in the continuing operations, discontinued operations or total earnings per common share calculations, even if overall net income is reported. See Note 14 Earnings Per Share for additional information.

Fair Value of Financial Instruments

The fair value of financial instruments and the methods and assumptions used in estimating fair value amounts and financial assets and liabilities for which fair value was elected are detailed in Note 15 Fair Value.

Derivative Instruments and Hedging Activities

We use a variety of financial derivatives to both mitigate exposure to market (primarily interest rate) and credit risks inherent in our business activities, as well as to facilitate customer risk management activities. We manage these risks as part of our asset and liability management process and through credit policies and procedures.

We recognize all derivative instruments at fair value as either Other assets or Other liabilities on the Consolidated Balance Sheet and the related cash flows in the Operating Activities section of the Consolidated Statement of Cash Flows. Adjustments for counterparty credit risk are included in the determination of fair value. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a cash flow or net investment hedging relationship. For all other derivatives, changes in fair value are recognized in earnings.

We utilize a net presentation for derivative instruments on the Consolidated Balance Sheet taking into consideration the effects of legally enforceable master netting agreements. Cash collateral exchanged with counterparties is also netted against the applicable derivative exposures by offsetting obligations to return, or general rights to reclaim, cash collateral against the fair values of the net derivatives being collateralized.

For those derivative instruments that are designated and qualify as accounting hedges, we designate the hedging instrument, based on the exposure being hedged, as a fair value hedge, a cash flow hedge or a hedge of the net investment in a foreign operation.

We formally document the relationship between the hedging instruments and hedged items, as well as the risk management objective and strategy, before undertaking an accounting hedge. To qualify for hedge accounting, the derivatives and related hedged items must be designated as a hedge at inception of the hedge relationship. In addition, a derivative must be highly effective at reducing the risk associated with the exposure being hedged. For accounting hedge relationships, we formally assess, both at the inception of the hedge and on an ongoing basis, if the derivatives are highly effective in offsetting designated changes in the fair value or cash flows of the hedged item. If it is determined that the derivative instrument is not highly effective, hedge accounting is discontinued. We assess effectiveness using statistical regression analysis. Where the critical terms of the derivative and hedged item match, effectiveness may be assessed qualitatively.

For derivatives that are designated as fair value hedges (e.e., hedging the exposure to changes in the fair value of an asset or a liability attributable to a particular risk, such as changes in LIBOR), changes in the fair value of the hedging instrument are recognized in earnings and offset by also recognizing in earnings the changes in the fair value of the hedged item attributable to the hedged risk. To

The PNC Financial Services Group, Inc. - 2020 Form 10-K 115

the extent the change in fair value of the derivative does not offset the change in fair value of the hedged item, the difference is reflected in the Consolidated Income Statement in the same income statement line as the hedged item.

For derivatives designated as cash flow hedges (i.e., hedging the exposure to variability in expected future cash flows), the gain or loss on derivatives is reported as a component of AOCI and subsequently reclassified to income in the same period or periods during which the hedged cash flows affect earnings and recorded in the same income statement line item as the hedged cash flows. For derivatives designated as a hedge of net investment in a foreign operation, the gain or loss on the derivatives is reported as a component of AOCI.

We discontinue hedge accounting when it is determined that the derivative no longer qualifies as an effective hedge; the derivative expires or is sold, terminated or exercised; or the derivative is de-designated as a fair value or cash flow hedge or, for a cash flow hedge, it is no longer probable that the forecasted transaction will occur by the end of the originally specified time period.

We purchase or originate financial instruments that contain an embedded derivative. For financial instruments not measured at fair value with changes in fair value reported in earnings, we assess, at inception of the transaction, if the economic characteristics of the embedded derivative are clearly and closely related to the economic characteristics of the host contract, and whether a separate instrument with the same terms as the embedded derivative would be a derivative. If the embedded derivative is not clearly and closely related to the host contract and meets the definition of a derivative, the embedded derivative is recorded separately from the host contract with changes in fair value recorded in earnings, unless we elect to account for the hybrid instrument at fair value.

We enter into commitments to originate residential and commercial mortgage loans for sale. We also enter into commitments to purchase or sell commercial and residential real estate loans. These commitments are accounted for as free-standing derivatives which are recorded at fair value in Other assets or Other liabilities on the Consolidated Balance Sheet. Any gain or loss from the change in fair value after the inception of the commitment is recognized in Noninterest income.

See Note 16 Financial Derivatives for additional information.

Income Taxes

We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that we expect will apply at the time when we believe the differences will reverse. Changes in tax rates and tax law are accounted for in the period of enactment. Thus, at the enactment date, deferred taxes are remeasured and the change is recognized in Income Tax expense. The recognition of deferred tax assets requires an assessment to determine the realization of such assets. Realization refers to the incremental benefit achieved through the reduction in future taxes payable or refunds receivable from the deferred tax assets, assuming that the underlying deductible differences and carryforwards are the last items to enter into the determination of future taxable income. We establish a valuation allowance for tax assets when it is more likely than not that they will not be realized, based upon all available positive and negative evidence.

We use the deferral method of accounting on investments that generate investment tax credits. Under this method, the investment tax credits are recognized as a reduction to the related asset

Revenue Recognition

We earn interest and noninterest income from various sources, including:

- Lending,
- · Securities portfolio,
- Asset management,
- Loan sales, loan securitizations, and servicing,
- · Brokerage services,
- Sale of loans and securities,
- · Certain private equity activities, and
- · Securities, derivatives and foreign exchange activities.

In addition, we earn fees and commissions from:

- Issuing loan commitments, standby letters of credit and financial guarantees,
- · Deposit account services,
- · Merchant services,
- · Selling various insurance products,
- · Providing treasury management services,
- · Providing merger and acquisition advisory and related services,
- Debit and credit card transactions, and
- Participating in certain capital markets transactions.

Service charges on deposit accounts are recognized when earned. Brokerage fees and gains and losses on the sale of securities and certain derivatives are recognized on a tradedate basis.

We record private equity income or loss based on changes in the valuation of the underlying investments or when we dispose of our interest.

We recognize gain/(loss) on changes in the fair value of certain financial instruments where we have elected the fair value option. These financial instruments include certain commercial and residential mortgage loans originated for sale, certain residential mortgage portfolio loans and resale agreements. We also recognize gain/(loss) on changes in the fair value of residential and commercial MSRs.

We recognize revenue from servicing residential mortgages, commercial mortgages and other consumer loans for others as earned based on the specific contractual terms. These revenues are reported on the Consolidated Income Statement in the line items Residential mortgage, Corporate services and Consumer services. We recognize revenue from securities, derivatives and foreign exchange customer-related trading, as well as securities underwriting activities, as these transactions occur or as services are provided. We generally recognize gains from the sale of loans upon meeting the derecognition criteria for transfers of financial assets. Mortgage revenue recognized is reported net of mortgage repurchase reserves.

For the fee-based revenue within the scope of ASC 606 - Revenue from Contracts with Customers, revenue is recognized when or as those services are transferred to the customer. See Note 24 Fee-Based Revenue from Contracts with Customers for additional information related to revenue within the scope of ASC 606.

NOTE 2 ACQUISITION AND DIVESTITURE ACTIVITY

Pending Acquisition of BBVA USA Bancshares, Inc.

On November 16, 2020, we announced a definitive agreement with BBVA, S.A. to acquire BBVA including its U.S. banking subsidiary, BBVA USA, for a fixed purchase price of \$11.6 billion in cash.

BBVA USA has over 600 branches in Texas, Alabama, Arizona, California, Florida, Colorado and New Mexico. The transaction is expected to add approximately \$02 billion in total assets, \$86 billion of deposits and \$66 billion of loans to PNC's Consolidated Balance Sheet and to close in mid-2021, subject to customary closing conditions, including receipt of regulatory approvals.

Sale of Equity Investment in Blackrock, Inc.

In May 2020, PNC completed the sale of its 31.6 million shares of BlackRock, Inc., common and preferred stock through a registered secondary offering at a price of \$420 per share. In addition, BlackRock repurchased 2.65 million shares from PNC at a price of \$414.96 per share. The total proceeds from the sale were \$14.2 billion in cash, net of \$0.2 billion in expenses, and resulted in a gain on sale of \$4.3 billion. Additionally, PNC contributed 500,000 BlackRock shares to the PNC Foundation.

Following the sale and donation, PNC has divested its entire investment in BlackRock and only holds shares of BlackRock stock in a fiduciary capacity for clients of PNC.

The following table summarizes the results from the discontinued operations of BlackRock included in the Consolidated Income Statement:

Table 39: Consolidated Income Statement - Discontinued Operations

	 Year ended December 31				
In millions	 2020	2019	2018		
Noninterest income	\$ 5,777 \$	988 \$	942		
Total revenue	5,777	988	942		
Income from discontinued operations before income taxes	5,777	988	942		
Income taxes	1,222	161	154		
Net income from discontinued operations	\$ 4,555 \$	827 \$	788		

The following table summarizes the cash flows of discontinued operations of BlackRock included in the Consolidated Statement of Cash Flows:

Table 40: Consolidated Statement of Cash Flows - Discontinued Operations

	Year ende	d December 31	
In millions	 2020	2019	2018
Cash flows from discontinued operations			
Net cash provided (used) by operating activities of discontinued operations	\$ (2,683) \$	299 \$	264
Net cash provided by investing activities of discontinued operations	\$ 14,225		

NOTE 3 INVESTMENT SECURITIES

With the adoption of the CECL standard on January 1, 2020, credit losses on investment securities are required to be recognized through an allowance, instead of as a direct write-down to the amortized cost basis of the security. The amortized cost basis of investment securities for which impairment had previously been recorded did not change upon adoption.

We maintain the allowance for investment securities at levels that we believe to be appropriate as of the balance sheet date to absorb expected credit losses on our portfolio. As of December 31, 2020, the allowance for investment securities was \$2 million and primarily related to non-agency commercial mortgage-backed securities in the available for sale portfolio and other debt securities in the held to maturity portfolio. The provision for credit losses on investment securities totaled \$0 million for the year ended December 31, 2020.

In the first quarter of 2020, upon the adoption of ASU 2019-04, we elected to transfer debt securities with an amortized cost of \$6.2 billion and a fair value of \$16.5 billion from the held to maturity to the available for sale portfolio. During the second quarter of 2020, pursuant to the guidance in ASU 2020-04, we elected to transfer debt securities with an amortized cost of \$49 million and a fair value of \$48 million from the held to maturity to the available for sale portfolio.

See Note 1 Accounting Policies for additional information related to the adoption of the CECL standard, including the methodologies used to determine the allowance for investment securities, and the adoption of ASU 2019-04 and ASU 2020-04.

The following table summarizes our available for sale and held to maturity portfolios by major security type:

Table 41: Investment Securities Summary

		December	31, 202	20 (a)			Decembe	r 31, 20)19	
	 Amortized	Unre	alized		Fair	Amortized	Unre	alized		Fair
In millions	 Cost (b)	Gains		Losses	Value	Cost	Gains		Losses	Value
Securities Available for Sale										
U.S. Treasury and government agencies	\$ 19,821	\$ 903	\$	(13)	\$ 20,711	\$ 16,150	\$ 382	\$	(16)	\$ 16,516
Residential mortgage-backed										
Agency	47,355	1,566		(10)	48,911	35,847	517		(43)	36,321
Non-agency	1,272	243		(14)	1,501	1,515	302		(3)	1,814
Commercial mortgage-backed										
Agency	2,571	119		(2)	2,688	3,094	42		(18)	3,118
Non-agency	3,678	78		(67)	3,689	3,352	29		(9)	3,372
Asset-backed	5,060	100		(10)	5,150	5,044	78		(8)	5,114
Other	4,415	293			4,708	2,788	121		(1)	2,908
Total securities available for sale (b)	\$ 84,172	\$ 3,302	\$	(116)	\$ 87,358	\$ 67,790	\$ 1,471	\$	(98)	\$ 69,163
Securities Held to Maturity										
U.S. Treasury and government agencies	\$ 795	\$ 125			\$ 920	\$ 776	\$ 56			\$ 832
Residential mortgage-backed										
Agency						14,419	270	\$	(26)	14,663
Non-agency						133	7			140
Commercial mortgage-backed										
Agency						59	1			60
Non-agency						430	4			434
Asset-backed						52				52
Other	646	42	\$	(3)	685	1,792	85		(14)	1,863
Total securities held to maturity (b) (c)	\$ 1,441	\$ 167	\$	(3)	\$ 1,605	\$ 17,661	\$ 423	\$	(40)	\$ 18,044

⁽a) The accrued interest associated with our available for sale and held to maturity portfolios totaled \$238 million and \$5 million at December 31, 2020, respectively. These amounts are included in Other assets on the Consolidated Balance Sheet.

The fair value of investment securities is impacted by interest rates, credit spreads, market volatility and liquidity conditions. Securities available for sale are carried at fair value with net unrealized gains and losses included in Shareholders' equity as AOCI, unless credit related. Net unrealized gains and losses are determined by taking the difference between the fair value of a security and its amortized cost, net of any allowance. Securities held to maturity are carried at amortized cost less any allowance. Investment securities at December 31, 2020 included \$0.2 billion of net unsettled purchases which represent non-cash investing activity, and accordingly, are not reflected on the Consolidated Statement of Cash Flows. The comparable amount for December 31, 2019 was \$0.5 billion.

Table 42 presents the gross unrealized losses and fair value of securities available for sale that do not have an associated allowance for investment securities as of December 31, 2020. These securities are segregated between investments that had been in a continuous unrealized loss position for less than twelve months and twelve months or more, based on the point in time that the fair value declined below the amortized cost basis. All securities included in the table have been evaluated to determine if a credit loss exists. As part of that assessment, as of December 31, 2020, we concluded that we do not intend to sell and believe we will not be required to sell these securities prior to recovery of the amortized cost basis.

⁽b) Amortized cost is presented net of allowance of \$79 million for securities available for sale and \$3 million for securities held to maturity at December 31, 2020 in accordance with the CECL accounting standard. See the Recently Adopted Accounting Standards portion of Note 1 Accounting Policies for additional detail on the CECL accounting standard.

⁽c) Credit ratings represent a primary credit quality indicator used to monitor and manage credit risk. As of December 31, 2020, 85% of our securities held to maturity were rated AAA/AA.

Table 42: Gross Unrealized Loss and Fair Value of Securities Available for Sale Without an Allowance for Credit Losses

		Unrealized le less than 1	oss p	osition onths	Unrealized l 12 month		Tot	al	
In millions	'	Unrealized Loss		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss		Fair Value
December 31, 2020									
U.S. Treasury and government agencies	\$	(13)	\$	603			\$ (13)	\$	603
Residential mortgage-backed									
Agency		(8)		3,152	\$ (2)	\$ 82	(10)		3,234
Non-agency		(7)		119	(7)	73	(14)		192
Commercial mortgage-backed									
Agency					(2)	149	(2)		149
Non-agency		(13)		972	(7)	714	(20)		1,686
Asset-backed		(1)		339	(9)	706	(10)		1,045
Total securities available for sale	\$	(42)	\$	5,185	\$ (27)	\$ 1,724	\$ (69)	\$	6,909

Table 43 presents the gross unrealized losses and fair value of debt securities at December 31, 2019, prior to the adoption of the CECL standard. These securities are segregated between investments that had been in a continuous unrealized loss position for less than twelve months and twelve months or more, based on the point in time that the fair value declined below the amortized cost basis.

Table 43: Gross Unrealized Loss and Fair Value of Debt Securities

	Unrealized loss position less than 12 months			than 12 mantha	Unrealized loss position 12 months or more					Total			
	Unrealiz		ni iess		Uni)II 12						
In millions		Unrealized Loss		Fair Value		Unrealized Loss		Fair Value		Unrealized Loss		Fair Value	
		LOSS		value		LOSS		value		LOSS		vaiue	
<u>December 31, 2019</u>													
Securities Available for Sale													
U.S. Treasury and government agencies	\$	(14)	\$	2,451	\$	(2)	\$	607	\$	(16)	\$	3,058	
Residential mortgage-backed													
Agency		(6)		2,832		(37)		4,659		(43)		7,491	
Non-agency						(3)		102		(3)		102	
Commercial mortgage-backed													
Agency		(6)		852		(12)		953		(18)		1,805	
Non-agency		(4)		1,106		(5)		230		(9)		1,336	
Asset-backed		(3)		660		(5)		561		(8)		1,221	
Other						(1)		403		(1)		403	
Total securities available for sale	\$	(33)	\$	7,901	\$	(65)	\$	7,515	\$	(98)	\$	15,416	
Securities Held to Maturity													
Residential mortgage-backed - Agency					\$	(26)	\$	2,960	\$	(26)	\$	2,960	
Other	\$	(1)	\$	22		(13)		105		(14)		127	
Total securities held to maturity	\$	(1)	\$	22	\$	(39)	\$	3,065	\$	(40)	\$	3,087	

Information relating to gross realized securities gains and losses from the sales of securities is set forth in the following table:

Table 44: Gains (Losses) on Sales of Securities Available for Sale

Year ended December 31 In millions	Gross Gains	Gross Losses	Net Gains	Tax Expense
2020	\$ 307 \$	(2) \$	305 \$	64
2019	\$ 69 \$	(21) \$	48 \$	10
2018	\$ 57 \$	(57)		

The following table presents, by remaining contractual maturity, the amortized cost, fair value and weighted-average yield of debt securities at December 31, 2020:

Table 45: Contractual Maturity of Debt Securities

December 31, 2020 Dollars in millions	 1 Year or Less	After 1 Year through 5 Years		After 5 Years through 10 Years	After 10 Years		Total
Securities Available for Sale							
U.S. Treasury and government agencies	\$ 1,149	\$ 11,973	\$	5,418	\$ 1,281	\$	19,821
Residential mortgage-backed							
Agency	1	205		2,384	44,765		47,355
Non-agency					1,272		1,272
Commercial mortgage-backed							
Agency	13	563		679	1,316		2,571
Non-agency		83		236	3,359		3,678
Asset-backed	67	2,375		1,029	1,589		5,060
Other	788	1,502		1,218	907		4,415
Total securities available for sale at amortized cost	\$ 2,018	\$ 16,701	\$	10,964	\$ 54,489	\$	84,172
Fair value	\$ 2,038	\$ 17,283	\$	11,443	\$ 56,594	\$	87,358
Weighted-average yield, GAAP basis (a)	2.20 %	1.81 %	1	1.74 %	2.80 %)	2.45 %
Securities Held to Maturity							
U.S. Treasury and government agencies		\$ 199	\$	312	\$ 284	\$	795
Other	\$ 34	422		109	81		646
Total securities held to maturity at amortized cost	\$ 34	\$ 621	\$	421	\$ 365	\$	1,441
Fair value	\$ 35	\$ 659	\$	507	\$ 404	\$	1,605
Weighted-average yield, GAAP basis (a)	3.75 %	3.26 %		3.93 %	2.48 %)	3.29 %

⁽a) Weighted-average yields are based on amortized cost with effective yields weighted for the contractual maturity of each security. Actual maturities and yields may differ as certain securities may be prepaid.

At December 31, 2020, there were no securities of a single issuer, other than FNMA and FHLMC, that exceeded 10% of total shareholders' equity. The FNMA and FHLMC investments had a total amortized cost of \$32.9 billion and \$14.7 billion and \$14.9 billion, respectively.

The following table presents the fair value of securities that have been either pledged to or accepted from others to collateralize outstanding borrowings:

Table 46: Fair Value of Securities Pledged and Accepted as Collateral

In millions	_	December 31 2020	December 31 2019
Pledged to others	\$	22,841	\$ 14,609
Accepted from others:			
Permitted by contract or custom to sell or repledge (a)	\$	683	\$ 2,349
Permitted amount repledged to others	\$	683	\$ 360

⁽a) Balances at December 31, 2019 include \$ 2.0 billion in fair value of securities accepted from others to collateralize short-term investments in resale agreements that were not repledged.

The securities pledged to others include positions held in our portfolio of investment securities, trading securities and securities accepted as collateral from others that we are permitted by contract or custom to sell or repledge, and were used to secure public and trust deposits, repurchase agreements and for other purposes.

NOTE 4 LOANS AND RELATED ALLOWANCE FOR CREDIT LOSSES

Loan Portfolio

Our loan portfolio consists oftwo portfolio segments – Commercial and Consumer. Each of these segments comprises multiple loan classes. Classes are characterized by similarities in risk attributes and the manner in which we monitor and assess credit risk.

Commercial	Consumer
Commercial and industrial	Home equity
Commercial real estate	Residential real estate
 Equipment lease financing 	Automobile
	Credit card
	Education
	Other consumer

See Note 1 Accounting Policies for additional information on our loan related policies.

Credit Quality

We closely monitor economic conditions and loan performance trends to manage and evaluate our exposure to credit risk within the loan portfolio based on our defined loan classes. In doing so, we use several credit quality indicators, including trends in delinquency rates, nonperforming status, analysis of PD and LGD ratings, updated credit scores, and originated and updated LTV ratios.

The measurement of delinquency status is based on the contractual terms of each loan. Loans that are 30 days or more past due in terms of payment are considered delinquent. With the adoption of the CECL standard, accruing loans past due as of December 31, 2020 include PCD loans, while amounts as of December 31, 2019 excluded purchased impaired loans. See Note 1 Accounting Policies for additional information related to the adoption of this standard, including the discontinuation of purchased impaired loan accounting.

The following table presents the composition and delinquency status of our loan portfolio at December 31, 2020 and 2019. Pursuant to the interagency guidance issued in April 2020 and in connection with the credit reporting rules from the CARES Act, the December 31, 2020 delinquency status of loans modified due to COVID-19 related hardships aligns with the rules set forth for banks to report delinquency status to the credit agencies. These rules require that COVID-19 related loan modifications be reported as follows:

- · if current at the time of modification, the loan remains current throughout the modification period,
- if delinquent at the time of modification and the borrower was not made current as part of the modification, the loan maintains its reported delinquent status during the modification period, or
- if delinquent at the time of modification and the borrower was made current as part of the modification or became current during the modification period, the loan is reported as current.

As a result, certain loans modified due to COVID-19 related hardships are not being reported as past due as of December 31, 2020 based on the contractual terms of the loan, even where borrowers may not be making payments on their loans during the modification period. Loan modifications due to COVID-19 related hardships that permanently reduce either the contractual interest rate or the principal balance of a loan do not qualify for TDR relief under the CARES Act or the interagency guidance.

Table 47: Analysis of Loan Portfolio

		Ac	cruing					
Dollars in millions	Current or Less Than 30 Days Past Due	30-59 Days Past Due	60-89 Days Past Due	90 Days Or More Past Due	Total Past Due (c)	Nonperforming Loans	Fair Value Option Nonaccrual Loans (d)	Total Loans (e)(f)
December 31, 2020 (a) (b)								
Commercial								
Commercial and industrial	\$ 131,245 \$	106 \$	26 \$	30	\$ 162	\$ 666	\$	132,073
Commercial real estate	28,485	6	1		7	224		28,716
Equipment lease financing	6,345	31	5		36	33		6,414
Total commercial	166,075	143	32	30	205	923		167,203
Consumer								
Home equity	23,318	50	21		71	645 \$	54	24,088
Residential real estate	20,945	181	78	319	578 (c)	528	509	22,560
Automobile	13,863	134	34	12	180	175		14,218
Credit card	6,074	43	30	60	133	8		6,215
Education	2,785	55	29	77	161 (c)			2,946
Other consumer	4,656	14	10	11	35	7		4,698
Total consumer	71,641	477	202	479	1,158	1,363	563	74,725
Total	\$ 237,716 \$	620 \$	234 \$	509	\$ 1,363	\$ 2,286 \$	563 \$	241,928
Percentage of total loans	98.27 %	0.26 %	0.10 %	0.21 %	0.56 %	0.94 %	0.23 %	100.00 %

- Amounts in table represent loans held for investment and do not include any associated valuation allowance.

 The accrued interest associated with our loan portfolio at December 31, 2020 totaled \$ 0.7 billion and is included in Other assets on the Consolidated Balance Sheet. (b)
- Past due loan amounts include government insured or guaranteed Residential real estate loans and Education loans totaling \$ 0.4 billion and \$0.2 billion, respectively, at December 31, 2020.
- Consumer loans accounted for under the fair value option for which we do not expect to collect substantially all principal and interest are subject to nonaccrual accounting and classification upon meeting any of our nonaccrual
- policies. Given that these loans are not accounted for at amortized cost, these loans have been excluded from the nonperforming loan population.

 Net of unearned income, unamortized deferred fees and costs on originated loans, and premiums or discounts on purchased loans totaling \$ 1.3 billion at December 31, 2020.
- Collateral dependent loans totaled \$1.5 billion at December 31, 2020. The majority of these loans are within the Home equity and Residential real estate loan classes and are secured by consumer real estate.

	_				Ac	ccruing					1					
Dollars in millions		Current or Less Than 30 Days Past Due		30-59 Days Past Due		60-89 Day Past Due		90 Days Or More Past Due	Total Pas Due (h			Nonperforming Loans	Fair Valu Optio Nonaccrus Loans (n al	Purchased Impaired Loans	Total Loans (j)
December 31, 2019 (g)																
Commercial																
Commercial and industrial	\$	124,695	\$	102	\$	30	\$	85	\$ 217		\$	425			\$	125,337
Commercial real estate		28,061		4		1			5			44				28,110
Equipment lease financing		7,069		49		5			54			32				7,155
Total commercial		159,825		155		36		85	276			501				160,602
Consumer																
Home equity		23,791		58		24			82			669		\$	543	25,085
Residential real estate		19,640		140		69		315	524	(h)		315	\$ 166		1,176	21,821
Automobile		16,376		178		47		18	243			135				16,754
Credit card		7,133		60		37		67	164			11				7,308
Education		3,156		55		34		91	180	(h)						3,336
Other consumer		4,898		15		11		9	35			4				4,937
Total consumer		74,994		506		222		500	1,228			1,134	166		1,719	79,241
Total	\$	234,819	\$	661	\$	258	\$	585	\$ 1,504		\$	1,635	\$ 166	\$	1,719 \$	239,843
Percentage of total loans		97.90 %	,	0.28 %	,	0.11 %	6	0.24 %	0.63 %	6		0.68 %	0.07 %	6	0.72 %	100.00 %

- Amounts in table represent recorded investment and exclude loans held for sale. Recorded investment does not include any associated valuation allowance.
- Past due loan amounts exclude purchased impaired loans, even if contractually past due (or if we do not expect to receive payment in full based on the original contractual terms), as we accreted interest income over the
- expected life of the loans. Past due loan amounts include government insured or guaranteed Residential real estate loans totaling \$0.4 billion and Education loans totaling \$0.2 billion at December 31, 2019.

 Consumer loans accounted for under the fair value option for which we do not expect to collect substantially all principal and interest are subject to nonaccrual accounting and classification upon meeting any of our nonaccrual policies. Given that these loans are not accounted for at amortized cost, these loans have been excluded from the nonperforming loan population.
- Net of unearned income, unamortized deferred fees and costs on originated loans, and premiums or discounts on purchased loans totaling \$ 1.1 billion at December 31, 2019.

In the normal course of business, we originate or purchase loan products with contractual characteristics that, when concentrated, may increase our exposure as a holder of those loan products. Possible product features that may create a concentration of credit risk would include a high original or updated LTV ratio, terms that may expose the borrower to future increases in repayments above increases in market interest rates, and interest-only loans, among others.

We originate interest-only loans to commercial borrowers. Such credit arrangements are usually designed to match borrower cash flow expectations (e.g., working capital lines, revolvers). These products are standard in the financial services industry and product features are considered during the underwriting process to mitigate the increased risk that the interest-only feature may result in borrowers not being able to make interest and principal payments when due. We do not believe that these product features create a concentration of credit risk.

At December 31, 2020, we pledged \$30.1 billion of commercial loans to the Federal Reserve Bank and \$69.0 billion of residential real estate and other loans to the Federal Home Loan Bank as collateral for the ability to borrow, if necessary. The comparable amounts at December 31, 2019 were \$16.9 billion and \$68.0 billion, respectively. Amounts pledged reflect the unpaid principal balances.

Nonperforming Assets

Nonperforming assets include nonperforming loans and leases, OREO and foreclosed assets. Nonperforming loans are those loans accounted for at amortized cost whose credit quality has deteriorated to the extent that full collection of contractual principal and interest is not probable. Interest income is not recognized on these loans. Loans accounted for under the fair value option are reported as performing loans, however, when nonaccrual criteria is met interest income is not recognized on these loans. Additionally, certain government insured or guaranteed loans for which we expect to collect substantially all principal and interest are not reported as nonperforming loans and continue to accrue interest.

With the adoption of the CECL standard, nonperforming loans as of December 31, 2020 include PCD loans. Amounts as of December 31, 2019 excluded purchased impaired loans as we were accreting interest income over the expected life of the loans. See Note 1 Accounting Policies for additional information related to the adoption of this standard and our nonperforming loan and lease policies.

The following table presents our nonperforming assets as of December 31, 2020 and 2019, respectively.

Table 48: Nonperforming Assets

Dollars in millions	_	December 31 2020	December 31 2019
Nonperforming loans			
Commercial	\$	923	\$ 501
Consumer (a)		1,363	1,134
Total nonperforming loans (b)		2,286	1,635
OREO and foreclosed assets		51	117
Total nonperforming assets	\$	2,337	\$ 1,752
Nonperforming loans to total loans		0.94 %	0.68 %
Nonperforming assets to total loans, OREO and foreclosed assets		0.97 %	0.73 %
Nonperforming assets to total assets		0.50 %	0.43 %

- (a) Excludes most unsecured consumer loans and lines of credit, which are charged off after 120 to 180 days past due and are not placed on nonperforming status.
- (b) Nonperforming loans for which there is no related ALLL totaled \$ 0.8 billion at December 31, 2020, and is primarily comprised of loans with a valuation that exceeds the amortized cost basis.

Nonperforming loans also include certain loans whose terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties. In accordance with applicable accounting guidance, these loans are considered TDRs. See Note 1 Accounting Policies and the TDR section of this Note 4 for additional information on TDRs.

Total nonperforming loans in Table 48 include TDRs of \$0.9 billion at both December 31, 2020 and 2019, respectively. TDRs that are performing, including consumer credit card TDR loans, totaled \$0.7 billion and \$0.8 billion at December 31, 2020 and 2019 and are excluded from nonperforming loans.

Additional Credit Quality Indicators by Loan Class

Commercial and Industrial

For commercial and industrial loans, we monitor the performance of the borrower in a disciplined and regular manner based upon the level of credit risk inherent in the loan. To evaluate the level of credit risk, we assign an internal risk rating reflecting the borrower's PD and LGD. This two-dimensional credit risk rating methodology provides granularity in the risk monitoring process. These ratings

are reviewed and updated, generally at least once per year. For small balance homogeneous pools of commercial and industrial loans and leases, we apply scoring techniques to assist in determining the PD. The combination of the PD and LGD ratings assigned to commercial and industrial loans, capturing both the combination of expectations of default and loss severity in the event of default, reflects credit quality characteristics as of the reporting date and are used as inputs into our loss forecasting process.

Based upon the amount of the lending arrangement and our risk rating assessment, we follow a formal schedule of written periodic reviews. Quarterly, we conduct formal reviews of a market's or business unit's loan portfolio, focusing on those loans which we perceive to be of higher risk, based upon PDs and LGDs, or loans for which credit quality is weakening. If circumstances warrant, it is our practice to review any customer obligation and its level of credit risk more frequently. We attempt to proactively manage our loans by using various procedures that are customized to the risk of a given loan, including ongoing outreach, contact, and assessment of obligor financial conditions, collateral inspection and appraisal.

Commercial Real Estate

We manage credit risk associated with our commercial real estate projects and commercial mortgages similar to commercial and industrial loans by evaluating PD and LGD. Risks associated with commercial real estate projects and commercial mortgage activities tend to be correlated to the loan structure and collateral location, project progress and business environment. As a result, these attributes are also monitored and utilized in assessing credit risk.

As with the commercial and industrial loan class, a formal schedule of periodic reviews is also performed to assess market/geographic risk and business unit/industry risk. Often as a result of these overviews, more in-depth reviews and increased scrutiny are placed on areas of higher risk, such as adverse changes in risk ratings, deteriorating operating trends, and/or areas that concern management. These reviews are designed to assess risk and facilitate actions to mitigate such risks.

Equipment Lease Financing

We manage credit risk associated with our equipment lease financing loan class similar to commercial and industrial loans by analyzing PD and LGD.

Based upon the dollar amount of the lease and the level of credit risk, we follow a formal schedule of periodic reviews. Generally, this occurs quarterly, although we have established practices to review such credit risk more frequently if circumstances warrant. Our review process entails analysis of the following factors: equipment value/residual value, exposure levels, jurisdiction risk, industry risk, guarantor requirements, and regulatory compliance as applicable.

The PNC Financial Services Group, Inc. – 2020 Form 10-K 125

Table 49: Commercial Credit Quality Indicators (a)

			Tern	n Loans by Origi	nation Year					
December 31, 2020 - In millions	-	2020	2019	2018	2017	2016	Prior	Revolving Loans	evolving Loans Converted to Term	Total Loans
Commercial and industrial										
Pass Rated	\$	31,680 \$	13,340 \$	8,209 \$	5,956 \$	4,242 \$	7,141 \$	54,775 \$	53 \$	125,396
Criticized		339	702	578	334	224	351	4,130	19	6,677
Total commercial and industrial		32,019	14,042	8,787	6,290	4,466	7,492	58,905	72	132,073
Commercial real estate										
Pass Rated		3,709	6,268	3,426	2,841	2,341	6,792	218		25,595
Criticized		319	548	148	423	400	1,159	124		3,121
Total commercial real estate		4,028	6,816	3,574	3,264	2,741	7,951	342		28,716
Equipment lease financing										
Pass Rated		1,429	1,202	942	738	405	1,350			6,066
Criticized		78	92	86	39	22	31			348
Total equipment lease financing		1,507	1,294	1,028	777	427	1,381			6,414
Total commercial	\$	37,554 \$	22,152 \$	13,389 \$	10,331 \$	7,634 \$	16,824 \$	59,247 \$	72 \$	167,203

December 31, 2019 - In millions	 Pass Rated	Criticized	Total Loans
Commercial and industrial	\$ 119,761	\$ 5,576	\$ 125,337
Commercial real estate	27,424	686	28,110
Equipment lease financing	6,891	264	7,155
Total commercial	\$ 154,076	\$ 6,526	\$ 160,602

⁽a) Loans in our commercial portfolio are classified as Pass Rated or Criticized based on the regulatory definitions, which are driven by the PD and LGD ratings that we assign. The Criticized classification includes loans that were rated special mention, substandard or doubtful as of December 31, 2020 and 2019.

Home Equity and Residential Real Estate

We use several credit quality indicators, including delinquency information, nonperforming loan information, updated credit scores, originated and updated LTV ratios, to monitor and manage credit risk within the home equity and residential real estate loan classes. A summary of credit quality indicators follows:

<u>Delinquency/Delinquency Rates:</u> We monitor trending of delinquency/delinquency rates for home equity and residential real estate loans. See Table 47 for additional information.

Nonperforming Loans: We monitor trending of nonperforming loans for home equity and residential real estate loans. See Table 47 for additional information.

<u>Credit Scores:</u> We use a national third-party provider to update FICO credit scores for home equity and residential real estate loans at least quarterly. The updated scores are incorporated into a series of credit management reports, which are utilized to monitor the risk in the loan classes.

LTV (inclusive of CLTV for first and subordinate lien positions): At least quarterly, we update the property values of real estate collateral and calculate an updated LTV ratio. For open-end credit lines secured by real estate in regions experiencing significant declines in property values, more frequent valuations may occur. We examine LTV migration and stratify LTV into categories to monitor the risk in the loan classes.

We use a combination of original LTV and updated LTV for internal risk management and reporting purposes \(\ell.g.\), line management, loss mitigation strategies). In addition to the fact that estimated property values by their nature are estimates, given certain data limitations, it is important to note that updated LTVs may be based upon management's assumptions (i.e., if an updated LTV is not provided by the third-party service provider, HPI changes will be incorporated in arriving at management's estimate of updated LTV).

Updated LTV is estimated using modeled property values. The related estimates and inputs are based upon an approach that uses a combination of third-party automated valuation models, broker price opinions, HPI indices, property location, internal and external balance information, origination data and management assumptions. We generally utilize origination lien balances provided by a third-party, where applicable, which do not include an amortization assumption when calculating updated LTV. Accordingly, the results of

the calculations do not represent actual appraised loan level collateral or updated LTV based upon lien balances held by others, and as such, are necessarily imprecise and subject to change as we refine our methodology.

The following table presents credit quality indicators for the home equity and residential real estate loan classes:

Table 50: Home Equity and Residential Real Estate Credit Quality Indicators

		Term	Loans by Origin	nation Year					
							Rev	olving Loans Converted to	
December 31, 2020 - In millions	2020	2019	2018	2017	2016	Prior R	evolving Loans	Term	Total Loans
Home equity									
Current estimated LTV ratios									
Greater than 100%	\$ 8 \$	44 \$	18 \$	15 \$	9 \$	88 \$	580 \$	279 \$	1,041
Greater than or equal to 80% to 100%	517	320	59	42	25	158	1,781	591	3,493
Less than 80%	2,909	1,636	513	773	660	3,754	6,433	2,876	19,554
Total home equity	\$ 3,434 \$	2,000 \$	590 \$	830 \$	694 \$	4,000 \$	8,794 \$	3,746 \$	24,088
Updated FICO scores									
Greater than or equal to 780	\$ 2,019 \$	1,094 \$	311 \$	525 \$	449 \$	2,467 \$	5,382 \$	1,480 \$	13,727
720 to 779	1,028	558	153	181	145	777	2,137	941	5,920
660 to 719	334	273	86	84	66	402	985	625	2,855
Less than 660	52	74	39	39	33	345	277	620	1,479
No FICO score available	1	1	1	1	1	9	13	80	107
Total home equity	\$ 3,434 \$	2,000 \$	590 \$	830 \$	694 \$	4,000 \$	8,794 \$	3,746 \$	24,088
Residential real estate									
Current estimated LTV ratios									
Greater than 100%	\$ 3 \$	52 \$	26 \$	42 \$	41 \$	160		\$	324
Greater than or equal to 80% to 100%	495	422	127	156	124	307			1,631
Less than 80%	7,491	3,656	992	1,706	1,847	3,991			19,683
Government insured or guaranteed loans	7	28	27	38	57	765			922
Total residential real estate	\$ 7,996 \$	4,158 \$	1,172 \$	1,942 \$	2,069 \$	5,223		\$	22,560
Updated FICO scores									
Greater than or equal to 780	\$ 5,425 \$	3,099 \$	814 \$	1,432 \$	1,538 \$	2,551		\$	14,859
720 to 779	2,268	820	220	340	335	818			4,801
660 to 719	252	161	76	98	92	475			1,154
Less than 660	40	48	33	31	41	485			678
No FICO score available	4	2	2	3	6	129			146
Government insured or guaranteed loans	7	28	27	38	57	765			922
Total residential real estate	\$ 7,996 \$	4,158 \$	1,172 \$	1,942 \$	2,069 \$	5,223	<u> </u>	\$	22,560

The PNC Financial Services Group, Inc. – 2020 Form 10-K 127

December 31, 2019 - In millions	Home equity	Residential real estate
Current estimated LTV ratios		
Greater than or equal to 100%	\$ 1,243 \$	333
Greater than or equal to 90% to less than 100%	1,047	340
Less than 90%	22,068	19,305
No LTV ratio available	184	83
Government insured or guaranteed loans		584
Purchased impaired loans	543	1,176
Total loans	\$ 25,085 \$	21,821
Updated FICO Scores		
Greater than 660	\$ 22,245 \$	19,341
Less than or equal to 660	2,019	569
No FICO score available	278	151
Government insured or guaranteed loans		584
Purchased impaired loans	543	1,176
Total loans	\$ 25,085 \$	21,821

Automobile, Credit Card, Education and Other Consumer

We monitor a variety of credit quality information in the management of these consumer loan classes. For all loan types, we generally use a combination of internal loan parameters as well as an updated FICO score. We use FICO scores as a primary credit quality indicator for automobile and credit card loans, as well as non-government guaranteed or non-insured education loans and other secured and unsecured lines and loans. Internal credit metrics, such as delinquency status, are heavily relied upon as credit quality indicators for government guaranteed or insured education loans and consumer loans to high net worth individuals, as internal credit metrics are more relevant than FICO scores for these types of loans.

Along with the monitoring of delinquency trends and losses for each class, FICO credit score updates are obtained at least quarterly along with a variety of credit bureau attributes. Loans with high FICO scores tend to have a lower likelihood of loss. Conversely, loans with low FICO scores tend to have a higher likelihood of loss.

The following table presents credit quality indicators for the automobile, credit card, education and other consumer loan classes:

Table 51: Credit Quality Indicators for Automobile, Credit Card, Education and Other Consumer Loan Classes

	-		Т	T 1 . O.' 1						
			Term	Loans by Origi	nation Year				1	
								Revolving	evolving Loans Converted to	
December 31, 2020 - In millions		2020	2019	2018	2017	2016	Prior	Loans	Term	Total Loans
Updated FICO Scores										
Automobile										
FICO score greater than or equal to 780	\$	1,807 \$	1,915 \$	807 \$	452 \$	246 \$	58		\$	5,285
720 to 779		1,098	1,581	789	381	167	44			4,060
660 to 719		617	1,222	684	288	109	31			2,951
Less than 660		192	776	598	240	87	29			1,922
Total automobile	\$	3,714 \$	5,494 \$	2,878 \$	1,361 \$	609 \$	162		\$	14,218
Credit card										
FICO score greater than or equal to 780							\$	1,635 \$	3 \$	1,638
720 to 779								1,724	11	1,735
660 to 719								1,765	26	1,791
Less than 660								902	51	953
No FICO score available or required (a)								94	4	98
Total credit card							\$	6,120 \$	95 \$	6,215
Education										
FICO score greater than or equal to 780	\$	34 \$	90 \$	74 \$	59 \$	50 \$	428		\$	735
720 to 779		24	46	38	28	20	190			346
660 to 719		15	15	14	9	6	90			149
Less than 660		3	2	3	2	2	37			49
No FICO score available or required (a)		16	10	6	3		1			36
Total loans using FICO credit metric		92	163	135	101	78	746			1,315
Other internal credit metrics							1,631			1,631
Total education	\$	92 \$	163 \$	135 \$	101 \$	78 \$	2,377		\$	2,946
Other consumer	· · ·	<u> </u>	·	·	·		,		<u> </u>	
FICO score greater than or equal to 780	\$	162 \$	187 \$	63 \$	21 \$	5 \$	42 \$	86 \$	1 \$	567
720 to 779		197	247	82	22	5	22	123		698
660 to 719		127	210	81	17	3	14	117	1	570
Less than 660		28	86	41	9	2	8	53	1	228
Total loans using FICO credit metric		514	730	267	69	15	86	379	3	2,063
Other internal credit metrics		67	33	37	26	60	75	2,334	3	2,635
Total other consumer	\$	581 \$	763 \$	304 \$	95 \$	75 \$	161 \$	2,713 \$	6 \$	4,698

December 31, 2019 - In millions	Automobile	Credit Card	Education	Other consumer
FICO score greater than 719	\$ 9,232	\$3,867\$	1,139	\$1,421
650 to 719	4,577	2,326	197	843
620 to 649	1,001	419	25	132
Less than 620	1,603	544	27	143
No FICO score available or required (a)	341	152	15	27
Total loans using FICO credit metric	16,754	7,308	1,403	2,566
Consumer loans using other internal credit metrics			1,933	2,371
Total loans	\$ 16,754 \$	7,308 \$	3,336 \$	4,937
Weighted-average updated FICO score (b)	726	724	773	727

⁽a) Loans with no FICO score available or required generally refers to new accounts issued to borrowers with limited credit history, accounts for which we cannot obtain an updated FICO score (e.g., recent profile changes), cards issued with a business name and/or cards secured by collateral. Management proactively assesses the risk and size of this loan category and, when necessary, takes actions to mitigate the credit risk. Weighted-average updated FICO score excludes accounts with no FICO score available or required.

Troubled Debt Restructurings

A TDR is a loan whose terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulty. Loans that have been restructured for COVID-19 related hardships and meet certain criteria under the CARES Act are not categorized as TDRs. See Note 1 Accounting Policies for additional information related to TDRs.

Table 52 quantifies the number of loans that were classified as TDRs as well as the change in the loans' balance as a result of becoming a TDR during 2020, 2019 and 2018. Additionally, the table provides information about the types of TDR concessions. The Principal Forgiveness TDR category includes principal forgiveness and accrued interest forgiveness. The Rate Reduction TDR category includes reduced interest rate and interest deferral. The Other TDR category primarily includes consumer borrowers that have been discharged from personal liability through Chapter 7 bankruptcy and have not formally reaffirmed their loan obligations to us, as well as postponement/reduction of scheduled amortization and contractual extensions for both consumer and commercial borrowers.

In some cases, there have been multiple concessions granted on one loan. This is most common within the commercial loan portfolio. When there have been multiple concessions granted in the commercial loan portfolio, the principal forgiveness concession was prioritized for purposes of determining the inclusion in Table 52. Second in priority would be rate reduction. In the event that multiple concessions are granted on a consumer loan, concessions resulting from discharge from personal liability through Chapter 7 bankruptcy without formal affirmation of the loan obligations to us would be prioritized and included in the Other type of concession in Table 52. After that, consumer loan concessions would follow the previously discussed priority of concessions for the commercial loan portfolio.

Table 52: Financial Impact and TDRs by Concession Type

			Post-TDR Amortized Cost Basis (c)					
During the year ended December 31, 2020 (a) Dollars in millions	Number of Loans	Pre-TDR Amortized Cost Basis (b)		ncipal veness	Rate Reduction	Other	Total	
Commercial	73	\$ 513	\$	39 \$	56	\$ 346	\$ 441	
Consumer	12,270	178			88	73	161	
Total TDRs	12,343	\$ 691	\$	39 \$	3 144	\$ 419	\$ 602	

- (a) Impact of partial charge-offs at TDR date are included in this table.
- (b) Represents the amortized cost basis of the loans as of the quarter end prior to TDR designation.
- (c) Represents the amortized cost basis of the TDRs as of the end of the quarter in which the TDR occurs.

	-	Pre-TDR	Post-TDR Recorded Investment (f)					
During the year ended December 31, 2019 (d) Dollars in millions	Number of Loans	Recorded Investment (e)	Principal Forgiveness	Rat Reductio		Other		Total
Commercial	75	\$ 278		\$ 11	\$	241	\$	252
Consumer	14,548	172		97		64		161
Total TDRs	14,623	\$ 450		\$ 108	\$	305	\$	413
During the year ended December 31, 2018 (d) Dollars in millions								
Commercial	85	\$ 272	\$ 2	\$ 67	\$	179	\$	248
Consumer	12,096	163	1	86		63		150
Total TDRs	12,181	\$ 435	\$ 3	\$ 153	\$	242	\$	398

- (d) Impact of partial charge-offs at TDR date are included in this table.
- (e) Represents the recorded investment of the loans as of the quarter end prior to TDR designation, and excludes immaterial amounts of accrued interest receivable.
- (f) Represents the recorded investment of the TDRs as of the end of the quarter in which the TDR occurs, and excludes immaterial amounts of accrued interest receivable.

After a loan is determined to be a TDR, we continue to track its performance under its most recent restructured terms. We consider a TDR to have subsequently defaulted when it becomes 60 days past due after the most recent date the loan was restructured. Loans that were both (i) classified as TDRs, and (ii) subsequently defaulted during the period totaled \$0.1 billion for each of the years ended December 31, 2020, 2019 and 2018, respectively.

Allowance for Credit Losses

We maintain the ACL related to loans at levels that we believe to be appropriate to absorb expected credit losses in the portfolios as of the balance sheet date. See Note 1 Accounting Policies for a discussion of the methodologies used to determine this allowance. A rollforward of the ACL related to loans follows:

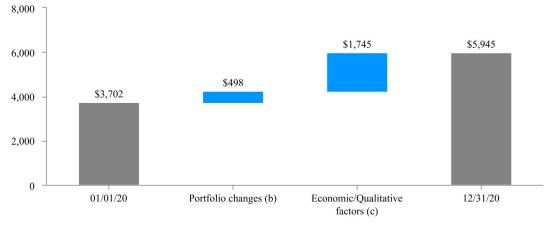
Table 53: Rollforward of Allowance for Credit Losses(a)

At or for the year ended December 31	 2020						
In millions	 Commercial	Consumer	Total				
Allowance for loan and lease losses							
Beginning balance	\$ 1,812 \$	930 \$	2,742				
Adoption of ASU 2016-13 (b)	(304)	767	463				
Beginning balance, adjusted	1,508	1,697	3,205				
Charge-offs	(407)	(785)	(1,192)				
Recoveries	94	266	360				
Net (charge-offs)	(313)	(519)	(832)				
Provision for credit losses	2,139	846	2,985				
Other	3		3				
Ending balance	\$ 3,337 \$	2,024 \$	5,361				
Allowance for unfunded lending related commitments (c)							
Beginning balance	\$ 316 \$	2 \$	318				
Adoption of ASU 2016-13 (b)	53	126	179				
Beginning balance, adjusted	369	128	497				
Provision for (recapture of) credit losses	116	(29)	87				
Ending balance	\$ 485 \$	99 \$	584				
Allowance for credit losses at December 31	\$ 3,822 \$	2,123 \$	5,945				

⁽a) Excludes allowances for investment securities and other financial assets, which together totaled \$ 109 million at December 31, 2020.

The following presents an analysis of changes impacting the ACL related to loans for the year ended December 31, 2020:

Table 54: Analysis of Changes in the Allowance for Credit Losses (a) In millions



(a) Excludes allowances for investment securities

and other financial assets, which together totaled \$109 million at December 31, 2020.

(b) Portfolio changes primarily represent the impact of increases/decreases in loan balances, age and mix due to new originations/purchases, as well as credit quality and net charge-off activity.

The \$2.2 billion increase in the ACL since January 1, 2020 was driven by the following factors in the commercial and consumer portfolios:

- Commercial reserves increased \$1.9 billion attributable to the significantly adverse economic impacts of the pandemic and its resulting effects on credit quality and loan growth.
- Consumer reserves increased \$0.3 billion primarily reflecting the significantly adverse economic impacts of the pandemic.

⁽b) Represents the impact of adopting ASU 2016-13, Financial Instruments - Credit Losses on January 1, 2020 and our transition from an incurred loss methodology for our reserves to an expected credit loss methodology.

⁽c) See Note 11 Commitments for additional information about the underlying commitments related to this allowance.

⁽c) Economic and qualitative factors primarily represent our evaluation and determination of an economic forecast applied to our loan portfolio, which is based on a three year forecast period and the use of four economic scenarios with associated probability weights, as well as updates to qualitative factor adjustments.

Allowance for Loan and Lease Losses

Prior to January 1, 2020, we maintained our ALLL at levels we believed to be appropriate to absorb estimated probable credit losses incurred in the portfolios as of the balance sheet date. We used the two main portfolio segments - Commercial and Consumer, and developed and documented the ALLL under separate methodologies for each of these portfolio segments. See Note 1 Accounting Policies for a summary of the accounting policies for ALLL prior to the adoption of CECL.

A rollforward of the ALLL and associated loan data follows:

Table 55: Rollforward of Allowance for Loan and Lease Losses and Associated Loan Data

At or for the year ended December 31	2019				2018				
Dollars in millions	Commercial	Consumer	Total		Commercial	Consumer	Total		
Allowance for loan and lease losses									
January 1	\$ 1,663 \$	966 \$	2,629	\$	1,582 \$	1,029 \$	2,611		
Charge-offs	(216)	(758)	(974)		(124)	(640)	(764)		
Recoveries	78	254	332		99	245	344		
Net (charge-offs)	(138)	(504)	(642)		(25)	(395)	(420)		
Provision for credit losses	320	453	773		97	311	408		
Net (increase) / decrease in allowance for unfunded loan commitments and letters of credit	(34)	1	(33)		11	1	12		
Other	1	14	15		(2)	20	18		
December 31	\$ 1,812 \$	930 \$	2,742	\$	1,663 \$	966 \$	2,629		
TDRs individually evaluated for impairment	\$ 40 \$	93 \$	133	\$	25 \$	136 \$	161		
Other loans individually evaluated for impairment	58		58		48		48		
Loans collectively evaluated for impairment	1,714	563	2,277		1,590	555	2,145		
Purchased impaired loans		274	274			275	275		
December 31	\$ 1,812 \$	930 \$	2,742	\$	1,663 \$	966 \$	2,629		
Loan portfolio									
TDRs individually evaluated for impairment	\$ 361 \$	1,303 \$	1,664	\$	409 \$	1,442 \$	1,851		
Other loans individually evaluated for impairment	220		220		232		232		
Loans collectively evaluated for impairment	160,021	75,477	235,498		151,641	69,722	221,363		
Fair value option loans (a)		742	742			782	782		
Purchased impaired loans		1,719	1,719			2,017	2,017		
December 31	\$ 160,602 \$	79,241 \$	239,843	\$	152,282 \$	73,963 \$	226,245		

⁽a) Loans accounted for under the fair value option were not evaluated for impairment as these loans are accounted for at fair value. Accordingly, there was no allowance recorded on those loans.

NOTE 5 LOAN SALE AND SERVICING ACTIVITIES AND VARIABLE INTEREST ENTITIES

Loan Sale and Servicing Activities

We have transferred residential and commercial mortgage loans in securitization or sales transactions in which we have continuing involvement. These transfers have occurred through Agency securitization, Non-agency securitization, and loan sale transactions. Agency securitizations consist of securitization transactions with FNMA, FHLMC and GNMA (collectively, the Agencies). FNMA and FHLMC generally securitize our transferred loans into mortgage-backed securities for sale into the secondary market through SPEs that they sponsor. As an authorized GNMA issuer/servicer, we pool FHA and Department of VA insured loans into mortgage-backed securities for sale into the secondary market. In Non-agency securitizations, we have transferred loans into securitization SPEs. In other instances, third-party investors have also purchased our loans in loan sale transactions and in certain instances have subsequently sold these loans into securitization SPEs. Securitization SPEs utilized in the Agency and Non-agency securitization transactions are VIEs.

Our continuing involvement in the FNMA, FHLMC, and GNMA securitizations, Non-agency securitizations, and loan sale transactions generally consists of servicing, repurchasing previously transferred loans under certain conditions and loss share arrangements, and, in limited circumstances, holding of mortgage-backed securities issued by the securitization SPEs.

Depending on the transaction, we may act as the master, primary and/or special servicer to the securitization SPEs or third-party investors. Servicing responsibilities typically consist of collecting and remitting monthly borrower principal and interest payments, maintaining escrow deposits, performing loss mitigation and foreclosure activities, and, in certain instances, funding of servicing advances. Servicing advances, which are generally reimbursable, are made for principal and interest and collateral protection and are carried in Other assets at cost.

We earn servicing and other ancillary fees for our role as servicer and, depending on the contractual terms of the servicing arrangement, we can be terminated as servicer with or without cause. At the consummation date of each type of loan transfer where we retain the servicing, we recognize a servicing right at fair value. See Note 6 Goodwill and Mortgage Servicing Rights and Note 15 Fair Value for further discussion of our servicing rights.

Certain loans transferred to the Agencies contain ROAPs. Under these ROAPs, we hold an option to repurchase at par individual delinquent loans that meet certain criteria. In other limited cases, GNMA has granted us the right to repurchase current loans when we intend to modify the borrower's interest rate under established guidelines. When we have the unilateral ability to repurchase a loan, effective control over the loan has been regained and we recognize an asset (in either Loans or Loans held for sale) and a corresponding liability (in Other borrowed funds) on the balance sheet regardless of our intent to repurchase the loan.

The Agency and Non-agency mortgage-backed securities issued by the securitization SPEs that are purchased and held on our balance sheet are typically purchased in the secondary market. We do not retain any credit risk on our Agency mortgage-backed security positions as FNMA, FHLMC and the U.S. Government (for GNMA) guarantee losses of principal and interest.

We also have involvement with certain Agency and Non-agency commercial securitization SPEs where we have not transferred commercial mortgage loans. These SPEs were sponsored by independent third-parties and the loans held by these entities were purchased exclusively from other third-parties. Generally, our involvement with these SPEs is as servicer with servicing activities consistent with those described above.

We recognize a liability for our loss exposure associated with contractual obligations to repurchase previously transferred loans due to possible breaches of representations and warranties and also for loss sharing arrangements (recourse obligations) with the Agencies. Other than providing temporary liquidity under servicing advances and our loss exposure associated with our repurchase and recourse obligations, we have not provided nor are we required to provide any type of credit support, guarantees or commitments to the securitization SPEs or third-party investors in these transactions.

The PNC Financial Services Group, Inc. – 2020 Form 10-K 133

The following table provides cash flows associated with our loan sale and servicing activities:

Table 56: Cash Flows Associated with Loan Sale and Servicing Activities

In millions	-	Residential Mortgages	Commercial Mortgages (a)
Cash Flows - Year ended December 31, 2020			
Sales of loans (b)	\$	6,654	\$ 4,521
Repurchases of previously transferred loans (c)	\$	673	\$ 229
Servicing fees (d)	\$	338	\$ 133
Servicing advances recovered/(funded), net	\$	(32)	\$ (280)
Cash flows on mortgage-backed securities held (e)	\$	9,234	\$ 83
Cash Flows - Year ended December 31, 2019			
Sales of loans (b)	\$	4,259	\$ 3,540
Repurchases of previously transferred loans (c)	\$	321	\$ 30
Servicing fees (d)	\$	352	\$ 130
Servicing advances recovered/(funded), net	\$	45	\$ 63
Cash flows on mortgage-backed securities held (e)	\$	4,362	\$ 84

- Represents cash flow information associated with both commercial mortgage loan transfer and servicing activities.
- Gains/losses recognized on sales of loans were insignificant for the periods presented.
- Includes both residential and commercial mortgage government insured or guaranteed loans eligible for repurchase through the exercise of our ROAP option, as well as residential mortgage loans repurchased due to alleged (c) breaches of origination covenants or representations and warranties made to purchasers.
- Includes contractually specified servicing fees, late charges and ancillary fees.
- Represents cash flows on securities where we transferred to, and/or service loans for, a securitization SPE and we hold securities issued by that SPE. The carrying values of such securities held were \$\) 16.5 billion in residential mortgage-backed securities and \$0.8 billion in commercial mortgage-backed securities at December 31, 2020 and \$17.8 billion in residential mortgage-backed securities and \$0.6 billion in commercial mortgage-backed securities at December 31, 2019.

Table 57 presents information about the principal balances of transferred loans that we service and are not recorded on our Consolidated Balance Sheet. We would only experience a loss on these transferred loans if we were required to repurchase a loan, where the repurchase price exceeded the loan's fair value, due to a breach in representations and warranties or a loss sharing arrangement associated with our continuing involvement with these loans. The estimate of losses related to breaches in representations and warranties was insignificant at December 31, 2020 and 2019.

Table 57: Principal Balance, Delinquent Loans and Net Charge-offs Related to Serviced Loans For Others

In millions	 Residential Mortgages	Commercial Mortgages (a)
December 31, 2020		
Total principal balance	\$ 43,351	\$ 40,790
Delinquent loans (b)	\$ 453	\$ 136
December 31, 2019		
Total principal balance	\$ 49,323	\$ 42,414
Delinquent loans (b)	\$ 492	\$ 64
Year ended December 31, 2020		
Net charge-offs (c)	\$ 17	\$ 127
Year ended December 31, 2019		
Net charge-offs (c)	\$ 40	\$ 520

- Represents information at the securitization level in which we have sold loans and we are the servicer for the securitization.
- Serviced delinquent loans are 90 days or more past due or are in process of foreclosure.

 Net charge-offs for Residential mortgages represent credit losses less recoveries distributed and as reported to investors during the period. Net charge-offs for Commercial mortgages represent credit losses less recoveries distributed and as reported by the trustee for commercial mortgage backed securitizations. Realized losses for Agency securitizations are not reflected as we do not manage the underlying real estate upon foreclosure and, as such, do not have access to loss information.

Variable Interest Entities (VIEs)

We are involved with various entities in the normal course of business that are deemed to be VIEs. We assess VIEs for consolidation based upon the accounting policies described in Note 1 Accounting Policies. Our consolidated VIEs were insignificant at both December 31, 2020 and 2019. We have not provided additional financial support to these entities which we are not contractually required to provide.

The following table provides a summary of non-consolidated VIEs with which we have significant continuing involvement but are not the primary beneficiary. We have excluded certain transactions with non-consolidated VIEs from the balances presented in Table 58 where we have determined that our continuing involvement is not significant. We do not consider our continuing involvement to be significant when it relates to a VIE where we only invest in securities issued by the VIE and were not involved in the design of the VIE or where no transfers have occurred between us and the VIE. In addition, where we only have lending arrangements in the normal

course of business with entities that could be VIEs, we have excluded these transactions with non-consolidated entities from the balances presented in Table 58. These loans are included as part of the asset quality disclosures that we make in Note 4 Loans and Related Allowance for Credit Losses.

Table 58: Non-Consolidated VIEs

In millions		PNC Risk of Loss (a) Carrying Value of Assets Owned by PNC		PNC Risk of Loss (a)		Carrying Value of Liabilities Owned by PNC
December 31, 2020						
Mortgage-backed securitizations (b)	\$	18,207	\$	18,207 (c)	\$ 1	
Tax credit investments and other		3,121		2,894 (d)	1,198 (e)	
Total	\$	21,328	\$	21,101	\$ 1,199	
December 31, 2019						
Mortgage-backed securitizations (b)	\$	19,287	\$	19,287 (c)		
Tax credit investments and other		3,131		3,028 (d)	\$ 1,101 (e)	
Total	\$	22,418	\$	22,315	\$ 1,101	

- (a) Represents loans, investments and other assets related to non-consolidated VIEs, net of collateral (if applicable). The risk of loss excludes any potential tax recapture associated with tax credit investments.
- (b) Amounts reflect involvement with securitization SPEs where we transferred to, and/or service loans for, an SPE and we hold securities issued by that SPE. Values disclosed in the PNC Risk of Loss column represent our maximum exposure to loss for those securities' holdings.
- (c) Included in Investment securities, Mortgage servicing rights and Other assets on our Consolidated Balance Sheet.
- (d) Included in Investment securities, Loans, Equity investments and Other assets on our Consolidated Balance Sheet.
- (e) Included in Deposits and Other liabilities on our Consolidated Balance Sheet.

Mortgage-Backed Securitizations

In connection with each Agency and Non-agency residential and commercial mortgage-backed securitization discussed above, we evaluate each SPE utilized in these transactions for consolidation. In performing these assessments, we evaluate our level of continuing involvement in these transactions as the nature of our involvement ultimately determines whether or not we hold a variable interest and/or are the primary beneficiary of the SPE. Factors we consider in our consolidation assessment include the significance of (i) our role as servicer, (ii) our holdings of mortgage-backed securities issued by the securitization SPE and (iii) the rights of third-party variable interest holders.

The first step in our assessment is to determine whether we hold a variable interest in the securitization SPE. We hold variable interests in Agency and Non-agency securitization SPEs through our holding of residential and commercial mortgage-backed securities issued by the SPEs and/or our recourse obligations. Each SPE in which we hold a variable interest is evaluated to determine whether we are the primary beneficiary of the entity. For Agency securitization transactions, our contractual role as servicer does not give us the power to direct the activities that most significantly affect the economic performance of the SPEs. Thus, we are not the primary beneficiary of these entities. For Non-agency securitization transactions, we would be the primary beneficiary to the extent our servicing activities give us the power to direct the activities that most significantly affect the economic performance of the SPE and we hold a more than insignificant variable interest in the entity.

Details about the Agency and Non-agency securitization SPEs where we hold a variable interest and are not the primary beneficiary are included in Table 58. Our maximum exposure to loss as a result of our involvement with these SPEs is the carrying value of the mortgage-backed securities, servicing assets, servicing advances and our liabilities associated with our recourse obligations. Creditors of the securitization SPEs have no recourse to our assets or general credit.

Tax Credit Investments and Other

For tax credit investments in which we do not have the right to make decisions that will most significantly impact the economic performance of the entity, we are not the primary beneficiary and thus do not consolidate the entity. These investments are disclosed in Table 58. The table also reflects our maximum exposure to loss exclusive of any potential tax credit recapture. Our maximum exposure to loss is equal to our legally binding equity commitments adjusted for recorded impairment, partnership results or amortization for qualifying low income housing tax credit investments when applicable. For all legally binding unfunded equity commitments, we increase our recognized investment and recognize a liability. As of December 31, 2020, we had a liability for unfunded commitments of \$1.1 billion related to investments in qualified affordable housing projects which is reflected in Other liabilities on our Consolidated Balance Sheet.

Table 58 also includes our involvement in lease financing transactions with LLCs engaged in solar power generation that, to a large extent, provided returns in the form of tax credits. The outstanding financings and operating lease assets are reflected as Loans and Other assets, respectively, on our Consolidated Balance Sheet, whereas related liabilities are reported in Deposits and Other liabilities.

We make certain equity investments in various tax credit limited partnerships or LLCs. The purpose of these investments is to achieve a satisfactory return on capital and to assist us in achieving goals associated with the Community Reinvestment Act. During 2020 we recognized \$0.2 billion of amortization, \$0.2 billion of tax credits and less than \$0.1 billion of other tax benefits associated with qualified investments in low income housing tax credits within Income taxes.

NOTE 6 GOODWILL AND MORTGAGE SERVICING RIGHTS

Assets and liabilities of acquired entities are recorded at estimated fair value as of the acquisition date.

Goodwill

Allocations of Goodwill by business segment during 2020, 2019 and 2018 follow:

Table 59: Goodwill by Business Segment

	Corporate & Institutional					
In millions	Reta	il Banking	Banking	Asset Management Group	Total	
December 31, 2020 \$	}	5,795 \$	3,374 \$	64 \$	9,233	
December 31, 2019 \$;	5,795 \$	3,374 \$	64 \$	9,233	
December 31, 2018 \$;	5,795 \$	3,359 \$	64 \$	9,218	

We review goodwill in each of our reporting units for impairment at least annually, in the fourth quarter, or more frequently if events occur or circumstances have changed significantly from the annual test date. Based on the results of our analysis, there were no impairment charges related to goodwill in 2020, 2019 or 2018.

See Note 1 Accounting Policies for additional information related to the adoption of ASU 2017-04, which simplified the goodwill impairment test.

Mortgage Servicing Rights

We recognize the right to service mortgage loans for others as an intangible asset when the servicing income we receive is more than adequate compensation. MSRs are purchased or originated when loans are sold with servicing retained. MSRs totaled \$1.2 billion at December 31, 2020 and \$1.6 billion at December 31, 2019, and consisted of loan servicing contracts for commercial and residential mortgages measured at fair value.

Commercial Mortgage Servicing Rights

We recognize gains/(losses) on changes in the fair value of commercial MSRs. Commercial MSRs are subject to changes in value from actual or expected prepayment of the underlying loans and defaults as well as market driven changes in interest rates. We manage this risk by economically hedging the fair value of commercial MSRs with securities, derivative instruments and resale agreements which are expected to increase (or decrease) in value when the value of commercial MSRs decreases (or increases).

The fair value of commercial MSRs is estimated by using a discounted cash flow model incorporating inputs for assumptions as to constant prepayment rates, discount rates and other factors determined based on current market conditions and expectations.

Changes in the commercial MSRs follow:

Table 60: Commercial Mortgage Servicing Rights

In millions	 2020		2019	2018
January 1	\$ 649	\$	726	\$ 668
Additions:				
From loans sold with servicing retained	100		53	57
Purchases	44		103	93
Changes in fair value due to:				
Time and payoffs (a)	(115)		(146)	(143)
Other (b)	(109)		(87)	51
December 31	\$ 569	\$	649	\$ 726
Related unpaid principal balance at December 31	\$ 243,960	\$ 2	216,992	\$ 180,496
Servicing advances at December 31	\$ 437	\$	157	\$ 220

⁽a) Represents decrease in MSR value due to passage of time, including the impact from both regularly scheduled loan principal payments and loans that were paid down or paid off during the period.

⁽b) Represents MSR value changes resulting primarily from market-driven changes in interest rates.

Residential Mortgage Servicing Rights

Residential MSRs are subject to changes in value from actual or expected prepayment of the underlying loans and defaults as well as market driven changes in interest rates. We manage this risk by economically hedging the fair value of residential MSRs with securities and derivative instruments which are expected to increase (or decrease) in value when the value of residential MSRs decreases (or increases).

The fair value of residential MSRs is estimated by using a discounted cash flow valuation model which calculates the present value of estimated future net servicing cash flows, taking into consideration actual and expected mortgage loan prepayment rates, discount rates, servicing costs, and other factors which are determined based on current market conditions.

Changes in the residential MSRs follow:

Table 61: Residential Mortgage Servicing Rights

In millions	2020	2019	2018
January 1	\$ 995	\$ 1,257 \$	1,164
Additions:			
From loans sold with servicing retained	45	36	44
Purchases	208	114	129
Changes in fair value due to:			
Time and payoffs (a)	(198)	(162)	(170)
Other (b)	(377)	(250)	90
December 31	\$ 673	\$ 995 \$	1,257
Unpaid principal balance of loans serviced for others at December 31	\$ 120,778	\$ 120,464 \$	125,388
Servicing advances at December 31	\$ 143	\$ 111 \$	156

a) Represents decrease in MSR value due to passage of time, including the impact from both regularly scheduled loan principal payments and loans that were paid down or paid off during the period.

Sensitivity Analysis

The fair value of commercial and residential MSRs and significant inputs to the valuation models as of December 31, 2020 are shown in Tables 62 and 63. The expected and actual rates of mortgage loan prepayments are significant factors driving the fair value. Management uses both internal proprietary models and a third-party model to estimate future commercial mortgage loan prepayments and a third-party model to estimate future residential mortgage loan prepayments. These models have been refined based on current market conditions and management judgment. Future interest rates are another important factor in the valuation of MSRs. Management utilizes market implied forward interest rates to estimate the future direction of mortgage and discount rates. The forward rates utilized are derived from the current yield curve for U.S. dollar interest rate swaps and are consistent with pricing of capital markets instruments. Changes in the shape and slope of the forward curve in future periods may result in volatility in the fair value estimate.

A sensitivity analysis of the hypothetical effect on the fair value of MSRs to adverse changes in key assumptions is presented in Tables 62 and 63. These sensitivities do not include the impact of the related hedging activities. Changes in fair value generally cannot be extrapolated because the relationship of the change in the assumption to the change in fair value may not be linear. Also, the effect of a variation in a particular assumption on the fair value of the MSRs is calculated independently without changing any other assumption. In reality, changes in one factor may result in changes in another (e.g., changes in mortgage interest rates, which drive changes in prepayment rate estimates, could result in changes in the interest rate spread), which could either magnify or counteract the sensitivities.

⁽b) Represents MSR value changes resulting from market-driven changes in interest rates.

The following tables set forth the fair value of commercial and residential MSRs and the sensitivity analysis of the hypothetical effect on the fair value of MSRs to immediate adverse changes of 10% and 20% in those assumptions:

Table 62: Commercial Mortgage Servicing Rights - Key Valuation Assumptions

Dollars in millions	·	December 31 2020	December 31 2019
Fair value	\$	569	\$ 649
Weighted-average life (years)		4.4	4.1
Weighted-average constant prepayment rate		4.87 %	4.56 %
Decline in fair value from 10% adverse change	\$	9	\$ 9
Decline in fair value from 20% adverse change	\$	18	\$ 17
Effective discount rate		7.33 %	7.91 %
Decline in fair value from 10% adverse change	\$	15	\$ 17
Decline in fair value from 20% adverse change	\$	31	\$ 34

Table 63: Residential Mortgage Servicing Rights – Key Valuation Assumptions

Dollars in millions	December 31 2020	December 31 2019
Fair value	\$ 673	\$ 995
Weighted-average life (years)	3.8	5.2
Weighted-average constant prepayment rate	21.13 %	13.51 %
Decline in fair value from 10% adverse change	\$ 41	\$ 46
Decline in fair value from 20% adverse change	\$ 82	\$ 89
Weighted-average option adjusted spread	922 bps	769 bps
Decline in fair value from 10% adverse change	\$ 20	\$ 27
Decline in fair value from 20% adverse change	\$ 38	\$ 52

Fees from mortgage loan servicing, which includes contractually specified servicing fees, late fees and ancillary fees were \$0.5 billion for each of 2020, 2019 and 2018. We also generate servicing fees from fee-based activities provided to others for which we do not have an associated servicing asset. Fees from commercial and residential MSRs are reported within Noninterest income on our Consolidated Income Statement in Corporate services and Residential mortgage, respectively.

NOTE 7 LEASES

PNC enters into both lessor and lessee arrangements. For more information on lease accounting, see Note 1 Accounting Policies and for additional details on our equipment lease financing receivables see Note 4 Loans and Related Allowance for Credit Losses.

Lessor Arrangements

PNC's lessor arrangements primarily consist of direct financing, sales-type and operating leases for equipment. Lease agreements may include options to renew and for the lessee to purchase the leased equipment at the end of the lease term.

The following table provides details on our income from lessor arrangements:

Table 64: Lease Income

Year ended December 31

rear ended December 51		
In millions	2020	2019
Sales-type and direct financing leases (a)	\$ 269 \$	295
Operating leases (b)	95	117
Lease income	\$ 364 \$	412

- (a) Included in Loan interest income on the Consolidated Income Statement.
- (b) Included in Corporate services on the Consolidated Income Statement.

The following table provides the components of our equipment lease financing assets:

Table 65: Sales-Type and Direct Financing Leases

	 December 31		
In millions	2020	2019	
Lease receivables (a)	\$ 6,246 \$	7,353	
Unguaranteed residual asset values	957	741	
Unearned income	(789)	(939)	
Equipment lease financing	\$ 6,414 \$	7,155	

⁽a) In certain cases, PNC obtains third-party residual value insurance to reduce its residual risk. The carrying value of residual assets with third-party residual value insurance for at least a portion of the asset value was \$0.4 billion and \$0.3 billion for 2020 and 2019, respectively.

Operating lease assets were \$1.0 billion and accumulated depreciation was \$0.2 billion at December 31, 2020 compared to operating lease assets of \$1.1 billion and accumulated depreciation of \$0.3 billion at December 31, 2019. We had no lease transactions with related parties or deferred selling profits at December 31, 2020 and 2019.

The future minimum lease payments based on maturity of our lessor arrangements at December 31, 2020 were as follows:

Table 66: Future Minimum Lease Payments of Lessor Arrangements

In millions	Operatin	g Leases Sales-type and	Direct Financing Leases
2021	\$	95 \$	1,467
2022		75	1,315
2023		42	948
2024		35	806
2025		24	473
2026 and thereafter		42	1,237
Total future minimum lease payments	\$	313 \$	6,246

Lessee Arrangements

We lease retail branches, datacenters, office space, land and equipment under operating and finance leases. Our leases have remaining lease terms ofone year to 47 years, some of which may include options to renew the leases for up to 99 years, and some of which may include options to terminate the leases prior to the end date. Certain leases also include options to purchase the leased asset. The exercise of lease renewal, termination and purchase options is at our sole discretion.

We recognize on the balance sheet all leases with lease terms greater than twelve months as a lease liability with a corresponding right-of-use asset. At adoption of ASU 2016-02 on January 1, 2019, we elected the practical expedient to account for the lease and nonlease components of existing real estate leases and leases of advertising assets, such as signage, as a single lease component. Effective January 1, 2019, lease and nonlease components of new lease agreements are accounted for separately. Lease components consist of fixed payments including rent, real estate taxes and insurance costs and nonlease components consist of common-area maintenance costs. In addition, we elected the practical expedient to not apply the recognition requirements under the standard to short-term leases. Leases with an initial term of 12 months or less are not recorded on the balance sheet, as we recognize lease expense for these leases on a straight-line basis over the lease term. Generally, we have elected to use the Overnight Indexed Swap rate corresponding to the term of the lease at the lease measurement date as our incremental borrowing rate to measure the right-of-use asset and lease liability.

Certain of our lease agreements include rental payments based on a percentage of revenue and others include rental payments if certain bank deposit levels are met. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants. Subleases to third parties were not material at December 31, 2020 and 2019.

The following tables provide details on our operating leases:

Table 67: Operating Lease Costs and Cash Flows

Year ended December 31

In millions	2020	2019
Operating lease cost (a)	\$ 358 \$	360
Operating cash flows	\$ 360 \$	353

⁽a) Included in Occupancy, Equipment and Marketing expense on the Consolidated Income Statement.

Table 68: Operating Lease Assets and Liabilities

	 December 31		
In millions	 2020	2019	
Operating lease assets (a)	\$ 1,876 \$	1,982	
Operating lease liabilities (b)	\$ 2,097 \$	2,170	

⁽a) Included in Other assets on the Consolidated Balance Sheet.

Finance lease assets and liabilities, income and cash flows at December 31, 2020 and 2019 were not material.

Operating lease term and discount rates of our lessee arrangements at December 31, 2020 and 2019 were as follows:

Table 69: Operating Lease Term and Discount Rates of Lessee Arrangements

	December 31		
	2020	2019	
Weighted-average remaining lease term (years)	8	9	
Weighted-average discount rate	2.21 %	2.42 %	

Future undiscounted cash flows on our lessee arrangements at December 31, 2020 are as follows:

Table 70: Future Lease Payments of Operating Lease Liabilities

In millions	December	er 31, 2020
2021	\$	364
2022		340
2023		309
2024		260
2025		217
2026 and thereafter		822
Total future lease payments	\$	2,312
Less: Interest		215
Present value of operating lease liabilities	\$	2,097

NOTE 8 PREMISES, EQUIPMENT AND LEASEHOLD IMPROVEMENTS

Premises, equipment and leasehold improvements, stated at cost less accumulated depreciation and amortization, were as follows:

Table 71: Premises, Equipment and Leasehold Improvements

In millions	 December 31 2020]	December 31 2019
Premises, equipment and leasehold improvements	\$ 14,843	\$	14,681
Accumulated depreciation and amortization	(7,156)		(6,953)
Net book value	\$ 7,687	\$	7,728

Depreciation expense on premises, equipment and leasehold improvements, as well as amortization expense, excluding intangible assets, primarily for capitalized internally developed software are shown in the following table:

⁽b) Included in Accrued expenses and other liabilities on the Consolidated Balance Sheet.

Table 72: Depreciation and Amortization Expense

Year ended December 31 In millions	2020	2019	2018
Depreciation	\$ 791 \$	778 \$	754
Amortization	115	109	78
Total depreciation and amortization	\$ 906 \$	887 \$	832

NOTE 9 TIME DEPOSITS

Total time deposits of \$19.7 billion at December 31, 2020 have future contractual maturities as follows:

Table 73: Time Deposits

In billions	
2021	\$ 17.5
2022	\$ 1.1
2023	\$ 0.4
2024	\$ 0.3
2025	\$ 0.2
2026 and thereafter	\$ 0.2

NOTE 10 BORROWED FUNDS

The following table shows the carrying value of total borrowed funds of \$37.2 billion at December 31, 2020 (including adjustments related to accounting hedges and unamortized original issuance discounts) by remaining contractual maturity:

Table 74: Borrowed Funds

In billions	
2021	\$ 7.9
2022	\$ 8.1
2023	\$ 3.9
2024	\$ 3.2
2025	\$ 2.5
2026 and thereafter	\$ 11.6

The following table presents the contractual rates and maturity dates of our FHLB borrowings, senior debt and subordinated debt as of December 31, 2020 and the carrying values as of December 31, 2020 and 2019.

Table 75: FHLB Borrowings, Senior Debt and Subordinated Debt

	Stated Rate Maturity		Carrying V	alue
Dollars in millions	2020	2020	2020	2019
Parent Company				
Senior debt	2.20%-3.50%	2021-2030 \$	9,573 \$	8,843
Subordinated debt	3.90 %	2024	805 \$	777
Junior subordinated debt	0.80 %	2028	205 \$	205
Subtotal			10,583 \$	9,825
Bank				
FHLB (a)	0.32%-0.59%	2021	3,500 \$	16,341
Senior debt	0.00%-3.50%	2021-2043	14,698 \$	20,167
Subordinated debt	2.70%-4.20%	2022-2029	5,393 \$	5,152
Subtotal			23,591 \$	41,660
Total		\$	34,174 \$	51,485

⁽a) FHLB borrowings are generally collateralized by residential mortgage loans, other mortgage-related loans and investment securities.

In Table 75, the carrying values for Parent Company senior and subordinated debt include basis adjustments of \$54 million and \$57 million, respectively, whereas Bank senior and subordinated debt include basis adjustments of \$485 million and \$414 million, respectively, related to fair value accounting hedges as of December 31, 2020.

Certain borrowings are reported at fair value, refer to Note 15 Fair Value for more information on those borrowings.

Junior Subordinated Debentures

PNC Capital Trust C, a wholly-owned finance subsidiary of The PNC Financial Services Group, Inc., owns junior subordinated debentures issued by PNC with a carrying value of \$205 million. In June 1998, PNC Capital Trust C issued \$200 million of trust preferred securities which bear interest at an annual rate of 3 month LIBOR plus57 basis points. The trust preferred securities are currently redeemable by PNC Capital Trust C at par. In accordance with GAAP, the financial statements of the Trust are not included in our consolidated financial statements.

The obligations of The PNC Financial Services Group, Inc., as the parent of the Trust, when taken collectively, are the equivalent of a full and unconditional guarantee of the obligations of the Trust under the terms of the trust preferred securities. Such guarantee is subordinate in right of payment in the same manner as other junior subordinated debt. There are certain restrictions on our overall ability to obtain funds from our subsidiaries. For additional disclosure on these funding restrictions, see Note 20 Regulatory Matters.

We are subject to certain restrictions, including restrictions on dividend payments, in connection with the outstanding junior subordinated debentures. Generally, if (i) there is an event of default under the debentures, (ii) we elect to defer interest on the debentures, (iii) we exercise our right to defer payments on the related trust preferred securities, or (iv) there is a default under our guarantee of such payment obligations, subject to certain limited exceptions, we would be unable during the period of such default or deferral to make payments on our debt securities that rank equal or junior to the debentures as well as to make payments on our equity securities, including dividend payments.

NOTE 11 COMMITMENTS

In the normal course of business, we have various commitments outstanding, certain of which are not included on our Consolidated Balance Sheet. The following table presents our outstanding commitments to extend credit along with other commitments as of December 31, 2020 and 2019.

Table 76: Commitments to Extend Credit and Other Commitments

In millions	December 31 2020	December 31 2019
Commitments to extend credit		
Total commercial lending	\$ 153,089	\$ 131,762
Home equity lines of credit	16,626	16,803
Credit card	31,019	30,862
Other	7,087	6,162
Total commitments to extend credit	207,821	185,589
Net outstanding standby letters of credit (a)	9,053	9,843
Reinsurance agreements (b)		1,393
Standby bond purchase agreements (c)	1,448	1,295
Other commitments (d)	2,046	1,498
Total commitments to extend credit and other commitments	\$ 220,368	\$ 199,618

- (a) Net outstanding standby letters of credit include \$ 3.8 billion and \$4.1 billion at December 31, 2020 and 2019, which support remarketing programs.
- (b) Represents aggregate maximum exposure up to the specified limits of the reinsurance contracts provided by our wholly-owned captive insurance subsidiary. These amounts reflect estimates based on availability of financial information from insurance carriers. As of December 31, 2020, the aggregate maximum exposure amount for reinsurance agreements was zero as all underlying insurance policies were cancelled and/or sold.
- (c) We enter into standby bond purchase agreements to support municipal bond obligations.
- (d) Includes \$1.1 billion and \$0.6 billion related to investments in qualified affordable housing projects at December 31, 2020 and 2019, respectively.

Commitments to Extend Credit

Commitments to extend credit, or net unfunded loan commitments, represent arrangements to lend funds or provide liquidity subject to specified contractual conditions. These commitments generally have fixed expiration dates, may require payment of a fee and generally contain termination clauses in the event the customer's credit quality deteriorates.

Net Outstanding Standby Letters of Credit

We issue standby letters of credit and share in the risk of standby letters of credit issued by other financial institutions, in each case to support obligations of our customers to third parties, such as insurance requirements and the facilitation of transactions involving capital markets product execution. Approximately 96% of our net outstanding standby letters of credit were rated as Pass at December 31, 2020, with the remainder rated as Criticized. An internal credit rating of Pass indicates the expected risk of loss is currently low, while a rating of Criticized indicates a higher degree of risk.

If the customer fails to meet its financial or performance obligation to the third party under the terms of the contract or there is a need to support a remarketing program, then upon a draw by a beneficiary, subject to the terms of the letter of credit, we would be obligated to make payment to them. The standby letters of credit outstanding on December 31, 2020 had terms ranging from less than one year to six years.

As of December 31, 2020, assets of \$1.1 billion secured certain specifically identified standby letters of credit. In addition, a portion of the remaining standby letters of credit issued on behalf of specific customers is also secured by collateral or guarantees that secure the customers' other obligations to us. The carrying amount of the liability for our obligations related to standby letters of credit and participations in standby letters of credit was \$0.2 billion at December 31, 2020 and is included in Other liabilities on our Consolidated Balance Sheet.

NOTE 12 EQUITY

Preferred Stock

The following table provides the number of preferred shares issued and outstanding, the liquidation value per share and the number of authorized preferred shares:

Table 77: Preferred Stock - Authorized, Issued and Outstanding

		Preferred	Shares
December 31 Shares in thousands	Liquidation value per share	2020	2019
Authorized			
\$1 par value		20,000	20,000
Issued and outstanding			
Series B	\$ 40	1	1
Series O	\$ 100,000	10	10
Series P	\$ 100,000	15	15
Series Q (a)	\$ 100,000		5
Series R	\$ 100,000	5	5
Series S	\$ 100,000	5	5
Total issued and outstanding		36	41

⁽a) On September 1, 2020, PNC redeemed all 4,800 shares of its Series Q Preferred Stock, as well as all 19.2 million Depositary Shares representing fractional interest in such shares.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 143

The following table discloses information related to the preferred stock outstanding as of December 31, 2020:

Table 78: Terms of Outstanding Preferred Stock

Preferred Stock	Issue Date	Number of Depositary Shares Issued and Outstanding	Fractional Interest in a share of preferred stock represented by each Depositary Share		Annual Per Share Dividend Rate	Optional Redemption Date (b)
Series B (c)	(c)	N/A	N/A	Quarterly from March 10th	\$ 1.80	None
Series O (d)	July 27, 2011	1 million	1/100 th	Semi-annually beginning on February 1, 2012 until August 1, 2021		August 1, 2021
				Quarterly beginning on November 1, 2021	3 Mo. LIBOR plus 3.678% per annum beginning on August 1, 2021	
Series P (d)	April 24, 2012	60 million	1/4,000 th	Quarterly beginning on August 1, 2012	6.125% until May 1, 2022 3 Mo. LIBOR plus 4.0675% per annum beginning on May 1, 2022	May 1, 2022
Series D (d)	M 7 2012	500,000	1/100 th	Semi-annually beginning on December 1, 2013 until June 1, 2023	4.85% until June 1, 2023	L 1 2022
Series R (d)	May 7, 2013	500,000	1/100***	Quarterly beginning on September 1, 2023	3 Mo. LIBOR plus 3.04% per annum beginning June 1, 2023	June 1, 2023
Series S (d)	November 1, 2016	525,000	1/100 th	Semi-annually beginning on May 1, 2017 until November 1, 2026	5.00% until November 1, 2026	November 1, 2026
				Quarterly beginning on February 1, 2027	3 Mo. LIBOR plus 3.30% per annum beginning November 1, 2026	

⁽a) Dividends are payable when, as, and if declared by our Board of Directors or an authorized committee of our Board of Directors.

Each outstanding series of preferred stock other than the Series B contains restrictions on our ability to pay dividends and make other shareholder payments. Subject to limited exceptions, if dividends are not paid on any such series of preferred stock, we cannot declare dividends on or repurchase shares of our common stock. In addition, if we would like to repurchase shares of preferred stock, such repurchases must be on a pro rata basis with respect to all such series of preferred stock.

The following table provides the dividends per share for PNC's common and preferred stock:

Table 79: Dividends Per Share

December 31	 2020	2019	2018
Common Stock	\$ 4.60 \$	4.20 \$	3.40
Preferred Stock			
Series B	\$ 1.80 \$	1.80 \$	1.80
Series O	\$ 6,750 \$	6,750 \$	6,750
Series P	\$ 6,125 \$	6,125 \$	6,125
Series Q	\$ 4,031 \$	5,375 \$	5,375
Series R	\$ 4,850 \$	4,850 \$	4,850
Series S	\$ 5,000 \$	5,000 \$	5,000

On January 5, 2021, the PNC Board of Directors declared a quarterly cash dividend on common stock of \$.15 per share payable on February 5, 2021.

⁽b) Redeemable at our option on or after the date stated. With the exception of the Series B preferred stock, redeemable at our option within 90 days of a regulatory capital treatment event as defined in the designations.

⁽c) Cumulative preferred stock. Holders of Series B preferred stock are entitled to 8 votes per share, which is equal to the number of full shares of common stock into which the Series B preferred stock is convertible. The Series B preferred stock was issued in connection with the consolidation of Pittsburgh National Corporation and Provident National Corporation in 1983.

⁽d) Non-Cumulative preferred stock.

Other Shareholders' Equity Matters

At December 31, 2020, we had reserved approximately 83 million common shares to be issued in connection with certain stock plans.

On April 4, 2019, our Board of Directors approved the establishment of a new stock repurchase program authorization in the amount of 00 million shares of PNC common stock, which may be purchased on the open market or in privately negotiated transactions, effective July 1, 2019. In June 2019, we announced share repurchase programs of up to \$4.3 billion for the four quarter period beginning with the third quarter of 2019, in accordance with PNC's 2019 capital plan. In January 2020, we announced an increase to these programs to repurchase up to an additional \$1.0 billion in common shares through the end of the second quarter of 2020. PNC announced on March 16, 2020 a temporary suspension of our common stock repurchase program in conjunction with the Federal Reserve's effort to support the U.S. economy during the pandemic. We continued the suspension through the fourth quarter of 2020 with the exception of employee benefit-related purchases in the third quarter, consistent with the extension of the Federal Reserve's special capital distribution restrictions. Under these program authorizations we repurchased 11.0 million shares in 2020 and 25.9 million shares in 2019. A maximum amount of 75.1 million shares remained available for repurchase under the new stock program authorization at December 31, 2020. In 2021, our plan is to refrain from share repurchases, excluding employee benefit-related purchases, during the period leading up to our pending BBVA transaction close date, expected to be mid-2021.

NOTE 13 OTHER COMPREHENSIVE INCOME

Details of other comprehensive income (loss) are as follows:

Table 80: Other Comprehensive Income (Loss)

	Year ended December 31										
		2020				2019					
In millions	Pre-tax	Tax effect	After-tax	Pre	e-tax Ta	x effect	After-tax	Pre-tax	Tax effect	After-tax	
Debt securities											
Increase in net unrealized gains (losses) on securities	\$ 2,113	\$ (485) \$ 1,628	\$	1,529 \$	(351)	\$ 1,178	\$ (536) \$ 123	\$ (413)	
Less: Net realized gains (losses) reclassified to earnings (a)	302	(69) 233	3	40	(9)	31	4	(1)	3	
Net change	1,811	(416	1,395	5	1,489	(342)	1,147	(540) 124	(416)	
Cash flow hedge derivatives											
Increase in net unrealized gains (losses) on cash flow hedge derivatives	918	(211	707	7	334	(77)	257	(118) 27	(91)	
Less: Net realized gains (losses) reclassified to earnings (a)	421	(97	324	1	37	(9)	28	60	(14)	46	
Net change	497	(114) 383	3	297	(68)	229	(178) 41	(137)	
Pension and other postretirement benefit plan adjustments											
Net pension and other postretirement benefit plan activity and other reclassified to earnings (b)	82	(19) 63	3	158	(36)	122	16	(4)	12	
Net change	82	(19) 63	3	158	(36)	122	16	(4)	12	
Other											
Net unrealized gains (losses) on other transactions	10) 5	1.5	5	17	5	22	18	(17)	1	
Net change	10) 5	1.5	5	17	5	22	18	(17)	1	
Total other comprehensive income (loss) from continuing											
operations	2,400	(544) 1,856	5	1,961	(441)	1,520	(684) 144	(540)	
Total other comprehensive income (loss) from discontinued operations	148	(33) 115	5	5	(1)	4	(55) 12	(43)	
Total other comprehensive income (loss)	\$ 2,548	\$ \$ (577	\$ 1,971	\$	1,966 \$	(442)	\$ 1,524	\$ (739) \$ 156	\$ (583)	

⁽a) Reclassifications for pre-tax debt securities and cash flow hedges are recorded in interest income and noninterest income on the Consolidated Income Statement.

⁽b) Reclassifications include amortization of actuarial losses (gains) and amortization of prior period services costs (credits) which are recorded in noninterest expense on the Consolidated Income Statement.

Table 81: Accumulated Other Comprehensive Income (Loss) Components

In millions, after-tax	Debt securities	Cash flow hedge derivatives	Pension and other postretirement benefit plan adjustments	Other	Accumulated other Comprehensive Income from Continuing Operations	Accumulated other Comprehensive Income from Discontinued Operations	Total
Balance at December 31, 2017	\$ 277	\$ 151	\$ (446)	\$ (68)	\$ (86)	\$ (62)	\$ (148)
Cumulative effect of adopting ASU 2018-02 (a)	59	33	(96)	24	20	(14)	6
Balance at January 1, 2018	336	184	(542)	(44)	(66)	(76)	(142)
Net activity	(416)	(137)	12	1	(540)	(43)	(583)
Balance at December 31, 2018	\$ (80)	\$ 47	\$ (530)	\$ (43)	\$ (606)	\$ (119)	\$ (725)
Net activity	1,147	229	122	22	1,520	4	1,524
Balance at December 31, 2019	\$ 1,067	\$ 276	\$ (408)	\$ (21)	\$ 914	\$ (115)	\$ 799
Net activity	1,395	383	63	15	1,856	115	1,971
Balance at December 31, 2020	\$ 2,462	\$ 659	\$ (345)	\$ (6)	\$ 2,770		\$ 2,770

⁽a) Represents the cumulative impact of adopting ASU 2018-02 which permits the reclassification to retained earnings of the income tax effects stranded within AOCI.

NOTE 14 EARNINGS PER SHARE

Table 82: Basic and Diluted Earnings Per Common Share

In millions, except per share data	 2020	2019	2018
Basic	 		
Net income from continuing operations	\$ 3,003	\$ 4,591	\$ 4,558
Less:			
Net income attributable to noncontrolling interests	41	49	45
Preferred stock dividends	229	236	236
Preferred stock discount accretion and redemptions	4	4	4
Net income from continuing operations attributable to common shareholders	2,729	4,302	4,273
Less: Dividends and undistributed earnings allocated to nonvested restricted shares	13	18	18
Net income from continuing operations attributable to basic common shareholders	\$ 2,716	\$ 4,284	\$ 4,255
Net income from discontinued operations attributable to common shareholders	\$ 4,555	\$ 827	\$ 788
Less: Undistributed earnings allocated to nonvested restricted shares	22	3	3
Net income from discontinued operations attributable to basic common shareholders	\$ 4,533	\$ 824	\$ 785
Basic weighted-average common shares outstanding	427	447	467
Basic earnings per common share from continuing operations (a)	\$ 6.37	\$ 9.59	\$ 9.11
Basic earnings per common share from discontinued operations (a)	\$ 10.62	\$ 1.84	\$ 1.68
Basic earnings per common share (b)	\$ 16.99	\$ 11.43	\$ 10.79
Diluted			
Net income from continuing operations attributable to diluted common shareholders	\$ 2,716	\$ 4,284	\$ 4,255
Net income from discontinued operations attributable to basic common shareholders	\$ 4,533	\$ 824	\$ 785
Less: Impact of earnings per share dilution from discontinued operations	2	10	9
Net income from discontinued operations attributable to diluted common shareholders	\$ 4,531	\$ 814	\$ 776
Basic weighted-average common shares outstanding	427	447	467
Dilutive potential common shares		1	3
Diluted weighted-average common shares outstanding	427	448	470
Diluted earnings per common share from continuing operations (a)	\$ 6.36	\$ 9.57	\$ 9.06
Diluted earnings per common share from discontinued operations (a)	\$ 10.60	\$ 1.82	\$ 1.65
Diluted earnings per common share (b)	\$ 16.96	\$ 11.39	\$ 10.71

⁽a) Basic and diluted earnings per share under the two-class method are determined on net income reported on the income statement less earnings allocated to nonvested restricted shares and restricted share units with nonforfeitable dividends and dividend rights (participating securities).

(b) See Note 1 Accounting Policies in the Notes to Consolidated Financial Statements of this Report for additional information on our policy for not allocating losses to participating securities.

NOTE 15 FAIR VALUE

Fair Value Measurement

We measure certain financial assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or the price that would be paid to transfer a liability on the measurement date, and is determined using an exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The fair value hierarchy established by GAAP requires us to maximize the use of observable inputs when measuring fair value. The three levels of the fair value hierarchy are:

- Level 1: Fair value is determined using a quoted price in an active market for identical assets or liabilities. Level 1 assets and liabilities may include debt securities, equity securities and listed derivative contracts that are traded in an active exchange market, and certain U.S. Treasury securities that are actively traded in over-the-counter markets
- Level 2: Fair value is estimated using inputs other than quoted prices included within Level 1 that are observable for assets or liabilities, either directly or indirectly. The majority of Level 2 assets and liabilities include debt securities and listed derivative contracts with quoted prices that are traded in markets that are not active, and certain debt and equity securities and over-the-counter derivative contracts whose fair value is determined using a pricing model without significant unobservable inputs.
- Level 3: Fair value is estimated using unobservable inputs that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models and discounted cash flow methodologies, or similar techniques for which the significant valuation inputs are not observable and the determination of fair value requires significant management judgment or estimation.

We characterize active markets as those where transaction volumes are sufficient to provide objective pricing information, with reasonably narrow bid/ask spreads, and where dealer quotes received do not vary widely and are based on current information. Inactive markets are typically characterized by low transaction volumes, price quotations that vary substantially among market participants or are not based on current information, wide bid/ask spreads, a significant increase in implied liquidity risk premiums, yields, or performance indicators for observed transactions or quoted prices compared to historical periods, a significant decline or absence of a market for new issuance, or any combination of the above factors. We also consider nonperformance risks, including credit risk, as part of our valuation methodology for all assets and liabilities measured at fair value.

Assets and liabilities measured at fair value, by their nature, result in a higher degree of financial statement volatility. Assets and liabilities classified within Level 3 inherently require the use of various assumptions, estimates and judgments when measuring their fair value. As observable market activity is commonly not available to use when estimating the fair value of Level 3 assets and liabilities, we must estimate fair value using various modeling techniques. These techniques include the use of a variety of inputs/assumptions including credit quality, liquidity, interest rates or other relevant inputs across the entire population of our Level 3 assets and liabilities. Changes in the significant underlying factors or assumptions (either an increase or a decrease) in any of these areas underlying our estimates may have resulted in a significant increase/decrease in the Level 3 fair value measurement of a particular asset and/or liability from period to period.

Any models used to determine fair values or to validate dealer quotes are subject to review and independent testing as part of our model validation and internal control testing processes. Our Model Risk Management Group reviews significant models on at least an annual basis. In addition, the Valuation Committee approves valuation methodologies and reviews the results of independent valuation reviews and processes for assets and liabilities measured at fair value on a recurring basis.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Residential Mortgage Loans Held for Sale

We account for certain residential mortgage loans originated for sale at fair value on a recurring basis. The election of the fair value option aligns the accounting for the residential mortgages with the related hedges. Residential mortgage loans are valued based on quoted market prices, where available, prices for other traded mortgage loans with similar characteristics, and purchase commitments and bid information received from market participants. The prices are adjusted as necessary to include the embedded servicing value in the loans and to take into consideration the specific characteristics of certain loans that are priced based on the pricing of similar loans. These adjustments represent unobservable inputs to the valuation but are not considered significant given the relative insensitivity of the value to changes in these inputs to the fair value of the loans. Accordingly, the majority of residential mortgage loans held for sale are classified as Level 2.

Commercial Mortgage Loans Held for Sale

We account for certain commercial mortgage loans classified as held for sale in whole loan transactions at fair value. We determine the fair value of commercial mortgage loans held for sale based upon discounted cash flows. Fair value is determined using sale valuation assumptions that management believes a market participant would use in pricing the loans

The PNC Financial Services Group, Inc. – 2020 Form 10-K 147

Valuation assumptions may include observable inputs based on the benchmark interest rate swap curve, whole loan sales and agency sales transactions. The significant unobservable input for commercial mortgage loans held for sale, excluding those to be sold to agencies, is management's assumption of the spread applied to the benchmark rate. The spread over the benchmark curve includes management's assumptions of the impact of credit and liquidity risk. Significant increases (decreases) in the spread applied to the benchmark would have resulted in a significantly lower (higher) asset value. The wide range of the spread over the benchmark curve is due to the varying risk and underlying property characteristics within our portfolio. Based on the significance of the unobservable input we classified this portfolio as Level 3.

For loans to be sold to agencies with servicing retained, the fair value is adjusted for the estimated servicing cash flows, which is an unobservable input. This adjustment is not considered significant given the relative insensitivity of the value to changes in the input to the fair value of the loans. Accordingly, commercial mortgage loans held for sale to agencies are classified as Level 2.

Securities Available for Sale and Trading Securities

Securities accounted for at fair value include both the available for sale and trading portfolios. We primarily use prices obtained from pricing services, dealer quotes or recent trades to determine the fair value of securities. The majority of securities were priced by third-party vendors. The third-party vendors use a variety of methods when pricing securities that incorporate relevant market data to arrive at an estimate of what a buyer in the marketplace would pay for a security under current market conditions. We monitor and validate the reliability of vendor pricing on an ongoing basis through pricing methodology reviews, including detailed reviews of the assumptions and inputs used by the vendor to price individual securities, and through price validation testing. Securities not priced by one of our pricing vendors may be valued using a dealer quote, which are also subject to price validation testing. Price validation testing is performed independent of the risk-taking function and involves corroborating the prices received from third-party vendors and dealers with prices from another third party or through other sources, such as internal valuations or sales of similar securities. Security prices are also validated through actual cash settlement upon sale of a security.

Securities are classified within the fair value hierarchy after giving consideration to the activity level in the market for the security type and the observability of the inputs used to determine the fair value. When a quoted price in an active market exists for the identical security, this price is used to determine fair value and the security is classified within Level 1 of the hierarchy. Level 1 securities include U.S. Treasury securities.

When a quoted price in an active market for the identical security is not available, fair value is estimated using either an alternative market approach, such as a recent trade or matrix pricing, or an income approach, such as a discounted cash flow pricing model. If the inputs to the valuation are based primarily on market observable information, then the security is classified within Level 2 of the hierarchy. Level 2 securities include agency debt securities, agency residential mortgage-backed securities, agency and non-agency commercial mortgage-backed securities, certain non-agency residential mortgage-backed securities collateralized by non-mortgage-related corporate and consumer loans, and other debt securities. Level 2 securities are predominantly priced by third parties, either by a pricing vendor or dealer.

In certain cases where there is limited activity or less transparency around the inputs to the valuation, securities are classified within Level 3 of the hierarchy. Securities classified as Level 3 consist primarily of non-agency residential mortgage-backed and asset-backed securities collateralized by first- and second-lien residential mortgage loans. Fair value for these securities is primarily estimated using pricing obtained from third-party vendors. In some cases, fair value is estimated using a dealer quote, by reference to prices of securities of a similar vintage and collateral type or by reference to recent sales of similar securities. Market activity for these security types is limited with little price transparency. As a result, these securities are generally valued by the third-party vendor using a discounted cash flow approach that incorporates significant unobservable inputs and observable market activity where available. Significant inputs to the valuation include prepayment projections and credit loss assumptions (default rate and loss severity) and discount rates that are deemed representative of current market conditions. Significant increases (decreases) in any of those assumptions in isolation would have resulted in a significantly lower (higher) fair value measurement.

Certain infrequently traded debt securities within Other debt securities available for sale and Trading securities are also classified in Level 3 and are included in the Insignificant Level 3 assets, net of liabilities line item in Table 85. The significant unobservable inputs used to estimate the fair value of these securities include an estimate of expected credit losses and a discount for liquidity risk. These inputs are incorporated into the fair value measurement by either increasing the spread over the benchmark curve or by applying a credit and liquidity discount to the par value of the security. Significant increases (decreases) in credit and/or liquidity risk could have resulted in a significantly lower (higher) fair value estimate.

Loans

Loans accounted for at fair value consist primarily of residential mortgage loans. These loans are generally valued similarly to residential mortgage loans held for sale and are classified as Level 2. However, similar to residential mortgage loans held for sale, if these loans are repurchased and unsalable, they are classified as Level 3. In addition, repurchased VA loans, where only a portion of the principal will be reimbursed, are classified as Level 3. The fair value is determined using a discounted cash flow calculation based on our historical loss rate. We have elected to account for certain home equity lines of credit at fair value. These loans are classified as

Level 3. Significant inputs to the valuation of these loans include credit and liquidity discount, cumulative default rate, loss severity and gross discount rate and are deemed representative of current market conditions. Significant increases (decreases) in any of these assumptions would have resulted in a significantly lower (higher) fair value measurement.

Equity Investments

Equity investments includes money market mutual funds as well as direct and indirect private equity investments. Money market mutual funds are valued based on quoted prices in active markets for identical securities and classified within Level 1 of the hierarchy. The valuation of direct and indirect private equity investments requires significant management judgment due to the absence of quoted market prices, inherent lack of liquidity and the long-term nature of such investments. Various valuation techniques are used for direct investments, including multiples of adjusted earnings of the entity, independent appraisals, anticipated financing and sale transactions with third parties, or the pricing used to value the entity in a recent financing transaction. A multiple of adjusted earnings calculation is the valuation technique utilized most frequently and is the most significant unobservable input used in such calculation. Significant decreases (increases) in the multiple of earnings could have resulted in a significantly lower (higher) fair value measurement. Direct equity investments are classified as Level 3.

Indirect investments are not redeemable; however, we receive distributions over the life of the partnerships from liquidation of the underlying investments by the investee, which we expect to occur over the next 10 years. We value indirect investments in private equity funds using the net asset value (NAV) practical expedient as provided in the financial statements that we receive from fund managers. Due to the time lag in our receipt of the financial information and based on a review of investments and valuation techniques applied, adjustments to the manager-provided value are made when available recent portfolio company information or market information indicates a significant change in value from that provided by the manager of the fund. Indirect investments valued using NAV are not classified in the fair value hierarchy.

Mortgage Servicing Rights (MSRs)

MSRs are carried at fair value on a recurring basis. Assumptions incorporated into the MSRs valuation model reflect management's best estimate of factors that a market participant would use in valuing the MSRs. Although sales of MSRs do occur and can offer some market insight, MSRs do not trade in an active, open market with readily observable prices so the precise terms and conditions of sales are not available.

Residential MSRs

As a benchmark for the reasonableness of our residential MSRs fair value, we obtained opinions of value from independent brokers. These brokers provided a range (+/10 bps) based upon their own discounted cash flow calculations of our portfolio that reflect conditions in the secondary market and any recently executed servicing transactions. We compare our internally-developed residential MSRs value to the ranges of values received from the brokers. If our residential MSRs fair value falls outside of the brokers' ranges, management will assess whether a valuation adjustment is warranted. For the periods presented, our residential MSRs value did not fall outside of the brokers' ranges. We consider our residential MSRs value to represent a reasonable estimate of fair value.

Due to the nature of the unobservable valuation inputs, residential MSRs are classified as Level 3. The significant unobservable inputs used in the fair value measurement of residential MSRs are constant prepayment rates and spread over the benchmark curve. Significant increases (decreases) in prepayment rates and spread over the benchmark curve would have resulted in lower (higher) fair market value of residential MSRs.

Commercial MSRs

The fair value of commercial MSRs is estimated by using a discounted cash flow model incorporating unobservable inputs for assumptions such as constant prepayment rates, discount rates and other factors. Due to the nature of the unobservable valuation inputs and the limited availability of market pricing, commercial MSRs are classified as Level 3. Significant increases (decreases) in constant prepayment rates and discount rates would have resulted in significantly lower (higher) commercial MSR value determined based on current market conditions and expectations.

Financial Derivatives

Exchange-traded derivatives are valued using quoted market prices and are classified as Level 1. The majority of derivatives that we enter into are executed over-the-counter and are valued using internal models. These derivatives are primarily classified as Level 2, as the readily observable market inputs to these models are validated to external sources, such as industry pricing services, or are corroborated through recent trades, dealer quotes, yield curves, implied volatility or other market-related data. Level 2 financial derivatives are primarily estimated using a combination of Eurodollar future prices and observable benchmark interest rate swaps to construct projected discounted cash flows.

Financial derivatives that are priced using significant management judgment or assumptions are classified as Level 3. Unobservable inputs related to interest rate contracts include probability of funding of residential mortgage loan commitments and estimated servicing cash flows of commercial and residential mortgage loan commitments. Probability of default and loss severity are the significant unobservable inputs used in the valuation of risk participation agreements. The fair values of Level 3 assets and liabilities

related to these interest rate contract financial derivatives as of December 31, 2020 and 2019 are included in the Insignificant Level 3 assets, net of liabilities line item in Table 85 of this Note 15.

In connection with the sales of portions of our Visa Class B common shares, we entered into swap agreements with the purchasers of the shares to retain any future risk of decreases in the conversion rate of Class B common shares to Class A common shares resulting from increases in the escrow funded by Visa to pay for the costs of resolution of specified litigation (see Note 21 Legal Proceedings). These swaps also require PNC to make periodic payments based on the market price of the Class A common shares at a fixed rate of interest (in certain cases subject to step-up provisions) until the Visa litigation is resolved. An increase in the estimated length of litigation resolution date, a decrease in the estimated conversion rate, or an increase in the estimated growth rate of the Class A share price would have had a negative impact on the fair value of the swaps and vice versa.

The fair values of our derivatives include a credit valuation adjustment to reflect our own and our counterparties' nonperformance risk. Our credit valuation adjustment is computed using credit default swap spreads, in conjunction with internal historical recovery observations.

Other Assets and Liabilities

Other assets held at fair value on a recurring basis primarily include assets related to PNC's deferred compensation and supplemental incentive savings plans.

The assets related to PNC's deferred compensation and supplemental incentive savings plans primarily consist of a prepaid forward contract referencing an amount of shares of PNC stock, equity mutual funds and fixed income funds, and are valued based on the underlying investments. These assets are valued either by reference to the market price of PNC's stock or by using the quoted market prices for investments other than PNC's stock and are classified in Levels 1 and 2.

All Level 3 other assets and liabilities are included in the Insignificant Level 3 assets, net of liabilities line item in Table 85 in this Note 15.

Other Borrowed Funds

Other borrowed funds primarily consist of U.S. Treasury securities sold short which are classified as Level 1. Other borrowed funds also includes the related liability for certain repurchased loans for which we have elected the fair value option and are classified as either Level 2 or Level 3, consistent with the level classification of the corresponding loans. All Level 3 amounts are included in the Insignificant Level 3 assets, net of liabilities line item in Table 85 in this Note 15.

The following table summarizes our assets and liabilities measured at fair value on a recurring basis, including instruments for which we have elected the fair value option.

Table 83: Fair Value Measurements - Recurring Basis Summary

	_		December 31, 2020										December 31, 2019						
			Decembe	1 31, 2	.020		Total				Decembe	1 31, 2	2019		Total				
In millions		Level 1	Level 2		Level 3		Fair Value		Level 1		Level 2		Level 3		Fair Value				
Assets																			
Residential mortgage loans held for sale			\$ 691	\$	163	\$	854			\$	817	\$	2	\$	819				
Commercial mortgage loans held for sale			305		57		362				182		64		246				
Securities available for sale																			
U.S. Treasury and government agencies	\$	16,675	4,036				20,711	\$	16,236		280				16,516				
Residential mortgage-backed																			
Agency			48,911				48,911				36,321				36,321				
Non-agency			136		1,365		1,501				73		1,741		1,814				
Commercial mortgage-backed																			
Agency			2,688				2,688				3,118				3,118				
Non-agency			3,678		11		3,689				3,372				3,372				
Asset-backed			4,951		199		5,150				4,874		240		5,114				
Other			4,636		72		4,708				2,834		74		2,908				
Total securities available for sale		16,675	69,036		1,647		87,358		16,236		50,872		2,055		69,163				
Loans			718		647		1,365				442		300		742				
Equity investments (a)		1,070			1,263		2,629		855				1,276		2,421				
Residential mortgage servicing rights					673		673						995		995				
Commercial mortgage servicing rights					569		569						649		649				
Trading securities (b)		548	1,690				2,238		433		2,787				3,220				
Financial derivatives (b) (c)			6,415		118		6,533				3,448		54		3,502				
Other assets		373	81				454		339		131				470				
Total assets (d)	\$	18,666	\$ 78,936	\$	5,137	\$	103,035	\$	17,863	\$	58,679	\$	5,395	\$	82,227				
Liabilities																			
Other borrowed funds	\$	661	\$ 44	\$	2	\$	707	\$	385	\$	126	\$	7	\$	518				
Financial derivatives (c) (e)			2,483		273		2,756				1,819		200		2,019				
Other liabilities					43		43						137		137				
Total liabilities (f)	\$	661	\$ 2,527	\$	318	\$	3,506	\$	385	\$	1,945	\$	344	\$	2,674				

Certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Included in Other assets on the Consolidated Balance Sheet.

Amounts at December 31, 2020 and 2019 are presented gross and are not reduced by the impact of legally enforceable master netting agreements that allow us to net positive and negative positions and cash collateral held or

placed with the same counterparty. See Note 16 Financial Derivatives for additional information related to derivative offsetting.

Total assets at fair value as a percentage of total consolidated assets was 22% and 20% at December 31, 2020 and 2019, respectively. Level 3 assets as a percentage of total assets at fair value was 5% and 7% as of December 31, 2020 and 2019, respectively. Level 3 assets as a percentage of total consolidated assets was 1% at both December 31, 2020 and 2019.

Included in Other liabilities on the Consolidated Balance Sheet.

Total liabilities at fair value as a percentage of total consolidated liabilities was 1% at both December 31, 2020 and 2019. Level 3 liabilities at fair value was 9% and 13% as of December 31, 2020 and 2019, respectively. Level 3 liabilities as a percentage of total consolidated liabilities was less than 1% at both December 31, 2020 and 2019.

Reconciliations of assets and liabilities measured at fair value on a recurring basis using Level 3 inputs for 2020 and 2019 follow

Table 84: Reconciliation of Level 3 Assets and Liabilities

Year Ended December 31, 2020

	 _	Total rea gains or p	for the									
Level 3 Instruments Only In millions	Fair Value Dec. 31, 2019	Included in Earnings	Included in Other comprehensive income (b)	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	I	Fair Value Dec. 31, 2020	Unrealized gains / losses on assets and liabilities held on Consolidated Balance Sheet at Dec. 31, 2020 (a) (c)
Assets												
Residential mortgage loans held for sale	\$ 2 \$	(1)	\$	124 \$	(13)	\$	(21)	\$ 93 \$	(21)	(e) \$	163	\$ (1)
Commercial mortgage loans held for sale	64	(2)					(5)				57	(2)
Securities available for sale												
Residential mortgage- backed non-agency	1,741	53	\$ (75)				(354)				1,365	
Commercial mortgage- backed non-agency			(8)					19			11	
Asset-backed	240	6	(7)				(40)				199	
Other	74	1	(4)	4			(3)				72	
Total securities available for sale	2,055	60	(94)	4			(397)	19			1,647	
Loans	300	28		161	(39)		280 (d)		(83)	(e)	647	28
Equity investments	1,276	(63)		229	(179)						1,263	(69)
Residential mortgage servicing rights	995	(377)		208	\$	45	(198)				673	(377)
Commercial mortgage servicing rights	649	(109)		44		100	(115)				569	(109)
Financial derivatives	54	209		11			(156)				118	229
Total assets	\$ 5,395 \$	(255)	\$ (94) \$	781 \$	(231) \$	145 \$	(612)	\$ 112 \$	(104)	\$	5,137	\$ (301)
Liabilities												
Other borrowed funds	\$ 7				\$	28 \$	(33)			\$	2	
Financial derivatives	200 \$	189		\$	4		(120)				273	\$ 186
Other liabilities	137	17				96	(207)				43	1
Total liabilities	\$ 344 \$	206		\$	4 \$	124 \$	(360)			\$	318	\$ 187
Net gains (losses)	\$	(461) (f)	<u> </u>				<u> </u>					\$ (488) (g)

152 The PNC Financial Services Group, Inc. – 2020 Form 10-K

Year Ended December 31, 2019

		Total realized gains or loss period	ses for the										Unrealized gains / losses on assets and
Level 3 Instruments Only In millions	ir Value 31, 2018	Included in Earnings	comp	Included in Other rehensive ncome (b)	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3		Fair Value Dec. 31, 2019	liabilities held on Consolidated Balance Sheet at December 31, 2019 (a) (c)
Assets													
Residential mortgage loans held for sale	\$ 2			\$	5	\$ (2)	\$	(2) \$	16	\$ (17)	(e)	\$ 2	
Commercial mortgage loans held for sale	87 \$	1						(24)				64	\$ 1
Securities available for sale													
Residential mortgage- backed non-agency	2,128	73	\$	15				(475)				1,741	
Asset-backed	274	6		3				(43)				240	
Other	84	1		(6)	9	(3)		(11)				74	
Total securities available for sale	2,486	80		12	9	(3)		(529)				2,055	
Loans	272	13			142	(42)		(54)		(31)	(e)		7
Equity investments	1,255	262			374	(615)						1,276	57
Residential mortgage servicing rights	1,257	(250)			114	\$	36	(162)				995	(235)
Commercial mortgage servicing rights	726	(87)			103		53	(146)				649	(87)
Trading securities	2							(2)					
Financial derivatives	25	70			22			(63)				54	94
Other assets	45							(45)					
Total assets	\$ 6,157 \$	89	\$	12 \$	769	\$ (662) \$	89 \$	(1,027) \$	16	\$ (48)		\$ 5,395	\$ (163)
Liabilities													
Other borrowed funds	\$ 7					\$	52 \$	(52)				\$ 7	
Financial derivatives	268 \$	101				\$ 10		(179)				200	\$ 112
Other liabilities	58	68		\$	16	2	81	(88)				137	49
Total liabilities	\$ 333 \$	169		\$	16	\$ 12 \$	133 \$	(319)				\$ 344	\$ 161
Net gains (losses)	\$	(80) (f)											\$ (324) (g)

An instrument's categorization within the hierarchy is based on the lowest level of input that is significant to the fair value measurement. Changes from one quarter to the next related to the observability of inputs to a fair value measurement may result in a reclassification (transfer) of assets or liabilities between hierarchy levels.

Losses for assets are bracketed while losses for liabilities are not.

Losses for assets are bracketed while losses for liabilities are not.

The difference in unrealized gains and losses for the period included in Other comprehensive income for securities available for sale held at the end of the reporting period were not significant.

The amount of the total gains or losses for the period included in earnings that is attributable to the change in unrealized gains or losses related to those assets and liabilities held at the end of the reporting period.

Upon adoption of ASU 2016-13 - Credit Losses, we discontinued the accounting for purchased impaired loans and eleted the one-time fair value option election for some of these loans and certain nonperforming loans.

Residential mortgage loan transfers out of Level 3 are primarily driven by residential mortgage loans transferring to OREO as well as reclassification of mortgage loans held for sale to held for investment.

Net gains (losses) realized and unrealized were included in Noninterest income on the Consolidated Income Statement.

Net unrealized gains (losses) realized and unrealized were included in Noninterest income on the Consolidated Income Statement.

Quantitative information about the significant unobservable inputs within Level 3 recurring assets and liabilities follows:

Table 85: Fair Value Measurements – Recurring Quantitative Information

December 31, 2020

Level 3 Instruments Only Dollars in millions	Fair Value	Valuation Techniques	Unobservable Inputs	Range (Weighted Average) (a)
Commercial mortgage loans held for Sale	\$ 57	Discounted cash flow	Spread over the benchmark curve (b)	0 (0 0 / (/
Residential mortgage-backed	1,365	Priced by a third-party vendor	Constant prepayment rate	1.0% - 37.6% (8.6%)
non-agency securities		using a discounted cash flow pricing model	Constant default rate	0.0% - 12.2% (4.7%)
		pricing moder	Loss severity	25.0% - 95.7% (48.8%)
			Spread over the benchmark curve (b)	242bps weighted-average
Asset-backed securities	199	Priced by a third-party vendor	Constant prepayment rate	1.0% - 22.0% (7.4%)
		using a discounted cash flow pricing model	Constant default rate	1.0% - 6.0% (3.3%)
		priems moder	Loss severity	30.0% - 100.0% (58.1%)
			Spread over the benchmark curve (b)	291bps weighted-average
Loans - Residential real estate	434	Consensus pricing (c)	Cumulative default rate	3.6% - 100.0% (82.1%)
			Loss severity	0.0% - 100.0% (11.2%)
			Discount rate	4.8% - 6.8% (5.1%)
	132	Discounted cash flow	Loss severity	8.0% weighted-average
			Discount rate	3.2% weighted-average
Loans - Home equity	21	Consensus pricing (c)	Cumulative default rate	3.6% - 100.0% (88.5%)
			Loss severity	0.0% - 98.4% (33.3%)
			Discount rate	4.8% - 6.8% (6.3%)
	60	Consensus pricing (c)	Credit and liquidity discount	17.5% - 97.0% (57.7%)
Equity investments	1,263	Multiple of adjusted earnings	Multiple of earnings	5.0x - 15.9x (8.7x)
Residential mortgage servicing	673	Discounted cash flow	Constant prepayment rate	0.0% - 77.5% (21.1%)
rights			Spread over the benchmark curve (b)	325bps - 2,783bps (922bps)
Commercial mortgage servicing	569	Discounted cash flow	Constant prepayment rate	4.0% - 16.1% (4.9%)
rights			Discount rate	4.7% - 7.8% (7.3%)
Financial derivatives - Swaps related to sales of certain Visa Class B	(252)	Discounted cash flow	Estimated conversion factor of Visa Class B shares into Class A shares	162.3% weighted-average
common shares			Estimated annual growth rate of Visa Class A share price	16.0%
			Estimated length of litigation resolution date	Q2 2022
Insignificant Level 3 assets, net of liabilities (d)	298			
Total Level 3 assets, net of liabilities (e)	\$ 4,819			

December 31, 2019

Level 3 Instruments Only Dollars in millions	Fair Value	Valuation Techniques	Unobservable Inputs	Range (Weighted Average) (a)
Commercial mortgage loans held for sale	\$ 64	Discounted cash flow	Spread over the benchmark curve (b)	530bps - 2,935bps (1,889bps)
Residential mortgage-backed	1,741	Priced by a third-party vendor using a	Constant prepayment rate	1.0% - 36.2% (9.9%)
non-agency securities		discounted cash flow pricing model	Constant default rate	0.0% - 14.1% (4.3%)
			Loss severity	26.6% - 95.7% (51.9%)
			Spread over the benchmark curve (b)	188bps weighted-average
Asset-backed securities	240	Priced by a third-party vendor using a	Constant prepayment rate	1.0% - 22.0% (7.5%)
		discounted cash flow pricing model	Constant default rate	1.0% - 7.2% (3.4%)
			Loss severity	30.0% - 100.0% (57.6%)
			Spread over the benchmark curve (b)	215bps weighted-average
Loans	184	Consensus pricing (c)	Cumulative default rate	3.6% - 100.0% (76.7%)
			Loss severity	0.0% - 100.0% (14.5%)
			Discount rate	5.0% - 8.0% (5.2%)
	72	Discounted cash flow	Loss severity	8.0% weighted-average
			Discount rate	4.8% weighted-average
	44	Consensus pricing (c)	Credit and liquidity discount	0.0% - 99.0% (63.4%)
Equity investments	1,276	Multiple of adjusted earnings	Multiple of earnings	5.0x - 16.5x (8.5x)
Residential mortgage servicing rights	995	Discounted cash flow	Constant prepayment rate	0.0% - 53.8% (13.5%)
			Spread over the benchmark curve (b)	320bps - 1,435bps (769bps)
Commercial mortgage servicing rights	649	Discounted cash flow	Constant prepayment rate	3.5% - 18.1% (4.6%)
			Discount rate	5.6% - 8.1% (7.9%)
Financial derivatives - Swaps related to sales of certain Visa Class B	(176)	Discounted cash flow	Estimated conversion factor of Visa Class B shares into Class A shares	162.3% weighted-average
common shares			Estimated annual growth rate of Visa Class A share price	16.0%
			Estimated length of litigation resolution date	Q1 2021
Insignificant Level 3 assets, net of liabilities (d)	(38)			
Total Level 3 assets, net of liabilities (e)	\$ 5,051			

- Unobservable inputs were weighted by the relative fair value of the instruments.

 The assumed yield spread over the benchmark curve for each instrument is generally intended to incorporate non-interest rate risks, such as credit and liquidity risks.
- Consensus pricing refers to fair value estimates that are generally internally developed using information such as dealer quotes or other third-party provided valuations or comparable asset prices.

 Represents the aggregate amount of Level 3 assets and liabilities measured at fair value on a recurring basis that are individually and in the aggregate insignificant. The amount includes certain financial derivative assets and liabilities, trading securities, other securities, residential mortgage loans held for sale, other assets, other borrowed funds and other securities assets of \$1.1 billion and total Level 3 assets of \$1.2 billion and total Level 3 liabilities.

 Consisted of total Level 3 assets of \$1.2 billion and total Level 3 liabilities of \$0.3 billion as of December 31, 2020 and \$1.2 billion and \$1.2 bill

Financial Assets Accounted for at Fair Value on a Nonrecurring Basis

We may be required to measure certain financial assets at fair value on a nonrecurring basis. These adjustments to fair value usually result from the application of lower of amortized cost or fair value accounting or write-downs of individual assets due to impairment and are included in Table 86.

Nonaccrual loans represent the fair value of those loans which have been adjusted due to impairment. The impairment is primarily based on the appraised value of the collateral.

Appraisals are obtained by licensed or certified appraisers at least annually and more recently in certain instances. All third-party appraisals are reviewed and any adjustments to the initial appraisal are incorporated into the final issued appraisal report. In instances where an appraisal is not obtained, collateral value is determined consistent with external third-party appraisal standards by an internal person independent of the asset manager.

OREO and Foreclosed Assets

The carrying value of OREO and foreclosed assets includes valuation adjustments recorded subsequent to the transfer to OREO and foreclosed assets. These valuation adjustments are based on the fair value less cost to sell of the property. Fair value is based on appraised value or sales price and the appraisal process for OREO and foreclosed assets is the same as described above for nonaccrual loans.

Long-Lived Assets

Long-lived assets consists of buildings for which valuation adjustments were recorded during the period. A facility classified as held and used is impaired to the extent its carrying value is not recoverable and exceeds fair value. Valuation adjustments on buildings held

for sale are based on the fair value of the property less an estimated cost to sell and are recorded subsequent to the transfer of the asset to held for sale status. Fair value is determined either by a third-party appraisal, recent sales offer, changes in market or property conditions, or, where we have agreed to sell the building to a third party, the contractual sales price. Impairment on these long-lived assets is recorded in Other noninterest expense on our Consolidated Income Statement.

Assets measured at fair value on a nonrecurring basis follow:

Table 86: Fair Value Measurements - Nonrecurring (a) (b) (c)

Year ended December 31	Fair Value		Gains (Losses)					
In millions	2020	2019		2020	2019	2018		
Assets								
Nonaccrual loans	\$ 332 \$	136	\$	(111) \$	(76) \$	(28)		
OREO and foreclosed assets	18	57		(2)	(5)	(7)		
Long-lived assets	20	5		(27)	(3)	(4)		
Total assets	\$ 370 \$	198	\$	(140) \$	(84) \$	(39)		

⁽a) All Level 3 for the periods presented.

Financial Instruments Accounted for under Fair Value Option

We elect the fair value option to account for certain financial instruments. For more information on these financial instruments for which the fair value option election has been made, refer to the Fair Value Measurement section of this Note 15. These financial instruments are initially measured at fair value. Gains and losses from initial measurement and any changes in fair value are subsequently recognized in earnings.

Interest income related to changes in the fair values of these financial instruments is recorded on the Consolidated Income Statement in Other interest income, except for certain Residential mortgage loans, for which income is also recorded in Loan interest income. Changes in the value on prepaid forward contracts included in Other assets is reported in Noninterest expense and interest expense on the Other borrowed funds is reported in Borrowed funds interest expense.

Fair values and aggregate unpaid principal balances of items for which we elected the fair value option follow

Table 87: Fair Value Option - Fair Value and Principal Balances

Table 87: Fair Value Option – Fair Value and Principal Balances								
	Ε	December 31, 2020	December 31, 2019					
In millions	Fair Value	Aggregate Unpaid Principal Balance	Difference		Fair Value	Aggregate Unpaid Principal Balance	Difference	
Assets								
Residential mortgage loans held for sale								
Accruing loans less than 90 days past due	\$ 831 \$	793 \$	38	\$	813 \$	792 \$	21	
Accruing loans 90 days or more past due	4	4			2	2		
Nonaccrual loans	20	24	(4)		4	4		
Total	\$ 855 \$	821 \$	34	\$	819 \$	798 \$	21	
Commercial mortgage loans held for sale (a)								
Accruing loans less than 90 days past due	\$ 357 \$	370 \$	(13)	\$	245 \$	263 \$	(18)	
Nonaccrual loans	5	6	(1)		1	2	(1)	
Total	\$ 362 \$	376 \$	(14)	\$	246 \$	265 \$	(19)	
Loans								
Accruing loans less than 90 days past due	\$ 519 \$	530 \$	(11)	\$	291 \$	304 \$	(13)	
Accruing loans 90 days or more past due	283	295	(12)		285	296	(11)	
Nonaccrual loans	563	820	(257)		166	265	(99)	
Total	\$ 1,365 \$	1,645 \$	(280)	\$	742 \$	865 \$	(123)	
Other assets	\$ 81 \$	69 \$	12	\$	132 \$	125 \$	7	
Liabilities								
Other borrowed funds	\$ 32 \$	33 \$	(1)	\$	63 \$	64 \$	(1)	

⁽a) There were no accruing loans 90 days or more past due within this category at December 31, 2020 or December 31, 2019.

Valuation techniques applied were fair value of property or collateral.

⁽c) Unobservable inputs used were appraised value/sales price, broker opinions or projected income/required improvement costs. Additional quantitative information was not meaningful for the periods presented.

The changes in fair value for items for which we elected the fair value option are as follows:

Table 88: Fair Value Option - Changes in Fair Value (a)

ssets Residential mortgage loans held for sale Commercial mortgage loans held for sale Loans	 Gains (Losses)										
In millions	2020	2019	2018								
Assets											
Residential mortgage loans held for sale	\$ 198 \$	84 \$	38								
Commercial mortgage loans held for sale	\$ 128 \$	61 \$	67								
Loans	\$ 44 \$	23 \$	24								
Other assets	\$ (3) \$	40 \$	(40)								

⁽a) The impact on earnings of offsetting hedged items or hedging instruments is not reflected in these amounts.

Additional Fair Value Information Related to Financial Instruments Not Recorded at Fair Value

This section presents fair value information for all other financial instruments that are not recorded on the Consolidated Balance Sheet at fair value. We used the following methods and assumptions to estimate the fair value amounts for these financial instruments.

Cash and Due from Banks and Interest-earning Deposits with Banks

Due to their short-term nature, the carrying amounts for Cash and due from banks and Interest-earning deposits with banks reported on our Consolidated Balance Sheet approximate fair value.

Securities Held to Maturity

We primarily use prices obtained from pricing services, dealer quotes or recent trades to determine the fair value of securities. Refer to the Fair Value Measurement section of this Note 15 for additional information relating to our pricing processes and procedures.

Net Loans

Fair values are estimated based on the discounted value of expected net cash flows incorporating assumptions about prepayment rates, net credit losses and servicing fees. Nonaccrual loans are valued at their estimated recovery value. Loans are presented net of the ALLL.

Other Assets

Other assets includes accrued interest receivable, cash collateral, federal funds sold and resale agreements, certain loans held for sale, and FHLB and FRB stock. The aggregate carrying value of our FHLB and FRB stock was \$1.1 billion and \$1.6 billion at December 31, 2020 and 2019, respectively, which approximated fair value at each date.

Deposits

For time deposits, fair values are estimated by discounting contractual cash flows using current market rates for instruments with similar maturities. For deposits with no defined maturity, such as noninterest-bearing and interest-bearing demand and interest-bearing money market and savings deposits, carrying values approximate fair values.

Borrowed Funds

For short-term borrowed funds, including federal funds purchased, commercial paper, repurchase agreements and certain other short-term borrowings and payables, carrying values approximated fair values. For long-term borrowed funds, quoted market prices are used, when available, to estimate fair value. When quoted market prices are not available, fair value is estimated based on current market interest rates and credit spreads for debt with similar terms and maturities.

Unfunded Lending Related Commitments and Letters of Credit

The fair value of unfunded lending related commitments and letters of credit is determined from a market participant's view including the impact of changes in interest rates and credit. We establish a liability on these facilities related to the creditworthiness of our counterparty.

Other Liabilities

Other liabilities includes interest-bearing cash collateral held related to derivatives and other accrued liabilities. Due to its short-term nature, the carrying value of Other liabilities reported on our Consolidated Balance Sheet approximates fair value.

The carrying amounts and estimated fair values, as well as the level within the fair value hierarchy, of these financial instruments as of December 31, 2020 and 2019 are as follows:

Table 89: Additional Fair Value Information Related to Other Financial Instruments

	 Carrying		Fair '	Value		
In millions	Amount	Total	Level 1		Level 2	Level 3
December 31, 2020						
Assets						
Cash and due from banks	\$ 7,017	\$ 7,017	\$ 7,017			
Interest-earning deposits with banks	85,173	85,173		\$	85,173	
Securities held to maturity	1,445	1,604	920		489	\$ 195
Net loans (excludes leases)	228,788	233,688				233,688
Other assets	 3,601	 3,600			3,559	41
Total assets	\$ 326,024	\$ 331,082	\$ 7,937	\$	89,221	\$ 233,924
Liabilities						
Time deposits	\$ 19,692	\$ 19,662		\$	19,662	
Borrowed funds	36,488	37,192			35,571	\$ 1,621
Unfunded lending related commitments	584	584				584
Other liabilities	 413	 413			413	
Total liabilities	\$ 57,177	\$ 57,851		\$	55,646	\$ 2,205
December 31, 2019						
Assets						
Cash and due from banks	\$ 5,061	\$ 5,061	\$ 5,061			
Interest-earning deposits with banks	23,413	23,413		\$	23,413	
Securities held to maturity	17,661	18,044	832		17,039	\$ 173
Net loans (excludes leases)	229,205	232,670				232,670
Other assets	 5,700	 5,700			5,692	8
Total assets	\$ 281,040	\$ 284,888	\$ 5,893	\$	46,144	\$ 232,851
Liabilities						
Time deposits	\$ 21,663	\$ 21,425		\$	21,425	
Borrowed funds	59,745	60,399			58,622	\$ 1,777
Unfunded lending related commitments	318	318				318
Other liabilities	506	506			506	
Total liabilities	\$ 82,232	\$ 82,648		\$	80,553	\$ 2,095

The aggregate fair values in Table 89 represent only a portion of the total market value of our assets and liabilities as, in accordance with the guidance related to fair values about financial instruments, we exclude the following:

- financial instruments recorded at fair value on a recurring basis (as they are disclosed in Table 83),
- · investments accounted for under the equity method,
- equity securities without a readily determinable fair value that apply for the alternative measurement approach to fair value under ASU 2016-01,
- · real and personal property,
- lease financing,
- loan customer relationships,
- · deposit customer intangibles,
- mortgage servicing rights (MSRs),
- · retail branch networks,
- fee-based businesses, such as asset management and brokerage,
- trademarks and brand names,
- · trade receivables and payables due in one year or less,
- deposit liabilities with no defined or contractual maturities under ASU 2016-01, and
- insurance contracts.

NOTE 16 FINANCIAL DERIVATIVES

We use a variety of financial derivatives to both mitigate exposure to market (primarily interest rate) and credit risks inherent in our business activities, as well as to facilitate customer risk management activities. We manage these risks as part of our overall asset and liability management process and through our credit policies and procedures. Derivatives represent contracts between parties that usually require little or no initial net investment and result in one party delivering cash or another type of asset to the other party based on a notional amount and an underlying as specified in the contract.

Derivative transactions are often measured in terms of notional amount, but this amount is generally not exchanged and it is not recorded on the balance sheet. The notional amount is the basis to which the underlying is applied to determine required payments under the derivative contract. The underlying is a referenced interest rate, security price, credit spread or other index. Residential and commercial real estate loan commitments associated with loans to be sold also qualify as derivative instruments.

The following table presents the notional amounts and gross fair values of all derivative assets and liabilities held by us:

Table 90: Total Gross Derivatives (a)

		Deceml	per 31, 2020		Decem	December 31, 2019				
In millions		Notional /Contract Amount	Asset Fair Value (b)	Liability Fair Value (c)	Notional /Contract Amount	Asset Fair Value (b)	Liability Fair Value (c)			
Derivatives used for hedging		Amount	value (b)	value (c)	7 tillount	varue (b)	varue (c)			
Interest rate contracts (d):										
Fair value hedges	\$	24.153		9	30,663					
Cash flow hedges	*	22,875 \$	14		23,642 \$	6				
Foreign exchange contracts:		,			.,.					
Net investment hedges		1,075	\$	22	1,102	\$	6			
Total derivatives designated for hedging	\$	48,103 \$	14 \$	22 5	55,407 \$	6 \$	6			
Derivatives not used for hedging		·			·					
Derivatives used for mortgage banking activities (e):										
Interest rate contracts:										
Swaps	\$	50,511		9	52,007 \$	1				
Futures (f)		2,841			3,487					
Mortgage-backed commitments		11,288 \$	147 \$	77	7,738	60 \$	44			
Other		1,831	11	2	3,134	32	23			
Total interest rate contracts		66,471	158	79	66,366	93	67			
Derivatives used for customer-related activities:										
Interest rate contracts:										
Swaps		280,125	5,475	1,601	249,075	2,769	1,187			
Futures (f)		1,235			703					
Mortgage-backed commitments		4,178	11	14	3,721	2	6			
Other		20,125	193	88	21,379	113	33			
Total interest rate contracts		305,663	5,679	1,703	274,878	2,884	1,226			
Commodity contracts:										
Swaps		6,149	350	323	5,204	234	229			
Other		2,770	61	61	4,203	72	72			
Total commodity contracts		8,919	411	384	9,407	306	301			
Foreign exchange contracts and other		26,620	267	243	27,120	204	162			
Total derivatives for customer-related activities		341,202	6,357	2,330	311,405	3,394	1,689			
Derivatives used for other risk management activities:										
Foreign exchange contracts and other		10,931	4	325	10,201	9	257			
Total derivatives not designated for hedging	\$	418,604 \$	6,519 \$	2,734	387,972 \$	3,496 \$	2,013			
Total gross derivatives	\$	466,707 \$	6,533 \$	2,756	\$ 443,379 \$	3,502 \$	2,019			
Less: Impact of legally enforceable master netting agreements			720	720		690	690			
Less: Cash collateral received/paid			1,434	1,452		616	790			
Total derivatives		\$	4,379 \$	584	\$	2,196 \$	539			

Centrally cleared derivatives are settled in cash daily and result in no derivative asset or derivative liability being recognized on our Consolidated Balance Sheet.

Included in Other assets on our Consolidated Balance Sheet. Included in Other liabilities on our Consolidated Balance Sheet

Includes both residential and commercial mortgage banking activities.

Futures contracts are settled in cash daily and result in no derivative asset or derivative liability being recognized on our Consolidated Balance Sheet.

All derivatives are carried on our Consolidated Balance Sheet at fair value. Derivative balances are presented on the Consolidated Balance Sheet on a net basis taking into consideration the effects of legally enforceable master netting agreements and, when appropriate, any related cash collateral exchanged with counterparties. Further discussion regarding the offsetting rights associated with these legally enforceable master netting agreements is included in the Offsetting, Counterparty Credit Risk, and Contingent Features section of this Note 16. Any nonperformance risk, including credit risk, is included in the determination of the estimated net fair value of the derivatives. Further discussion on how derivatives are accounted for is included in Note 1 Accounting Policies.

Derivatives Designated As Hedging Instruments

Certain derivatives used to manage interest rate and foreign exchange risk as part of our asset and liability risk management activities are designated as accounting hedges. Derivatives hedging the risks associated with changes in the fair value of assets or liabilities are considered fair value hedges, derivatives hedging the variability of expected future cash flows are considered cash flow hedges, and derivatives hedging a net investment in a foreign subsidiary are considered net investment hedges. Designating derivatives as accounting hedges allows for gains and losses on those derivatives to be recognized in the same period and in the same income statement line item as the earnings impact of the hedged items.

Fair Value Hedges

We enter into receive-fixed, pay-variable interest rate swaps to hedge changes in the fair value of outstanding fixed-rate debt caused by fluctuations in market interest rates. We also enter into pay-fixed, receive-variable interest rate swaps and zero-coupon swaps to hedge changes in the fair value of fixed rate and zero-coupon investment securities caused by fluctuations in market interest rates. Gains and losses on the interest rate swaps designated in these hedge relationships, along with the offsetting gains and losses on the hedged items attributable to the hedged risk, are recognized in current earnings within the same income statement line item.

Cash Flow Hedges

We enter into receive-fixed, pay-variable interest rate swaps to modify the interest rate characteristics of designated commercial loans from variable to fixed in order to reduce the impact of changes in future cash flows due to market interest rate changes. We also periodically enter into forward purchase and sale contracts to hedge the variability of the consideration that will be paid or received related to the purchase or sale of investment securities. The forecasted purchase or sale is consummated upon gross settlement of the forward contract itself. For these cash flow hedges, gains and losses on the interest rate swaps and forward contracts are recorded in AOCI and are then reclassified into earnings in the same period the hedged cash flows affect earnings and within the same income statement line as the hedged cash flows.

In the 12 months that follow December 31, 2020, we expect to reclassify net derivative gains of \$276 million pretax, or \$213 million after-tax, from AOCI to interest income for both cash flow hedge strategies. This reclassified amount could differ from amounts actually recognized due to changes in interest rates, hedge de-designations and the addition of other hedges subsequent to December 31, 2020. As of December 31, 2020, the maximum length of time over which forecasted transactions are hedged is ten years.

160 The PNC Financial Services Group, Inc. - 2020 Form 10-K

Further detail regarding gains (losses) related to our fair value and cash flow hedge derivatives is presented in the following table:

Table 91: Gains (Losses) Recognized on Fair Value and Cash Flow Hedges in the Consolidated Income Statement (a) (b)

	 Loc	ation and Amount of Gains (Lo	osses) Recognized in Inco	ome
	 Interest	Income	Interest Expense	Noninterest Income
In millions	 Loans	Investment Securities	Borrowed Funds	Other
Year ended December 31, 2020				
Total amounts on the Consolidated Income Statement	\$ 8,927 \$	2,041 \$	718 \$	1,364
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)	\$	208 \$	(1,059)	
Derivatives	\$	(202) \$	959	
Amounts related to interest settlements on derivatives	\$	(9) \$	480	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	\$ 375 \$	40	\$	6
Year ended December 31, 2019				
Total amounts on the Consolidated Income Statement	\$ 10,525 \$	2,426 \$	1,811 \$	1,473
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)	\$	187 \$	(808)	
Derivatives	\$	(178) \$	659	
Amounts related to interest settlements on derivatives	\$	13 \$	79	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	\$ 9 \$	9	\$	19
Year ended December 31, 2018				
Total amounts on the Consolidated Income Statement	\$ 9,580 \$	2,261 \$	1,632 \$	1,205
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)	\$	(53) \$	151	
Derivatives	\$	60 \$	(262)	
Amounts related to interest settlements on derivatives	\$	3 \$	80	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	\$ 41 \$	11	\$	8

⁽a) For all periods presented, there were no components of derivative gains or losses excluded from the assessment of hedge effectiveness for any of the fair value or cash flow hedge strategies.

Detail regarding the impact of fair value hedge accounting on the carrying value of the hedged items is presented in the following table:

Table 92: Hedged Items - Fair Value Hedges

	 Decembe	r 31, 2020	Decembe	r 31, 2019
In millions	Carrying Value of the Hedged Items	Cumulative Fair Value Hedge Adjustment included in the Carrying Value of Hedged Items (a)	Carrying Value of the Hedged Items	Cumulative Fair Value Hedge Adjustment included in the Carrying Value of Hedged Items (a)
Investment securities - available for sale (b)	\$ 2,785	\$ 30	\$ 5,666	\$ 59
Borrowed funds	\$ 25,797	\$ 1,611	\$ 28,616	\$ 548

⁽a) Includes \$(0.1) billion and \$(0.3) billion of fair value hedge adjustments primarily related to discontinued borrowed funds hedge relationships at December 31, 2020 and 2019, respectively.

Net Investment Hedges

We enter into foreign currency forward contracts to hedge non-U.S. dollar net investments in foreign subsidiaries against adverse changes in foreign exchange rates. We assess whether the hedging relationship is highly effective in achieving offsetting changes in the value of the hedge and hedged item by qualitatively verifying that the critical terms of the hedge and hedged item match at the inception of the hedging relationship and on an ongoing basis. Net investment hedge derivatives are classified as foreign exchange contracts. There were no components of derivative gains or losses excluded from the assessment of the hedge effectiveness for all periods presented. Net gains (losses) on net investment hedge derivatives recognized in OCI were \$(24) million at both 2020 and 2019 and \$76 million in 2018.

⁽b) All cash flow and fair value hedge derivatives were interest rate contracts for the periods presented.

⁽c) Includes an insignificant amount of fair value hedge adjustments related to discontinued hedge relationships.
(d) For all periods presented, there were no gains or losses from cash flow hedge derivatives reclassified to income because it became probable that the original forecasted transaction would not occur.

⁽b) Carrying value shown represents amortized cost.

Derivatives Not Designated As Hedging Instruments

Residential mortgage loans that will be sold in the secondary market, and the related loan commitments, which are considered derivatives, are accounted for at fair value. Changes in the fair value of the loans and commitments due to interest rate risk are hedged with forward contracts to sell mortgage-backed securities, as well as U.S. Treasury and Eurodollar futures and options. Gains and losses on the loans and commitments held for sale and the derivatives used to economically hedge them are included in Residential mortgage noninterest income on the Consolidated Income Statement.

Residential mortgage servicing rights are accounted for at fair value with changes in fair value influenced primarily by changes in interest rates. Derivatives used to hedge the fair value of residential mortgage servicing rights include interest rate futures, swaps, options, and forward contracts to purchase mortgage-backed securities. Gains and losses on residential mortgage servicing rights and the related derivatives used for hedging are included in Residential mortgage noninterest income.

Commercial mortgage loans held for sale and the related loan commitments, which are considered derivatives, are accounted for at fair value. Derivatives used to economically hedge these loans and commitments from changes in fair value due to interest rate risk include forward loan sale contracts and interest rate swaps. Gains and losses on the commitments, loans and derivatives are included in Other noninterest income. Derivatives used to economically hedge the change in value of commercial mortgage servicing rights include interest rate futures, swaps and options. Gains or losses on these derivatives are included in Corporate services noninterest income.

The residential and commercial mortgage loan commitments associated with loans to be sold which are accounted for as derivatives are valued based on the estimated fair value of the underlying loan and the probability that the loan will fund within the terms of the commitment. The fair value also takes into account the fair value of the embedded servicing right.

We offer derivatives to our customers in connection with their risk management needs. These derivatives primarily consist of interest rate swaps, interest rate caps and floors, swaptions and foreign exchange contracts. We primarily manage our market risk exposure from customer transactions by entering into a variety of hedging transactions with third-party dealers. Gains and losses on customer-related derivatives are included in Other noninterest income.

Included in the customer, mortgage banking risk management, and other risk management portfolios are written interest-rate caps and floors entered into with customers and for risk management purposes. We receive an upfront premium from the counterparty and are obligated to make payments to the counterparty if the underlying market interest rate rises above or falls below a certain level designated in the contract. Our ultimate obligation under written options is based on future market conditions.

We have entered into risk participation agreements to share some of the credit exposure with other counterparties related to interest rate derivative contracts or to take on credit exposure to generate revenue. The notional amount of risk participation agreements sold was \$7.0 billion at December 31, 2020 and \$8.0 billion at December 31, 2019. Assuming all underlying third party customers referenced in the swap contracts defaulted, the exposure from these agreements would be \$0.5 billion at December 31, 2020 and \$0.3 billion at December 31, 2019 based on the fair value of the underlying swaps.

Further detail regarding the gains (losses) on derivatives not designated in hedging relationships is presented in the following table:

Table 93: Gains (Losses) on Derivatives Not Designated for Hedging

	 Y	ear ended Dece	mber	31	
In millions	 2020		2019		2018
Derivatives used for mortgage banking activities:					
Interest rate contracts (a)	\$ 792	\$	405	\$	(56)
Derivatives used for customer-related activities:					
Interest rate contracts	210		125		99
Foreign exchange contracts and other	156		114		104
Gains (losses) from customer-related activities (b)	366		239		203
Derivatives used for other risk management activities:					
Foreign exchange contracts and other (b)	(338)	(137)		268
Total gains (losses) from derivatives not designated as hedging instruments	\$ 820	\$	507	\$	415

- (a) Included in Residential mortgage, Corporate services and Other noninterest income on our Consolidated Income Statement.
- (b) Included in Other noninterest income on our Consolidated Income Statement

Offsetting, Counterparty Credit Risk, and Contingent Features

We generally utilize a net presentation on the Consolidated Balance Sheet for those derivative financial instruments entered into with counterparties under legally enforceable master netting agreements. The master netting agreements reduce credit risk by permitting the closeout netting of all outstanding derivative instruments under the master netting agreement with the same counterparty upon the occurrence of an event of default. The master netting agreement also may require the exchange of cash or marketable securities to collateralize either party's net position. In certain cases, minimum thresholds must be exceeded before any collateral is exchanged. Collateral is typically exchanged daily on unsettled positions based on the net fair value of the positions with the counterparty as of the preceding day. Collateral representing initial margin, which is based on potential future exposure, is also required to be pledged by us in relation to derivative instruments with central clearing house counterparties. Any cash collateral exchanged with counterparties under these master netting agreements is also netted, when appropriate, against the applicable derivative fair values on the Consolidated Balance Sheet. However, the fair value of any securities held or pledged is not included in the net presentation on the balance sheet. In order for derivative instruments under a master netting agreement to be eligible for closeout netting under GAAP, we must conduct sufficient legal review to conclude with a well-founded basis that the offsetting rights included in the master netting agreement would be legally enforceable upon an event of default, including upon an event of bankruptcy, insolvency, or a similar proceeding of the counterparty. Enforceability is evidenced by a legal opinion that supports, with sufficient confidence, the enforceability of the master netting agreement in such circumstances.

Table 94 shows the impact legally enforceable master netting agreements had on our derivative assets and derivative liabilities as of December 31, 2020 and 2019. The table includes cash collateral held or pledged under legally enforceable master netting agreements. The table also includes the fair value of any securities collateral held or pledged under legally enforceable master netting agreements. Cash and securities collateral amounts are included in the table only to the extent of the related net derivative fair values.

Table 94 includes over-the-counter (OTC) derivatives and OTC derivatives cleared through a central clearing house. OTC derivatives represent contracts executed bilaterally with counterparties that are not settled through an organized exchange or directly cleared through a central clearing house. The majority of OTC derivatives are governed by the ISDA documentation or other legally enforceable master netting agreements. OTC cleared derivatives represent contracts executed bilaterally with counterparties in the OTC market that are novated to a central clearing house who then becomes our counterparty. OTC cleared derivative instruments are typically settled in cash each day based on the prior day value.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 163

Table 94: Derivative Assets and Liabilities Offsetting

	·		Am	ounts Offset on the She	olidated Balance				
				Fair Value				Securities ateral Held /Pledged Under	
In millions	Gro	ss Fair Value		Offset Amount	Cash Collateral	Net Fair Value	1	Master Netting Agreements	Net Amounts
December 31, 2020									
Derivative assets									
Interest rate contracts:									
Over-the-counter cleared	\$	48				\$ 48			\$ 48
Over-the-counter		5,803	\$	430	\$ 1,426	3,947	\$	531	3,416
Commodity contracts		411		209	4	198			198
Foreign exchange and other contracts		271		81	4	186		1	185
Total derivative assets	\$	6,533	\$	720	\$ 1,434	\$ 4,379 (a)	\$	532	\$ 3,847
Derivative liabilities									
Interest rate contracts:									
Over-the-counter cleared	\$	42				\$ 42			\$ 42
Over-the-counter		1,740	\$	462	\$ 1,179	99			99
Commodity contracts		384		182	103	99			99
Foreign exchange and other contracts		590		76	170	344			344
Total derivative liabilities	\$	2,756	\$	720	\$ 1,452	\$ 584 (b)			\$ 584
December 31, 2019									
Derivative assets									
Interest rate contracts:									
Over-the-counter cleared	\$	14				\$ 14			\$ 14
Over-the-counter		2,969	\$	365	\$ 593	2,011	\$	215	1,796
Commodity contracts		306		198	18	90			90
Foreign exchange and other contracts		213		127	5	81			81
Total derivative assets	\$	3,502	\$	690	\$ 616	\$ 2,196 (a)	\$	215	\$ 1,981
Derivative liabilities									
Interest rate contracts:									
Over-the-counter cleared	\$	14				\$ 14			\$ 14
Over-the-counter		1,279	\$	475	\$ 692	112			112
Commodity contracts		301		152	17	132			132
Foreign exchange and other contracts		425		63	81	281			281
Total derivative liabilities	\$	2,019	\$	690	\$ 790	\$ 539 (b)			\$ 539

⁽a) Represents the net amount of derivative assets included in Other assets on our Consolidated Balance Sheet.

Represents the net amount of derivative liabilities included in Other liabilities on our Consolidated Balance Sheet.

In addition to using master netting agreements and other collateral agreements to reduce credit risk associated with derivative instruments, we also seek to manage credit risk by evaluating credit ratings of counterparties and by using internal credit analysis, limits, and monitoring procedures.

At December 31, 2020, we held cash, U.S. government securities and mortgage-backed securities totaling \$\mathbb{L}\$. 3 billion under master netting agreements and other collateral agreements to collateralize net derivative assets due from counterparties, and we pledged cash totaling \$1.9 billion under these agreements to collateralize net derivative liabilities owed to counterparties and to meet initial margin requirements. These totals may differ from the amounts presented in the preceding offsetting table because these totals may include collateral exchanged under an agreement that does not qualify as a master netting agreement or because the total amount of collateral held or pledged exceeds the net derivative fair values with the counterparty as of the balance sheet date due to timing or other factors, such as initial margin. To the extent not netted against the derivative fair values under a master netting agreement, the receivable for cash pledged is included in Other assets and the obligation for cash held is included in Other liabilities on our Consolidated Balance Sheet. Securities held from counterparties are not recognized on our balance sheet. Likewise, securities we have pledged to counterparties remain on our balance sheet.

Certain derivative agreements contain various credit-risk related contingent provisions, such as those that require our debt to maintain a specified credit rating from one or more of the major credit rating agencies. If our debt ratings were to fall below such specified ratings, the counterparties to the derivative instruments could request immediate payment or demand immediate and ongoing full collateralization on derivative instruments in net liability positions. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a net liability position on December 31, 2020 was \$1.6 billion for which we had posted collateral of \$1.4 billion in the normal course of business. The maximum additional amount of collateral we would have been required

to post if the credit-risk related contingent features underlying these agreements had been triggered on December 31, 2020 would be \$0.2 billion.

NOTE 17 EMPLOYEE BENEFIT PLANS

Pension and Postretirement Plans

We have a noncontributory, qualified defined benefit pension plan covering eligible employees. Benefits are determined using a cash balance formula where earnings credits are a percentage of eligible compensation. Earnings credit percentages for those employees who were plan participants on December 31, 2009 are frozen at the level earned to that point. Earnings credits for all employees who became participants on or after January 1, 2010 are a flat 3% of eligible compensation. All plan participants earn interest credits on their cash balances based on 30-year Treasury securities rates with those who were participants at December 31, 2009 earning a minimum rate. New participants on or after January 1, 2010 are not subject to the minimum rate. Beginning in 2018, the plan provides for a minimum annual earnings credit amount of \$2,000, subject to eligibility criteria. Pension contributions to the plan are typically based on an actuarially determined amount necessary to fund total benefits payable to plan participants. Assets of the qualified pension plan are held in a separate Trust.

We also maintain nonqualified supplemental retirement plans for certain employees and provide certain health care and life insurance benefits for qualifying retired employees (postretirement benefits) through various plans. PNC reserves the right to terminate or make changes to these plans at any time. The nonqualified pension plan is unfunded. Contributions from PNC and, in the case of the postretirement benefit plans, participant contributions cover all benefits paid under the nonqualified pension plan and postretirement benefit plans. The postretirement plan provides benefits to certain retirees that are at least actuarially equivalent to those provided by Medicare Part D and accordingly, we receive a federal subsidy. PNC has established a VEBA to partially fund postretirement medical and life insurance benefit obligations.

We use a measurement date of December 31 for plan assets and benefit obligations. The qualified pension plan assets and benefit obligation were re-measured as of January 31, 2019 as a result of a plan amendment.

A reconciliation of the changes in the projected benefit obligation for qualified pension, nonqualified pension and postretirement benefit plans as well as the change in plan assets for the qualified pension plan follows:

The PNC Financial Services Group, Inc. - 2020 Form 10-K 165

Table 95: Reconciliation of Changes in Projected Benefit Obligation and Change in Plan Assets

	Qualified Pension (a)					Nonqu Pen	aalifieo sion	d	Postretirement Benefits			
In millions		2020		2019		2020		2019		2020		2019
Accumulated benefit obligation at December 31	\$	5,117	\$	4,740	\$	258	\$	259				
Projected benefit obligation at January 1	\$	4,887	\$	4,355	\$	265	\$	258	\$	333	\$	322
Service cost		122		115		3		3		4		4
Interest cost		160		186		8		10		11		13
Amendments				21								
Actuarial (gains)/losses and changes in assumptions		306		498		17		25		11		18
Participant contributions										3		3
Benefits paid		(301)		(288)		(30)		(31)		(25)		(27)
Projected benefit obligation at December 31	\$	5,174	\$	4,887	\$	263	\$	265	\$	337	\$	333
Fair value of plan assets at January 1	\$	5,654	\$	4,963					\$	247	\$	232
Actual return on plan assets		720		979						14		15
Employer contribution					\$	30	\$	31		23		24
Participant contributions										3		3
Benefits paid		(301)		(288)		(30)		(31)		(25)		(27)
Fair value of plan assets at December 31	\$	6,073	\$	5,654					\$	262	\$	247
Funded status	\$	899	\$	767	\$	(263)	\$	(265)	\$	(75)	\$	(86)
Amounts recognized on the consolidated balance sheet												
Noncurrent asset	\$	899	\$	767								
Current liability					\$	(25)	\$	(26)	\$	(2)	\$	(2)
Noncurrent liability						(238)		(239)		(73)		(84)
Net amount recognized on the consolidated balance sheet	\$	899	\$	767	\$	(263)	\$	(265)	\$	(75)	\$	(86)
Amounts recognized in AOCI consist of:												
Prior service cost (credit)	\$	25	\$	29					\$	2	\$	2
Net actuarial loss (gain)		299		411	\$	90	\$	78		4		1
Amount of loss (gain) recognized in AOCI	\$	324	\$	440	\$	90	\$	78	\$	6	\$	3

⁽a) The actuarial (gains)/losses and changes in assumptions in 2020 and 2019 were primarily related to a change in the discount rate used to measure the projected benefit obligation.

PNC Pension Plan Assets

The long-term investment strategy for pension plan assets in our qualified pension plan (the Plan) is to:

- Meet present and future benefit obligations to all participants and beneficiaries;
- · Cover reasonable expenses incurred to provide such benefits, including expenses incurred in the administration of the Trust and the Plan;
- · Provide sufficient liquidity to meet benefit and expense payment requirements on a timely basis; and
- Provide a total return that, over the long term, maximizes the ratio of trust assets to liabilities by maximizing investment return, at an appropriate level of risk.

The Plan's named investment fiduciary has the ability to make short to intermediate term asset allocation shifts under the dynamic asset allocation strategy based on factors such as the Plan's funded status, the named investment fiduciary's view of return on equities relative to long term expectations, the named investment fiduciary's view on the direction of interest rates and credit spreads, and other relevant financial or economic factors which would be expected to impact the ability of the Trust to meet its obligation to participants and beneficiaries. Accordingly, the allowable asset allocation ranges have been updated to incorporate the flexibility required by the dynamic allocation policy.

The asset strategy allocations for the Plan at the end of 2020 and 2019, and the target allocation range at the end of 2020, by asset category, are as follows.

Table 96: Asset Strategy Allocations

	Target Allocation Range Perce	entage of Plan Assets by Strategy	at December 31
		2020	2019
Asset Category			
Domestic Equity	15 - 40%	23 %	27 %
International Equity	10 - 25%	18 %	17 %
Private Equity	0 - 15%	10 %	10 %
Total Equity	30 – 70%	51 %	54 %
Domestic Fixed Income	10 – 40%	25 %	23 %
High Yield Fixed Income	0 - 25%	8 %	8 %
Total Fixed Income	10 – 65%	33 %	31 %
Real estate	0 – 10%	5 %	5 %
Other	0 - 20%	11 %	10 %
Total	100%	100 %	100 %

The asset category represents the allocation of Plan assets in accordance with the investment objective of each of the Plan's investment managers. Certain domestic equity investment managers utilize derivatives and fixed income securities as described in their Investment Management Agreements to achieve their investment objective under the Investment Policy Statement. Other investment managers may invest in eligible securities outside of their assigned asset category to meet their investment objectives. The actual percentage of the fair value of total Plan assets held as of December 31, 2020 for equity securities, fixed income securities, real estate and all other assets are 61%, 21%, 5% and 13%, respectively.

We believe that, over the long term, asset allocation is the single greatest determinant of risk. Asset allocation will deviate from the target percentages due to market movement, cash flows, investment manager performance and implementation of shifts under the dynamic asset allocation policy. Material deviations from the asset allocation targets can alter the expected return and risk of the Trust. However, frequent rebalancing of the asset allocation targets may result in significant transaction costs, which can impair the Trust's ability to meet its investment objective. Accordingly, the Trust portfolio is periodically rebalanced to maintain asset allocation within the target ranges described above.

In addition to being diversified across asset classes, the Trust is diversified within each asset class. Secondary diversification provides a reasonable basis for the expectation that no single security or class of securities will have a disproportionate impact on the total risk and return of the Trust.

Where investment strategies permit the use of derivatives and/or currency management, language is incorporated in the managers' guidelines to define allowable and prohibited transactions and/or strategies. Derivatives are typically employed by investment managers to modify risk/return characteristics of their portfolio(s), implement asset allocation changes in a cost effective manner, or reduce transaction costs. Under the managers' investment guidelines, derivatives may not be used solely for speculation or leverage. Derivatives are to be used only in circumstances where they offer the most efficient economic means of improving the risk/reward profile of the portfolio.

Fair Value Measurements

As further described in Note 15 Fair Value, GAAP establishes the framework for measuring fair value, including a hierarchy used to classify the inputs used in measuring fair value

A description of the valuation methodologies used for assets measured at fair value at both December 31, 2020 and 2019 follows:

<u>Asset</u>	<u>Valuation Methodology</u>
Money market funds	Valued at the net asset value of the shares held by the pension plan at year end.
U.S. government and agency securities	 Valued at the closing price reported on the active market on which the individual securities are traded.
Corporate debt Common stock	 If quoted market prices are not available for the specific security, then fair values are estimated by using pricing models or quoted prices of securities with similar characteristics. Such securities are generally classified within Level 2 of the valuation hierarchy but may be a Level 3 depending on the level of liquidity and activity in the market for the security.
Mutual funds	Valued based on third-party pricing of the fund which is not actively traded.
Other investments Derivative financial instruments Group annuity contracts	 Derivative financial instruments - recorded at estimated fair value as determined by third-party appraisals and pricing models. Group annuity contracts - measured at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer. Preferred stock - Valued at the closing price reported on an active market on which the securities are traded.
Preferred stock	
Investments measured at NAV Collective trust fund investments Limited partnerships	 Collective trust fund investments - Valued based upon the units of such collective trust fund held by the Plan at year end multiplied by the respective unit value. The unit value of the collective trust fund is based upon significant observable inputs, although it is not based upon quoted prices in an active market. The underlying investments of the collective trust funds consist primarily of equity securities, debt obligations, short-term investments, and other marketable securities. Due to the nature of these securities, there are no unfunded commitments or redemption restrictions.
	 Limited partnerships - Valued by investment managers based on recent financial information used to estimate fair value. The unit value of limited partnerships is based upon significant observable inputs, although it is not based upon quoted marked prices in an active market.

These methods may result in fair value calculations that may not be indicative of net realizable values or future fair values. Furthermore, while the pension plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2020 and 2019.

Table 97: Pension Plan Assets - Fair Value Hierarchy

		Decembe	r 31, 2	2020		December 31, 2019								
In millions	 Level 1	Level 2		Level 3	Total Fair Value		Level 1		Level 2		Level 3		Total Fair Value	
Interest bearing cash								\$	1			\$	1	
Money market funds	\$ 572				\$ 572	\$	456						456	
U.S. government and agency securities	446	\$ 126			572		582		135	\$	1		718	
Corporate debt		730	\$	3	733				660		3		663	
Common stock	738			1	739		620		1		4		625	
Mutual funds		290			290				253				253	
Other	1	214			215				126				126	
Investments measured at net asset value (a)					2,952								2,812	
Total	\$ 1,757	\$ 1,360	\$	4	\$ 6,073	\$	1,658	\$	1,176	\$	8	\$	5,654	

⁽a) Certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

The following table provides information regarding our estimated future cash flows related to our various plans.

Table 98: Estimated Cash Flows

	Pension Plans			Postretirement Benefits	
In millions	Qualified Pension		Nonqualified Pension		
Estimated 2021 employer contributions		\$	25	\$	24
Estimated future benefit payments					
2021	\$ 292	\$	25	\$	24
2022	\$ 304	\$	22	\$	23
2023	\$ 317	\$	22	\$	23
2024	\$ 306	\$	21	\$	23
2025	\$ 303	\$	20	\$	22
2026-2030	\$ 1,476	\$	89	\$	104

The qualified pension plan contributions are deposited into the Trust, and the qualified pension plan benefit payments are paid from the Trust. We do not expect to be required to make a contribution to the qualified plan for 2021 based on the funding calculations under the Pension Protection Act of 2006. For the other plans, total contributions and the benefit payments are the same and represent expected benefit amounts, which are paid from general assets. Postretirement benefits are net of participant contributions. Estimated cash flows reflect the partial funding of postretirement medical and life insurance obligations in the VEBA.

The components of net periodic benefit cost/(income) and other amounts recognized in OCI were as follows:

Table 99: Components of Net Periodic Benefit Cost (a)

	Qualified Pension Plan			Nonqualified Pension Plan			Postretirement Benefits				
Year ended December 31 – in millions	2020	2019 (b)	2018		2020	2019	2018		2020	2019	2018
Net periodic cost consists of:											
Service cost	\$ 122 \$	115 \$	116	\$	3 \$	3 \$	3	\$	4 \$	4 \$	5
Interest cost	160	186	171		8	10	9		11	13	12
Expected return on plan assets	(302)	(288)	(306)						(6)	(5)	(6)
Amortization of prior service cost/(credit)	4	4	1								
Amortization of actuarial (gain)/loss		4			5	4	5				
Net periodic cost (benefit)	\$ (16)\$	21 \$	(18)	\$	16 \$	17 \$	17	\$	9 \$	12 \$	11
Other changes in plan assets and benefit obligations recognized in OCI:											
Current year prior service cost/(credit)		21									
Amortization of prior service (cost)/credit	(4)	(4)	(1)								
Current year actuarial loss/(gain)	(112)	(193)	75		17	25	(16)		3	9	(25)
Amortization of actuarial gain/(loss)		(4)			(5)	(4)	(5)				
Total recognized in OCI	\$ (116)\$	(180) \$	74	\$	12 \$	21 \$	(21)	\$	3 \$	9 \$	(25)
Total amounts recognized in net periodic cost and OCI	\$ (132) \$	(159) \$	56	\$	28 \$	38 \$	(4)	\$	12 \$	21 \$	(14)

⁽a) The service cost component is included in Personnel expense on the Consolidated Income Statement. All other components are included in Other noninterest expense on the Consolidated Income Statement.

⁽b) Includes the effects of the qualified pension plan remeasurement as of January 31, 2019 as a result of a plan amendment.

The weighted-average assumptions used (as of the beginning of each year) to determine the net periodic costs shown in Table 99 were as follows:

Table 100: Net Periodic Costs - Assumptions

	Net Period	Net Periodic Cost Determination				
of January 1	2020	2019	2018			
count rate						
Qualified pension (a)	3.30 %	4.30 %	3.60 %			
Ionqualified pension	3.05 %	4.15 %	3.45 %			
ostretirement benefits	3.20 %	4.20 %	3.55 %			
te of compensation increase (average) (b)	4.25 %	3.50 %	3.50 %			
erest crediting rate (average)						
ualified Pension	3.85 %	3.95 %	3.90 %			
onqualified pension	4.15 %	4.20 %	4.20 %			
ostretirement benefits	2.05 %	3.05 %	2.35 %			
sumed health care cost trend rate (c)						
nitial trend	6.25 %	6.50 %	6.75 %			
Iltimate trend	5.00 %	5.00 %	5.00 %			
'ear ultimate trend reached	2025	2025	2025			
pected long-term return on plan assets (b)	5.50 %	5.75 %	6.00 %			

- (a) The 2019 qualified pension discount rate was 4.15% at the time of remeasurement on January 31, 2019 as a result of a plan amendment.
- (b) Rate disclosed is for the qualified pension plan.
- (c) Rate is applicable only to the postretirement benefit plan.

The weighted-average assumptions used (as of the end of each year) to determine year end obligations for pension and postretirement benefits were as follows:

Table 101: Other Pension Assumptions

Tuble 101. Other I ension Assumptions		
Year ended December 31	2020	2019
Discount rate		
Qualified pension	2.55 %	3.30 %
Nonqualified pension	2.10 %	3.05 %
Postretirement benefits	2.40 %	3.20 %
Rate of compensation increase (average) (a)	4.25 %	4.25 %
Interest crediting rate (average)		
Qualified pension	3.70 %	3.85 %
Nonqualified pension	4.00 %	4.15 %
Postretirement benefits	1.30 %	2.05 %
Assumed health care cost trend rate (b)		
Initial trend	6.00 %	6.25 %
Ultimate trend	5.00 %	5.00 %
Year ultimate trend reached	2025	2025

- (a) Rate disclosed is for the qualified pension plan.
- (b) Rate is applicable only to the postretirement benefit plans.

The discount rates are determined independently for each plan by comparing the expected future benefits that will be paid under each plan with yields available on high quality corporate bonds of similar duration. For this analysis, 10% of bonds with the highest yields and 40% with the lowest yields were removed from the bond universe.

The expected return on plan assets is a long-term assumption established by considering historical and anticipated returns of the asset classes invested in by the pension plan and the allocation strategy currently in place among those classes. For purposes of setting and reviewing this assumption, "long-term" refers to the period over which the plan's projected benefit obligations will be disbursed. We review this assumption at each measurement date and adjust it if warranted. Our selection process references certain historical data and the current environment, but primarily utilizes qualitative judgment regarding future return expectations. We also examine the assumption used by other companies with similar pension investment strategies. Taking into account all of these factors, the expected long-term return on plan assets for determining net periodic pension cost for 2020 was 5.50%. We are reducing our expected long-term return on assets to 4.55% for determining pension cost for 2021. This decision was made after considering the views of both internal and external capital market advisors, particularly with regard to the effects of the recent economic environment on long-term prospective equity and fixed income returns.

With all other assumptions held constant, a 0.50% decline in the discount rate would have resulted in an immaterial change in net periodic benefit cost in 2020 and to be recognized in 2021 for each of the qualified pension, nonqualified pension and postretirement benefit plans.

Defined Contribution Plans

The ISP is a qualified defined contribution plan that covers all of our eligible employees. Newly-hired full time employees and part-time employees who are eligible to participate in the ISP are automatically enrolled in the ISP with a deferral rate equal to 4% of eligible compensation in the absence of an affirmative election otherwise. Employee benefits expense related to the ISP was \$147 million in 2020, \$139 million in 2019 and \$139 million in 2018, representing cash contributed to the ISP by PNC.

The ISP is a 401(k) Plan and includes an employee stock ownership feature. Employee contributions are invested in a number of investment options, including pre-mixed portfolios and individual core funds, available under the ISP at the direction of the employee.

NOTE 18 STOCK BASED COMPENSATION PLANS

We have long-term incentive award plans (Incentive Plans) that provide for the granting of incentive stock options, nonqualified stock options, stock appreciation rights, incentive shares/performance units, restricted share units, other share-based awards and dollar-denominated awards to executives and, other than incentive stock options, to non-employee directors. Certain Incentive Plan awards may be paid in stock, cash or a combination of stock and cash. We typically grant a substantial portion of our stock-based compensation awards during the first quarter of each year.

Incentive/Performance Share Unit Awards and Restricted Share Unit Awards

The fair value of nonvested incentive/performance share unit awards and restricted share unit awards is initially determined based on prices not less than the market value of our common stock on the date of grant with a reduction for estimated forfeitures. The value of certain incentive/performance unit awards is subsequently remeasured based on the achievement of one or more financial and other performance goals. Additionally, certain incentive/performance unit awards could require subsequent adjustment due to certain discretionary risk review triggers.

The weighted-average grant date fair value of incentive/performance share unit awards and restricted share unit awards granted in 2020, 2019 and 2018 was \$50.23, \$117.53 and \$149.38 per share, respectively. The total intrinsic value of incentive/performance share unit awards and restricted share unit awards vested during 2020, 2019 and 2018 was approximately \$213 million, \$218 million and \$254 million, respectively. We recognize compensation expense for such awards ratably over the corresponding vesting and/or performance periods for each type of program.

A rollforward of the nonvested incentive/performance share unit and restricted share unit awards follows:

Table 102: Nonvested Incentive/Performance Share Unit Awards and Restricted Share Unit Awards - Rollforward

Shares in thousands	Nonvested Incentive/Performance Units Shares			Weighted-Average Grant Date Fair Value
December 31, 2019	844	\$ 116.00	3,305 \$	128.29
Granted (a)	183	\$ 147.60	1,268 \$	150.61
Vested/Released (a)	(363)	\$ 106.17	(1,053) \$	123.58
Forfeitures			(63) \$	138.41
December 31, 2020	664	\$ 130.08	3,457 \$	137.73

⁽a) Includes adjustments for achieving specific performance goals for Incentive/Performance Unit Share Awards granted in prior periods.

In Table 102, the units and related weighted-average grant date fair value of the incentive/performance unit share awards exclude the effect of dividends on the underlying shares, as those dividends will be paid in cash if and when the underlying shares are issued to the participants.

NOTE 19 INCOME TAXES

The components of income tax expense from continuing operations are as follows:

Table 103: Components of Income Tax Expense

Year ended December 31 In millions	 2020	2019	2018
Current			
Federal	\$ 669 \$	570 \$	739
State	158	152	178
Total current	\$ 827 \$	722 \$	917
Deferred			
Federal	(373)	187	13
State	(28)	(8)	(2)
Total deferred	\$ (401) \$	179 \$	11
Total	\$ 426 \$	901 \$	928

Significant components of deferred tax assets and liabilities are as follows:

Table 104: Deferred Tax Assets and Liabilities

December 31 – in millions	 2020	2019
Deferred tax assets		
Allowance for loan and lease losses	\$ 1,288	\$ 661
Allowance for unfunded commitments	141	78
Compensation and benefits	227	270
Partnership investments	121	120
Loss and credit carryforward	162	203
Accrued expenses	107	117
Lease obligations	528	545
Other	163	161
Total gross deferred tax assets	2,737	2,155
Valuation allowance	(26)	(31)
Total deferred tax assets	2,711	2,124
Deferred tax liabilities		
Leasing	1,179	1,183
Right of Use Assets	476	520
Goodwill and intangibles	193	194
Fixed assets	592	412
Net unrealized gains on securities and financial instruments	929	370
Other	143	306
Total deferred tax liabilities	3,512	2,985
Net deferred tax liability	\$ 801	\$ 861

A reconciliation between the statutory and effective tax rates from continuing operations follows:

Table 105: Reconciliation of Statutory and Effective Tax Rates

Year ended December 31	2020	2019	2018
Statutory tax rate	21.0 %	21.0 %	21.0 %
Increases (decreases) resulting from:			
State taxes net of federal benefit	2.0	2.3	2.5
Tax-exempt interest	(1.7)	(1.5)	(1.7)
Life insurance	(1.6)	(1.0)	(1.0)
Tax credits	(6.0)	(4.2)	(4.0)
Federal deferred tax revaluation			(2.1)
Unrecognized tax benefits	(1.6)	(0.1)	1.3
Subsidiary Liquidation	(1.2)		
Other	1.5	(0.1)	0.9
Effective tax rate	12.4 %	16.4 %	16.9 %

The net operating loss carryforwards at December 31, 2020 and 2019 follow.

Table 106: Net Operating Loss Carryforwards

Dollars in millions	I	December 31, 2020	December 31, 2019	Expiration
Net Operating Loss Carryforwards:				
Federal	\$	282 \$	402	2032
State	\$	848 \$	1,197	2021-2039

The majority of the tax credit carryforwards expire in 2039 and were \$\$8 million at December 31, 2020 and \$149 million at December 31, 2019. Some federal and state net operating loss and credit carryforwards are from acquired entities and utilization is subject to various statutory limitations. We anticipate that we will be able to fully utilize our carryforwards for federal tax purposes, but we have recorded an insignificant valuation allowance against certain state tax carryforwards as of December 31, 2020.

Retained earnings included \$0.1 billion at both December 31, 2020 and 2019 in allocations for bad debt deductions of former thrift subsidiaries for which no income tax has been provided. Under current law, if certain subsidiaries use these bad debt reserves for purposes other than to absorb bad debt losses, they will be subject to Federal income tax at the current corporate tax rate.

A reconciliation of the beginning and ending balance of unrecognized tax benefits is as follows:

Table 107: Change in Unrecognized Tax Benefits

In millions	 2020	2019	2018
Balance of gross unrecognized tax benefits at January 1	\$ 130 \$	207 \$	18
Increases:			
Positions taken during a current period	265		
Positions taken during a prior period			212
Decreases:			
Positions taken during a prior period		(77)	(16)
Settlements with taxing authorities	(130)		(7)
Balance of gross unrecognized tax benefits at December 31	\$ 265 \$	130 \$	207
Favorable impact if recognized	\$ 209 \$	76 \$	76

We do not expect that the balance of unrecognized tax benefits will increase or decrease in the next twelve months.

We are subject to U.S. federal income tax as well as income tax in most states and some foreign jurisdictions. Table 108 summarizes the status of significant IRS examinations.

Table 108: IRS Tax Examination Status

	Years under examination	Status at December 31
Federal	2016 - 2018	Under Exam

In addition, we are under continuous examinations by various state taxing authorities. With few exceptions, we are no longer subject to state and local and foreign income tax examinations by taxing authorities for periods before 2013. For all open audits, any potential adjustments have been considered in establishing our unrecognized tax benefits as of December 31, 2020.

Our policy is to classify interest and penalties associated with income taxes as income tax expense. For 2020 and 2019, the amount of gross interest and penalties was insignificant. At December 31, 2020 and 2019, the related amounts of accrued interest and penalties were also insignificant.

NOTE 20 REGULATORY MATTERS

We are subject to the regulations of certain federal, state and foreign agencies and undergo periodic examinations by such regulatory authorities.

The ability to undertake new business initiatives (including acquisitions), the access to and cost of funding for new business initiatives, the ability to pay dividends, the ability to repurchase shares or other capital instruments, the level of deposit insurance costs, and the level and nature of regulatory oversight depend, in large part, on a financial institution's capital strength.

As of January 1, 2020, the 2019 Tailoring Rules became effective for PNC. The most significant changes involve the election to exclude specific AOCI items from CET1 capital and higher thresholds used to calculate CET1 capital deductions.

On March 27, 2020, the regulatory agencies issued an interim final rule delaying the estimated impact on regulatory capital stemming from implementing the CECL standard. The estimated CECL impact is added to CET1 through December 31, 2021, then phased-out over the following three years. PNC and PNC Bank have elected the five-year transition period effective March 31, 2020.

At December 31, 2020 and 2019, PNC and PNC Bank, our domestic banking subsidiary, were both considered "well capitalized," based on applicable U.S. regulatory capital ratio requirements.

The following table sets forth the Basel III regulatory capital ratios at December 31, 2020 and 2019, for PNC and PNC Bank:

Table 109: Basel Regulatory Capital (a)

	 Amount			Ratios	
December 31 Dollars in millions	 2020	2019	2020	2019 "	Well Capitalized" Requirements
Risk-based capital					
Common equity Tier 1					
PNC	\$ 39,735 \$	32,478	12.2 %	9.5 %	N/A
PNC Bank	\$ 35,232 \$	32,215	11.0 %	9.9 %	6.5 %
Tier 1					
PNC	\$ 43,252 \$	36,306	13.2 %	10.7 %	6.0 %
PNC Bank	\$ 35,232 \$	32,215	11.0 %	9.9 %	8.0 %
Total					
PNC	\$ 51,001 \$	43,331	15.6 %	12.7 %	10.0 %
PNC Bank	\$ 42,440 \$	39,074	13.2 %	12.1 %	10.0 %
Leverage					
PNC	\$ 43,252 \$	36,306	9.5 %	9.1 %	N/A
PNC Bank	\$ 35,232 \$	32,215	7.9 %	8.3 %	5.0 %

⁽a) Calculated using the regulatory capital methodology applicable to us during both 2020 and 2019.

The principal source of parent company cash flow is the dividends it receives from PNC Bank, which may be impacted by the following:

- Capital needs.
- Laws and regulations,
- Corporate policies,
- · Contractual restrictions, and
- · Other factors.

Also, there are statutory and regulatory limitations on the ability of national banks to pay dividends or make other capital distributions. The amount available for dividend payments to the parent company by PNC Bank without prior regulatory approval was approximately \$3.1 billion at December 31, 2020.

Under federal law, a bank subsidiary generally may not extend credit to, or engage in other types of covered transactions (including the purchase of assets) with, the parent company or its non-bank subsidiaries on terms and under circumstances that are not

substantially the same as comparable transactions with nonaffiliates. A bank subsidiary may not extend credit to, or engage in a covered transaction with, the parent company or a non-bank subsidiary if the aggregate amount of the bank's extensions of credit and other covered transactions with the parent company or non-bank subsidiary exceeds 10% of the capital stock and surplus of such bank subsidiary or the aggregate amount of the bank's extensions of credit and other covered transactions with the parent company and all non-bank subsidiaries exceeds 20% of the capital stock and surplus of such bank subsidiary. Such extensions of credit, with limited exceptions, must be at least fully collateralized in accordance with specified collateralization thresholds, with the thresholds varying based on the type of assets serving as collateral. In certain circumstances, federal regulatory authorities may impose more restrictive limitations.

At December 31, 2020, the balance outstanding at the Federal Reserve Bank was \$4.9 billion.

NOTE 21 LEGAL PROCEEDINGS

We establish accruals for legal proceedings, including litigation and regulatory and governmental investigations and inquiries, when information related to the loss contingencies represented by those matters indicates both that a loss is probable and that the amount of loss can be reasonably estimated. Any such accruals are adjusted thereafter as appropriate to reflect changed circumstances. When we are able to do so, we also determine estimates of possible losses or ranges of possible losses, whether in excess of any related accrued liability or where there is no accrued liability, for disclosed legal proceedings ("Disclosed Matters," which are those matters disclosed in this Note 21). For Disclosed Matters where we are able to estimate such possible losses or ranges of possible losses, as of December 31, 2020, we estimate that it is reasonably possible that we could incur losses in excess of related accrued liabilities, if any, in an aggregate amount less than \$100 million. The estimates included in this amount are based on our analysis of currently available information and are subject to significant judgment and a variety of assumptions and uncertainties. As new information is obtained we may change our estimates. Due to the inherent subjectivity of the assessments and unpredictability of outcomes of legal proceedings, any amounts accrued or included in this aggregate amount may not represent the ultimate loss to us from the legal proceedings in question. Thus, our exposure and ultimate losses may be higher, and possibly significantly so, than the amounts accrued or this aggregate amount.

In our experience, legal proceedings are inherently unpredictable. One or more of the following factors frequently contribute to this inherent unpredictability: the proceeding is in its early stages; the damages sought are unspecified, unsupported or uncertain; it is unclear whether a case brought as a class action will be allowed to proceed on that basis or, if permitted to proceed as a class action, how the class will be defined; the other party is seeking relief other than or in addition to compensatory damages (including, in the case of regulatory and governmental investigations and inquiries, the possibility of fines and penalties); the matter presents meaningful legal uncertainties, including novel issues of law; we have not engaged in meaningful settlement discussions; discovery has not started or is not complete; there are significant facts in dispute; the possible outcomes may not be amenable to the use of statistical or quantitative analytical tools; predicting possible outcomes depends on making assumptions about future decisions of courts or regulatory bodies or the behavior of other parties; and there are a large number of parties named as defendants (including where it is uncertain how damages or liability, if any, will be shared among multiple defendants). Generally, the less progress that has been made in the proceedings or the broader the range of potential results, the harder it is for us to estimate losses or ranges of losses that it is reasonably possible we could incur.

As a result of these types of factors, we are unable, at this time, to estimate the losses that are reasonably possible to be incurred or ranges of such losses with respect to some of the matters disclosed, and the aggregate estimated amount provided above does not include an estimate for every Disclosed Matter. Therefore, as the estimated aggregate amount disclosed above does not represent our maximum reasonably possible loss exposure for all of the Disclosed Matters. The estimated aggregate amount also does not reflect any of our exposure to matters not so disclosed, as discussed below under "Other."

We include in some of the descriptions of individual Disclosed Matters certain quantitative information related to the plaintiff's claim against us as alleged in the plaintiff's pleadings or other public filings or otherwise publicly available information. While information of this type may provide insight into the potential magnitude of a matter, it does not necessarily represent our estimate of reasonably possible loss or our judgment as to any currently appropriate accrual.

Some of our exposure in Disclosed Matters may be offset by applicable insurance coverage. We do not consider the possible availability of insurance coverage in determining the amounts of any accruals (although we record the amount of related insurance recoveries that are deemed probable up to the amount of the accrual) or in determining any estimates of possible losses or ranges of possible losses.

Interchange Litigation

Beginning in June 2005, a series of antitrust lawsuits were filed against Visa®, Mastercard®, and several major financial institutions, including cases naming National City (since merged into The PNC Financial Services Group, Inc.) and its subsidiary, National City Bank of Kentucky (since merged into National City Bank which in turn was merged into PNC Bank). The plaintiffs in these cases are merchants operating commercial businesses throughout the U.S., as well as trade associations. Some of these cases (including those naming National City entities) were brought as class actions on behalf of all persons or business entities that have accepted Visa or Mastercard. The cases have been consolidated for pre-trial proceedings in the U.S. District Court for the Eastern District of New York under the caption *In re Payment Card Interchange Fee and Merchant-Discount Antitrust Litigation* (Master File No. 1:05-md-1720- MKB-JO).

In July 2012, the parties entered into a memorandum of understanding with the class plaintiffs and an agreement in principle with certain individual plaintiffs with respect to a settlement of these cases, under which the defendants agreed to pay approximately \$6.6 billion collectively to the class and individual settling plaintiffs and agreed to changes in the terms applicable to their respective card networks (including an eight-month reduction in default credit interchange rates). The parties entered into a definitive agreement with respect to this settlement in October 2012. The court granted final approval of the settlement in December 2013. Several objectors appealed the order of approval to the U.S. Court of Appeals for the Second Circuit, which issued an order in June 2016, reversing approval of the settlement and remanding for further proceedings. In November 2016, the plaintiffs filed a petition for a writ of certiorari with the U.S. Supreme Court to challenge the court of appeal's decision. The Supreme Court denied the petition in March 2017.

As a result of the reversal of the approval of the settlement, the class actions have resumed in the district court. In November 2016, the district court appointed separate interim class counsel for a proposed class seeking damages and a proposed class seeking equitable (injunctive) relief. In February 2017, each of these counsel filed a proposed amended and supplemental complaint on behalf of its respective proposed class. These complaints make similar allegations, including that the defendants conspired to monopolize and to fix the prices for general purpose card network services, that the restructuring of Visa and Mastercard, each of which included an initial public offering, violated the antitrust laws, and that the defendants otherwise imposed unreasonable restraints on trade, resulting in the payment of inflated interchange fees and other fees, which also violated the antitrust laws. In their complaints, collectively the plaintiffs seek, among other things, injunctive relief, unspecified damages (trebled under the antitrust laws) and attorneys' fees. PNC is named as a defendant in the complaint seeking damages but is not named as a defendant in the complaint that seeks equitable relief.

In September 2017, the magistrate judge at the district court granted in part and denied in part the plaintiffs' motions to file their proposed amended complaints. The dispute over amendment arose in part from the decision in *United States v. American Express, Co.*, 838 F.3d 179 (2d Cir. 2016), in which the court held that the relevant market in a similar complaint against American Express is "two-sided," *i.e.*, requires consideration of effects on consumers as well as merchants. In June 2018, the U.S. Supreme Court affirmed (under the caption *Ohio v. American Express Co.*) the court of appeals decision Previously, the plaintiffs in this litigation had alleged a one-sided market, and, as a result of the court's decision in *American Express*, they sought leave to add claims based on a two-sided market. The order allowed the complaint to be amended to include allegations pertaining to a two-sided market only to the extent those claims are not time-barred, but held that the two-sided market allegations do not relate back to the time of the original complaint and are not subject to tolling. In October 2017, the plaintiffs appealed this order to the presiding district court judge. In August 2018, the judge overruled this decision, finding that the two-sided market allegations do relate back.

In September 2018, the relevant parties entered an amended definitive agreement to resolve the claims of the class seeking damages. In this amended settlement agreement, the parties agreed, among other things, to the following terms:

- An additional settlement payment from all defendants of \$900 million, with Visa's share of the additional settlement payment being \$600 million. The additional settlement payment will be added to the approximately \$5.3 billion previously paid by the defendants pursuant to the original 2012 settlement agreement.
- Up to \$700 million may be returned to the defendants (with up to \$467 million to Visa) if more than 15% of class members (by payment volume) opt out of the class. As more than 15% of class members opted out of the class, \$700 million has been returned to the defendants (\$467 million to Visa).

This amended settlement agreement is subject to court approval. Following preliminary approval in January 2019, and after class notice, the submission of opt-outs, and the filing of objections, the district court granted final approval of the settlement in December 2019. Several objectors have appealed the district court's order granting final approval to the U.S. Court of Appeals for the Second Circuit. Some merchants that opted out from the settlement have brought lawsuits against Visa and Mastercard and one or more of the issuing banks. Resolution by Visa of claims by merchants that opted out of the settlement, including those that file lawsuits, have been or will be paid from the Visa litigation escrow account.

National City and National City Bank entered into judgment and loss sharing agreements with Visa and certain other banks with respect to all of the above referenced litigation. We were not originally named as defendants in any of the Visa or Mastercard related antitrust litigation nor were we initially parties to the judgment or loss sharing agreements. However, we became responsible for National City's and National City Bank's position in the litigation and responsibilities under the agreements through our acquisition of National City. In addition, following Visa's reorganization in 2007 in contemplation of its initial public offering, U.S. Visa members received shares of Class B Visa common stock, convertible upon resolution of specified litigation, including the remaining litigation described above, into shares of Class A Visa common stock, with the conversion rate adjusted to reflect amounts paid or escrowed to resolve the specified litigation, and also remained responsible for indemnifying Visa against the specified litigation. Our Class B Visa common stock is all subject to this conversion adjustment provision, and we are now responsible for the indemnification obligations of our predecessors as well as ourselves. We have also entered into a Mastercard Settlement and Judgment Sharing Agreement with Mastercard and other financial institution defendants and an Omnibus Agreement Regarding Interchange Litigation Sharing and Settlement Sharing with Visa, Mastercard and other financial institution defendants. The Omnibus Agreement, in substance, apportions resolution of the claims in this litigation into a Visa portion and a Mastercard portion, with the Visa portion being two-thirds and the Mastercard portion being one-third. This apportionment only applies in the case of either a global settlement involving all defendants or an adverse judgment against the defendants, to the extent that damages either are related to the merchants' inter-network conspiracy claims or are otherwise not attributed to specific Mast

Residential Mortgage-Backed Securities Indemnification Demands

We have received indemnification demands from several entities sponsoring residential mortgage-backed securities and their affiliates where purchasers of the securities, trustees for the securitization trusts, or monoline insurers have asserted claims against the sponsors and other parties involved in the securitization transactions. National City Mortgage and its predecessors had sold to the sponsors or their affiliates whole loans that were allegedly included in certain of these securitization transactions. According to the indemnification demands, the claims for which indemnity is being sought are based on alleged misstatements and omissions in the offering documents for these transactions or breaches of representations and warranties relating to the loans made in connection with the transactions. The indemnification demands assert that agreements governing the sale of these loans or the securitization transactions to which National City Mortgage was a party require us to indemnify the sponsors and their affiliates for losses suffered in connection with these claims.

The parties have settled several of these disputes. In February 2020, one of the entities asserting a right to indemnification submitted a demand for our purported share of the settlement amount of claims asserted against it and its affiliates. The portion of the settlement amount, if any, for which we are responsible in the settled cases has not been determined

Pre-need Funeral Arrangements

National City Bank and PNC Bank are defendants in a lawsuit filed in the U.S. District Court for the Eastern District of Missouri under the caption *Jo Ann Howard and Associates, P.C., et al. v. Cassity, et al.* (No. 4:09-CV-1252-ERW) arising out of trustee services provided by Allegiant Bank, a National City Bank and PNC Bank predecessor, with respect to Missouri trusts that held pre-need funeral contract assets. Under a pre-need funeral contract, a customer pays an amount up front in exchange for payment of funeral expenses following the customer's death. In a number of states, including Missouri, pre-need funeral contract sellers are required to deposit a portion of the proceeds of the sale of pre-need funeral contracts in a trust account.

The lawsuit was filed in August 2009 by the Special Deputy Receiver for three insolvent affiliated companies, National Prearranged Services, Inc. a seller of pre-need funeral contracts (NPS), Lincoln Memorial Life Insurance Company (Lincoln), and Memorial Service Life Insurance Company (Memorial). Seven individual state life and health insurance guaranty associations, who claim they are liable under state law for payment of certain benefits under life insurance policies sold by Lincoln and Memorial, and the National Organization of Life & Health Guaranty Associations have also joined the action as plaintiffs. In addition to National City Bank and PNC Bank (added following filing of the lawsuit as successor-in-interest to National City Bank) (the PNC defendants), other defendants included members of the Cassity family, who controlled NPS, Lincoln, and Memorial; officers and directors of NPS, Lincoln, and additions and attorneys for NPS, Lincoln, and Memorial; the trustees of each of the trusts that held pre-need funeral contract assets; and the investment advisor to the Pre-need Trusts. NPS retained several banks to act as trustees for the trusts holding NPS pre-need funeral contract assets (the NPS Trusts), with Allegiant Bank acting as one of these trustees with respect to seven Missouri NPS Trusts. All of the other defendants have settled with the plaintiffs, are otherwise no longer a party to the lawsuit, or are insolvent.

In their Third Amended Complaint, filed in 2012 following the granting by the court in part of motions to dismiss made by the PNC defendants and the other NPS Trust trustees, the plaintiffs allege that Allegiant Bank breached its fiduciary duties and acted

The PNC Financial Services Group, Inc. - 2020 Form 10-K 177

negligently as the trustee for the Missouri NPS Trusts. In part as a result of these breaches, the plaintiffs allege, members of the Cassity family, acting in concert with other defendants, were able to improperly remove millions of dollars from the NPS Trusts, which in turn caused NPS, Lincoln, and Memorial to become insolvent. The complaint alleges \$600 million in present and future losses to the plaintiffs due to the insolvency of NPS, Lincoln, and Memorial. The lawsuit seeks, among other things, unspecified actual and punitive damages, various equitable remedies including restitution, attorneys' fees, costs of suit and interest.

In July 2013, five of the six defendants in a parallel federal criminal action, including two members of the Cassity family, entered into plea agreements with the U.S. to resolve criminal charges arising out of their conduct at NPS, Lincoln and Memorial. In August 2013, after a jury trial, the sixth defendant, the investment advisor to the NPS Trusts, was convicted on all criminal counts against him. The criminal charges against the defendants alleged, among other thing, a scheme to defraud Allegiant Bank and the other trustees of the NPS Trusts.

In May 2014, the court granted the plaintiffs' motion to disallow the PNC defendants' affirmative defense relating to the plaintiffs' alleged failure to mitigate damages. In July 2014, the PNC defendants' motion for reconsideration was denied. In September 2014, the plaintiffs filed a motion seeking leave to amend their complaint to reassert aiding and abetting claims, previously dismissed by the court in 2012. The court denied this motion in December 2014. Also in December 2014, the court granted in part and denied in part the PNC defendants' motion for summary judgment.

In March 2015, following a jury trial, the court entered a judgment against the PNC defendants in the amount of \$56 million in compensatory damages and \$36 million in punitive damages. In April 2015, the plaintiffs filed motions with the court seeking \$179 million in pre-judgment interest. Also, in April 2015, the PNC defendants filed motions with the court to reduce the compensatory damages by the amounts paid in settlement by other defendants, to strike the punitive damages award, for judgment as a matter of law, and for a new trial. In November 2015, the court granted the motion to reduce the compensatory damages by amounts paid in settlement by other defendants and denied the other motions by the PNC defendants, with the judgment being reduced as a result to a total of \$289 million, and also denied the plaintiffs' motion for pre-judgment interest

In December 2015, the PNC defendants appealed the judgment to the U.S. Court of Appeals for the Eighth Circuit. Also in December 2015, the plaintiffs cross-appealed from the court's orders reducing the judgment by amounts paid in settlement by other defendants, denying plaintiffs' motion for pre-judgment interest, and dismissing the plaintiffs' aiding and abetting claims. In August 2017, the court of appeals reversed the judgment to the extent that it was based on tort rather than trust law. The court accordingly held that any damages awarded to the plaintiff will be limited to losses to the trusts in Missouri caused by Allegiant's breaches during the time it acted as trustee; plaintiffs cannot recover for damages to the Missouri trusts after Allegiant's trusteeship or outside of the Missouri trusts, which had been included in the judgment under appeal. The court of appeals otherwise affirmed the judgment, including the dismissal of the aiding and abetting claims, and remanded the case to the district court for further proceedings in light of its decision.

In September 2017, plaintiffs filed a motion for rehearing by the panel solely seeking to remove the prohibition on damages being sought for the period following Allegiant's trusteeship. In December 2017, the court denied the petition for rehearing. In July 2019, following a new trial on remand from the court of appeals, the district court awarded the plaintiffs \$72 million in compensatory damages, \$15 million in interest, and \$15 million in punitive damages. The PNC defendants have appealed this judgment to the court of appeals, and the plaintiffs cross-appealed. In December 2019, the court reduced the judgment by approximately \$2.6 million to correct a mathematical error in calculating prejudgment interest, reducing the total judgment to \$99.5 million. In March 2020, the court dismissed the plaintiffs' cross-appeal on the plaintiffs' motion In February 2020, the district court awarded \$7 million in fees and costs to the plaintiffs, and the PNC defendants have appealed this judgment to the court of appeals. The consolidated appeals of the district court's judgments were argued in January 2021.

USAA Patent Infringement Litigation

In September 2020, a lawsuit (*United Services Automobile Association v. PNC Bank N.A., Case No. 2:20-cv-319*) was filed in the United States District Court for the Eastern District of Texas against PNC Bank for patent infringement. The plaintiff amended its complaint in December 2020. As amended, the complaint alleges that PNC's mobile remote deposit capture systems infringe on four patents owned by the plaintiff. The plaintiff seeks, among other things, a judgment that PNC is infringing each of the patents, damages for willful infringement, and attorneys' fees. In December 2020, we filed a motion to dismiss the amended complaint, and in January 2021, we filed a motion to transfer the lawsuit to the United States District Court for the Western District of Pennsylvania. Trial in this matter is presently scheduled to commence on March 7, 2022.

In December 2020, we filed a lawsuit (PNC Bank, N.A. v. United Services Automobile Association, Case No. 2:20-cv-1886 in the United States District Court for the Western District of Pennsylvania against USAA seeking declaratory judgment of non-infringement as to two of the patents at issue in the lawsuit pending in the Eastern District of Texas and awarding PNC its fees and costs.

Regulatory and Governmental Inquiries

We are the subject of investigations, audits, examinations and other forms of regulatory and governmental inquiry covering a broad range of issues in our consumer, mortgage, brokerage, securities and other financial services businesses, as well as other aspects of our operations. In some cases, these inquiries are part of reviews of specified activities at multiple industry participants; in others, they are directed at PNC individually. From time to time, these inquiries have involved and may in the future involve or lead to regulatory enforcement actions and other administrative proceedings. These inquiries have also led to and may in the future lead to civil or criminal judicial proceedings. Some of these inquiries result in remedies including fines, penalties, restitution, or alterations in our business practices, and in additional expenses and collateral costs and other consequences. Such remedies and other consequences typically have not been material to us from a financial standpoint, but could be in the future. Even if not financially material, they may result in significant reputational harm or other adverse consequences.

As has been publicly reported, the U.S. Department of Justice is conducting an inquiry relating to the federal LIHTC program directed at program participants. In connection with that inquiry, the Department of Justice requested information from PNC Bank, and we cooperated in that inquiry.

Our practice is to cooperate fully with regulatory and governmental investigations, audits and other inquiries, including that described in this Note 21.

Other

In addition to the proceedings or other matters described above, PNC and persons to whom we may have indemnification obligations, in the normal course of business, are subject to various other pending and threatened legal proceedings in which claims for monetary damages and other relief are asserted. We do not anticipate, at the present time, that the ultimate aggregate liability, if any, arising out of such other legal proceedings will have a material adverse effect on our financial position. However, we cannot now determine whether or not any claims asserted against us or others to whom we may have indemnification obligations, whether in the proceedings or other matters described above or otherwise, will have a material adverse effect on our results of operations in any future reporting period, which will depend on, among other things, the amount of the loss resulting from the claim and the amount of income otherwise reported for the reporting period.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 179

NOTE 22 PARENT COMPANY

Summarized financial information of the parent company is as follows:

Table 110: Parent Company - Income Statement

Year ended December 31 – in millions	 2020	2019	2018
Operating Revenue			
Dividends from:			
Bank subsidiaries and bank holding company	\$ 13,701	\$ 3,570	\$ 2,639
Non-bank subsidiaries	300	170	157
Interest income	38	169	147
Noninterest income	37	48	(1)
Total operating revenue	14,076	3,957	2,942
Operating Expense			
Interest expense	179	325	281
Other expense	91	146	139
Total operating expense	270	471	420
Income before income taxes and equity in undistributed net income of subsidiaries	13,806	3,486	2,522
Equity in undistributed net income of subsidiaries:			
Bank subsidiaries and bank holding company	(12,009)	671	1,602
Non-bank subsidiaries	(86)	164	181
Income from continuing operations before taxes	1,711	4,321	4,305
Income tax benefit from continuing operations	\$ (1,251)	(221)	(208)
Net income from continuing operations	2,962	4,542	4,513
Dividends from discontinued operations			
Bank subsidiaries and bank holding company	126	460	418
Equity in undistributed net income of subsidiaries from discontinued operations:			
Bank subsidiaries and bank holding company	5,651	528	524
Income from discontinued operations before taxes	5,777	988	942
Income taxes from discontinued operations	1,222	161	154
Net income from discontinued operations	4,555	827	788
Net income	\$ 7,517	\$ 5,369	\$ 5,301
Other comprehensive income, net of tax:			
Net pension and other postretirement benefit plan activity arising during the period	1	(2)	1
Other comprehensive income (loss)	1	(2)	1
Comprehensive income	\$ 7,518	\$ 5,367	\$ 5,302

Table 111: Parent Company - Balance Sheet

December 31 – in millions	2020	2019
Assets		
Cash held at banking subsidiary	\$ 14,882	\$ 6
Restricted deposits with banking subsidiary	175	175
Nonrestricted interest-earning deposits		7,024
Investments in:		
Bank subsidiaries and bank holding company	45,992	41,882
Non-bank subsidiaries	1,984	2,054
Net investment held for sale		6,772
Loans with affiliates	1,021	730
Other assets	1,934	1,512
Total assets	\$ 65,988	\$ 60,155
Liabilities		
Subordinated debt (a)	\$ 1,010	\$ 986
Senior debt (a)	9,567	8,849
Other borrowed funds from affiliates	780	307
Accrued expenses and other liabilities	621	699
Total liabilities	11,978	10,841
Equity		
Shareholders' equity	54,010	49,314
Total liabilities and equity	\$ 65,988	\$ 60,155

⁽a) See Note 10 Borrowed Funds for additional information on contractual rates and maturity dates of senior debt and subordinated debt for parent company.

In connection with certain affiliates' commercial and residential mortgage servicing operations, the parent company has committed to maintain such affiliates' net worth above minimum requirements.

The PNC Financial Services Group, Inc. – 2020 Form 10-K 181

Table 112: Parent Company - Interest Paid and Income Tax Refunds (Payments)

Year ended December 31 – in millions	·	Interest Paid	Income Tax Refunds/(Payments)
2020	\$	335	\$ 29
2019	\$	300	\$ 26
2018	\$	288	\$ 88

Table 113: Parent Company - Statement of Cash Flows

Year ended December 31 – in millions		2020	2019	2018
Operating Activities				
Net income	\$	7,517	\$ 5,369	\$ 5,301
Adjustments to reconcile net income to net cash provided by operating activities:				
Equity in undistributed net earnings of subsidiaries			(1,363)	(2,307)
Return on investment in subsidiaries		6,444		
Other		237	218	155
Net cash provided (used) by operating activities	\$ 1	4,198	\$ 4,224	\$ 3,149
Investing Activities				
Net change in loans and securities from affiliates	\$ ((2,808)	\$ 664	\$ 540
Net change in nonrestricted interest-earning deposits		7,024	(2,369)	1,145
Other			(8)	2
Net cash provided (used) by investing activities	\$	4,216	\$ (1,713)	\$ 1,687
Financing Activities				
Net change in other borrowed funds from affiliates	\$	473	\$ 228	\$ (29)
Proceeds from long-term borrowings		1,986	4,180	498
Repayments of long-term borrowings	((1,750)	(1,300)	(553)
Net change in commercial paper				(100)
Preferred stock redemptions		(480)		
Common and treasury stock issuances		65	90	69
Acquisition of treasury stock	((1,624)	(3,578)	(2,877)
Preferred stock cash dividends paid		(229)	(236)	(236)
Common stock cash dividends paid	((1,979)	(1,895)	(1,603)
Net cash provided (used) by financing activities	\$ ((3,538)	\$ (2,511)	\$ (4,831)
Net increase (decrease) in cash and due from banks	\$ 1	4,876		\$ 5
Net cash provided by operating activities of discontinued operations	1	1,542	299	264
Net cash activity from continuing operations	_	3,334	(299)	(259)
Cash and restricted deposits held at banking subsidiary at beginning of year		181	181	176
Cash and restricted deposits held at banking subsidiary at end of year	\$ 1	5,057	\$ 181	\$ 181

NOTE 23 SEGMENT REPORTING

We have three reportable business segments:

- Retail Banking
- · Corporate & Institutional Banking
- Asset Management Group

Results of individual businesses are presented based on our internal management reporting practices. There is no comprehensive, authoritative body of guidance for management accounting equivalent to GAAP; therefore, the financial results of our individual businesses are not necessarily comparable with similar information for any other company. We periodically refine our internal methodologies as management reporting practices are enhanced. To the extent significant and practicable, retrospective application of new methodologies is made to prior period reportable business segment results and disclosures to create comparability with the current period.

During the second quarter of 2020, we divested our entire 22.4% investment in BlackRock, which had previously been reported as a separate business segment. See Note 2 Acquisition and Divestiture Activity for additional information on the sale and details on our results and cash flows for 2020, 2019 and 2018.

Total business segment financial results differ from total consolidated net income. These differences are reflected in the "Other" category in the Table 114. "Other" includes residual activities that do not meet the criteria for disclosure as a separate reportable business, such as asset and liability management activities including net securities gains or losses, ACL for investment securities, certain trading activities, certain runoff consumer loan portfolios, private equity investments, intercompany eliminations, certain corporate overhead, tax adjustments that are not allocated to business segments, exited businesses, and differences between business segment performance reporting and financial statement reporting (GAAP). The "Other" category also includes our BlackRock held for sale asset. Assets, revenue and earnings attributable to foreign activities were not material in the periods presented for comparison.

Financial results are presented, to the extent practicable, as if each business operated on a stand-alone basis. Additionally, we have aggregated the results for corporate support functions within "Other" for financial reporting purposes.

Net interest income in business segment results reflects our internal funds transfer pricing methodology. Assets receive a funding charge and liabilities and capital receive a funding credit based on a transfer pricing methodology that incorporates product repricing characteristics, tenor and other factors.

We have allocated ALLL and the allowance for unfunded lending related commitments based on the loan exposures within each business segment's portfolio. Key reserve assumptions and estimation processes react to and are influenced by observed changes in loan portfolio performance experience, the financial strength of the borrower and economic conditions. Key reserve assumptions are periodically updated.

The PNC Financial Services Group, Inc. – 2020 Form 10-K 183

Table 114: Results of Businesses

Tuble 114. Results of Businesses					
Year ended December 31 In millions	 Retail Banking	Corporate & Institutional Banking	Asset Management Group	Other	Consolidated (a)
2020					
Income Statement					
Net interest income	\$ 5,609	\$ 3,999	\$ 357	\$ (19)	\$ 9,946
Noninterest income	2,519	3,062	854	520	6,955
Total revenue	8,128	7,061	1,211	501	16,901
Provision for credit losses	968	2,088	21	98	3,175
Depreciation and amortization	251	197	45	490	983
Other noninterest expense	5,768	2,659	813	74	9,314
Income (loss) from continuing operations before income taxes (benefit) and noncontrolling interests	1,141	2,117	332	(161)	3,429
Income taxes (benefit) from continuing operations	266	433	77	(350)	426
Net income from continuing operations	875	1,684	255	189	3,003
Less: Net income attributable to noncontrolling interests	31	10			41
Net income from continuing operations excluding noncontrolling interests	\$ 844	\$ 1,674	\$ 255	\$ 189	\$ 2,962
Average Assets	\$ 97,643	\$ 183,189	\$ 8,186	\$ 160,277	\$ 449,295
2019					
Income Statement					
Net interest income	\$ 5,520	\$ 3,637	\$ 288	\$ 520	\$ 9,965
Noninterest income	2,648	2,537	991	698	6,874
Total revenue	8,168	6,174	1,279	1,218	16,839
Provision for (recapture of) credit losses	517	284	(1)	(27)	773
Depreciation and amortization	230	198	62	545	1,035
Other noninterest expense	5,781	2,615	877	266	9,539
Income from continuing operations before income taxes and noncontrolling interests	1,640	3,077	341	434	5,492
Income taxes (benefit) from continuing operations	377	629	79	(184)	901
Net income from continuing operations	1,263	2,448	262	618	4,591
Less: Net income attributable to noncontrolling interests	50			(1)	49
Net income from continuing operations excluding noncontrolling interests	\$ 1,213	\$ 2,448	\$ 262	\$ 619	\$ 4,542
Average Assets	\$ 92,959	\$ 164,243	\$ 7,360	\$ 135,773	\$ 400,335
2018					
Income Statement					
Net interest income	\$ 5,119	\$ 3,551	\$ 287	\$ 764	\$ 9,721
Noninterest income	2,631	2,406	892	540	6,469
Total revenue	7,750	5,957	1,179	1,304	16,190
Provision for (recapture of) credit losses	373	85	2	(52)	408
Depreciation and amortization	206	186	52	496	940
Other noninterest expense	5,724	2,520	861	251	9,356
Income from continuing operations before income taxes and noncontrolling interests	1,447	3,166	264	609	5,486
Income taxes (benefit) from continuing operations	 335	 658	 62	(127)	928
Net income from continuing operations	1,112	2,508	202	736	4,558
Less: Net income attributable to noncontrolling interests	48			(3)	45
Net income from continuing operations excluding noncontrolling interests	\$ 1,064	\$ 2,508	\$ 202	\$ 739	\$ 4,513
Average Assets	\$ 89,739	\$ 154,119	\$ 7,423	\$ 126,954	\$ 378,235

⁽a) There were no material intersegment revenues for 2020, 2019 and 2018.

Business Segment Products and Services

Retail Banking provides deposit, lending, brokerage, insurance services, investment management and cash management products and services to consumer and small business customers. Our customers are serviced through our branch network, ATMs, call centers, online banking and mobile channels. The branch network is located primarily in markets across the Mid-Atlantic, Midwest and Southeast. In 2018, Retail Banking launched its national expansion strategy designed to grow customers with digitally-led banking and a thin branch network in markets outside of our existing retail branch network. Deposit products include checking, savings and money market accounts and certificates of deposit. Lending products include residential mortgages, home equity loans and lines of credit,

auto loans, credit cards, education loans and personal and small business loans and lines of credit. The residential mortgage loans are directly originated within our branch network and nationwide, and are typically underwritten to agency and/or third-party standards, and either sold, servicing retained, or held on our balance sheet. Brokerage, investment management and cash management products and services include managed, education, retirement and trust accounts.

Corporate & Institutional Banking provides lending, treasury management, and capital markets-related products and services to mid-sized and large corporations, and government and not-for-profit entities. Lending products include secured and unsecured loans, letters of credit and equipment leases. The Treasury Management business provides payables, receivables, deposit and account services, liquidity and investments, and online and mobile banking products and services to our clients. Capital markets-related products and services include foreign exchange, derivatives, securities underwriting, loan syndications, mergers and acquisitions advisory and equity capital markets advisory related services. We also provide commercial loan servicing and technology solutions for the commercial real estate finance industry. Products and services are provided nationally.

Asset Management Group provides personal wealth management for high net worth and ultra high net worth clients and institutional asset management. The Asset Management group is composed of three distinct operating units:

- Wealth Management provides products and services to individuals and their families including investment and retirement planning, customized investment management, private banking, and trust management and administration for individuals and their families.
- Our Hawthorn unit provides multi-generational family planning including estate, financial, tax planning, fiduciary, investment management and consulting, private banking, personal administrative services, asset custody and customized performance reporting to ultra high net worth clients.
- Institutional asset management provides outsourced chief investment officer, custody, private real estate, cash and fixed income client solutions, and fiduciary retirement
 advisory services to institutional clients including corporations, healthcare systems, insurance companies, unions, municipalities and non-profits.

NOTE 24 FEE-BASED REVENUE FROM CONTRACTS WITH CUSTOMERS

A subset of our noninterest income relates to certain fee-based revenue within the scope of ASC Topic 606 Revenue from Contracts with Customers (Topic 606). The objective of the standard is to clarify the principles for recognizing revenue from contracts with customers across all industries and to develop a common revenue standard under GAAP. The standard requires the application of a five-step recognition model to contracts, allocating the amount of consideration we expect to be entitled to across distinct promises in the contract, called performance obligations, and recognizing revenue when or as those services are transferred to the customer.

Fee-based revenue within the scope of Topic 606 is recognized within our three reportable business segments, Retail Banking, Corporate & Institutional Banking and Asset Management Group. Interest income, income from lease contracts, fair value gains from financial instruments (including derivatives), income from mortgage servicing rights and guarantee products, letter of credit fees, non-refundable fees associated with acquiring or originating a loan and gains from the sale of financial assets are outside of the scope of Topic 606.

The following tables present noninterest income within the scope of Topic 606 disaggregated by segment. A description of the fee-based revenue and how it is recognized for each segment's principal services and products follows each table.

Retail Banking

Table 115: Retail Banking Noninterest Income Disaggregation

	Year ended December 31					
In millions	2	020	2019	2018		
Product						
Debit card fees	\$	522 \$	535 \$	505		
Deposit account fees		463	642	618		
Brokerage fees		367	356	350		
Net credit card fees (a)		179	186	189		
Merchant services		154	216	212		
Other		225	255	284		
Total in-scope noninterest income by product	\$	1,910 \$	2,190 \$	2,158		
Reconciliation to total Retail Banking noninterest income						
Total in-scope noninterest income	\$	1,910 \$	2,190 \$	2,158		
Total out-of-scope noninterest income (b)		609	458	473		
Total Retail Banking noninterest income	\$	2,519 \$	2,648 \$	2,631		

⁽a) Net credit card fees consists of interchange fees of \$ 469 million, \$498 million and \$452 million and credit card reward costs of \$ 290 million, \$312 million and \$263 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Debit Card and Net Credit Card Fees

As an issuing bank, Retail Banking earns interchange fee revenue from debit and credit card transactions. By offering card products, we maintain and administer card-related services, such as credit card reward programs, account data and statement information, card activation, card renewals, and card suspension and blockage. Interchange fees are earned when cardholders make purchases and are presented in Table 115 net of credit card reward costs, which are earned by customers when they make purchases.

Deposit Account Fees

Retail Banking provides demand deposit, money market and savings account products for consumer and small business customers. Services include online and branch banking, overdraft and wire transfer services, imaging services and cash alternative services, such as money orders and cashier's checks. We recognize fee income at the time these services are performed for the customer.

Brokerage Fees

Retail Banking earns fee revenue by providing its customers a wide range of investment options through its brokerage services including mutual funds, annuities, stocks, bonds, long-term care and insurance products, and managed accounts. We earn fee revenue for transaction-based brokerage services, such as the execution of market trades, once the transaction has been completed as of the trade date. In other cases, such as investment management services, we earn fee revenue over the term of the customer contract.

Merchant Services

Retail Banking earns fee revenue for debit and credit card processing services and products. We provide these services to merchant businesses including point-of-sale payment acceptance capabilities and customized payment processing built around the merchant's specific requirements. We earn fee revenue as the merchant's customers make purchases.

Other

Other noninterest income primarily includes ATM fees earned from our customers and non-PNC customers. These fees are recognized as transactions occur.

⁽b) Out-of-scope noninterest income includes revenue streams that fall under the scope of other accounting and disclosure requirements outside of Topic 606.

Corporate & Institutional Banking

Table 116: Corporate & Institutional Banking Noninterest Income Disaggregation

	Year ended December 31					
In millions	2020	2019	2018			
Product						
Treasury management fees	\$ 897 \$	840 \$	776			
Capital markets fees	759	547	510			
Commercial mortgage banking activities	111	102	87			
Other	83	77	81			
Total in-scope noninterest income by product	\$ 1,850 \$	1,566 \$	1,454			
Reconciliation to total Corporate & Institutional Banking noninterest income						
Total in-scope noninterest income	\$ 1,850 \$	1,566 \$	1,454			
Total out-of-scope noninterest income (a)	1,212	971	952			
Total Corporate & Institutional Banking noninterest income	\$ 3,062 \$	2,537 \$	2,406			

⁽a) Out-of-scope noninterest income includes revenue streams that fall under the scope of other accounting and disclosure requirements outside of Topic 606.

Treasury Management Fees

Corporate & Institutional Banking provides corporations with cash and investment management services, receivables and disbursement management services, funds transfer services and access to online/mobile information management and reporting services. Treasury management fees are recognized over time as we perform these services.

Capital Markets Fees

Capital markets fees include securities underwriting fees, merger and acquisition advisory fees and other advisory related fees. We recognize these fees when the related transaction closes.

Commercial Mortgage Banking Activities

Commercial mortgage banking activities include servicing responsibilities where we do not own the servicing rights. Servicing responsibilities typically consist of collecting and remitting monthly borrower principal and interest payments, maintaining escrow deposits, performing loss mitigation and foreclosure activities, and, in certain instances, funding of servicing advances. We recognize servicing fees over time as we perform these activities.

Other

Other noninterest income within Corporate & Institutional Banking, primarily comprised of fees from collateral management and asset management services. We earn these fees over time as we perform these services.

Asset Management Group

Table 117: Asset Management Group Noninterest Income Disaggregation

	 Year ended December 31							
In millions	 2020	2019	2018					
Customer Type								
Personal	\$ 634 \$	620 \$	611					
Institutional	202	242	272					
Total in-scope noninterest income by customer type	\$ 836 \$	862 \$	883					
Reconciliation to Asset Management Group noninterest income								
Total in-scope noninterest income	\$ 836 \$	862 \$	883					
Total out-of-scope noninterest income (a)	18	129	9					
Total Asset Management Group noninterest income	\$ 854 \$	991 \$	892					

⁽a) Out-of-scope noninterest income includes revenue streams that fall under the scope of other accounting and disclosure requirements outside of Topic 606.

Asset Management Services

Asset Management Group provides both personal wealth and institutional asset management services including investment management, custody services, retirement planning, family planning, trust management and retirement administration services. We recognize fee revenue over the term of the customer contract based on the value of assets under management at a point in time.

STATISTICAL INFORMATION (UNAUDITED)

THE PNC FINANCIAL SERVICES GROUP, INC.

SELECTED QUARTERLY FINANCIAL DATA

		20	020			2019							
Dollars in millions, except per share data	Fourth	Third		Second	First		Fourth		Third		Second		First
Summary of Operations													
Interest income	\$ 2,576	\$ 2,676	\$	2,855	\$ 3,200	\$	3,334	\$	3,503	\$	3,497	\$	3,428
Interest expense	152	192		328	689		846		999		999		953
Net interest income	2,424	2,484		2,527	2,511		2,488		2,504		2,498		2,475
Noninterest income	1,784	1,797		1,549	1,825		1,833		1,738		1,717		1,586
Total revenue	4,208	4,281		4,076	4,336		4,321		4,242		4,215		4,061
Provision for (Recapture of) credit losses	(254)	52		2,463	914		221		183		180		189
Noninterest expense	2,708	2,531		2,515	2,543		2,762		2,623		2,611		2,578
Income (loss) from continuing operations before income taxes and noncontrolling interests	1,754	1,698		(902)	879		1,338		1,436		1,424		1,294
Income taxes (benefit) from continuing operations	298	166		(158)	120		195		255		239		212
Net income (loss) from continuing operations	1,456	1,532		(744)	759		1,143		1,181		1,185		1,082
Income from discontinued operations before taxes				5,596	181		288		251		224		225
Income taxes from discontinued operations				1,197	25		50		40		35		36
Net income from discontinued operations				4,399	156		238		211		189		189
Net Income	1,456	1,532		3,655	915		1,381		1,392		1,374		1,271
Less: Net income attributable to noncontrolling interests	14	13		7	7		14		13		12		10
Preferred stock dividends and discount accretion and redemptions	49	64		56	64		56		64		56		64
Net income attributable to common shareholders	\$ 1,393	\$ 1,455	\$	3,592	\$ 844	\$	1,311	\$	1,315	\$	1,306	\$	1,197
Per Common Share													
Book value	\$ 119.11	\$ 117.44	\$	115.26	\$ 106.70	\$	104.59	\$	103.37	\$	101.53	\$	98.47
Cash dividends declared (a)	\$ 1.15	\$ 1.15	\$	1.15	\$ 1.15	\$	1.15	\$	1.15	\$	0.95	\$	0.95
Basic earnings (loss) from continuing operations	\$ 3.26	\$ 3.40	\$	(1.90)	\$ 1.59	\$	2.44	\$	2.47	\$	2.47	\$	2.21
Basic earnings from discontinued operations			\$	10.28	\$ 0.37	\$	0.54	\$	0.48	\$	0.42	\$	0.41
Total basic earnings	\$ 3.26	\$ 3.40	\$	8.40	\$ 1.96	\$	2.98	\$	2.95	\$	2.89	\$	2.62
Diluted earnings (loss) from continuing operations	\$ 3.26	\$ 3.39	\$	(1.90)	\$ 1.59	\$	2.43	\$	2.47	\$	2.47	\$	2.20
Diluted earnings from discontinued operations			\$	10.28	\$ 0.36	\$	0.54	\$	0.47	\$	0.41	\$	0.41
Total diluted earnings	\$ 3.26	\$ 3.39	\$	8.40	\$ 1.95	\$	2.97	\$	2.94	\$	2.88	\$	2.61

 $⁽a) \quad \text{On January 5, 2021, we declared a quarterly common stock cash dividend of $1.15 per share payable on February 5, 2021.}$

188 The PNC Financial Services Group, Inc. – 2020 Form 10-K

AVERAGE CONSOLIDATED BALANCE SHEET AND NET INTEREST ANALYSIS (a) (b) (c)

		2020		2019				2018			
Taxable-equivalent basis Dollars in millions	Average Balances	Interest Income/ Expense	Average Yields/ Rates	Average Balances	Interest Income/ Expense	Average Yields/ Rates	Average Balances	Interest Income/ Expense	Average Yields/ Rates		
Assets								•			
Interest-earning assets:											
Investment securities											
Securities available for sale											
Residential mortgage-backed											
Agency	\$ 50,594 \$	1,109	2.19 % \$	31,526	\$ 867	2.75 % 5	\$ 27,156 \$	740	2.72 %		
Non-agency	1,480	109	7.36 %	1,746	141	8.08 %	2,196	146	6.65 %		
Commercial mortgage-backed	6,865	183	2.67 %	5,676	162	2.85 %	4,545	128	2.82 %		
Asset-backed	5,090	129	2.53 %	5,199	172	3.31 %	5,242	165	3.15 %		
U.S. Treasury and government agencies	17,234	324	1.88 %	17,642	435	2.47 %	16,319	373	2.29 %		
Other	4,564	160	3.51 %	3,200	107	3.34 %	4,064	142	3.49 %		
Total securities available for sale	85,827	2,014	2.35 %	64,989	1,884	2.90 %	59,522	1,694	2.85 %		
Securities held to maturity											
Residential mortgage-backed				15,421	438	2.84 %	15,670	456	2.91 %		
Commercial mortgage-backed				553	21	3.80 %	767	29	3.78 %		
Asset-backed	18			120	5	4.17 %	192	7	3.65 %		
U.S. Treasury and government agencies	786	22	2.80 %	767	22	2.87 %	749	21	2.80 %		
Other	648	28	4.32 %	1,816	80	4.41 %	1,884	82	4.35 %		
Total securities held to maturity	1,452	50	3.44 %	18,677	566	3.03 %	19,262	595	3.09 %		
Total investment securities	87,279	2,064	2.36 %	83,666	2,450	2.93 %	78,784	2,289	2.91 %		
Loans											
Commercial	139,254	4,276	3.07 %	123,524	5,157	4.17 %	113,837	4,606	4.05 %		
Commercial real estate	28,765	858	2.98 %	28,526	1,235	4.33 %	28,756	1,193	4.15 %		
Equipment lease financing	6,812	263	3.86 %	7,255	285	3.93 %	7,437	267	3.59 %		
Consumer	55,423	2,730	4.93 %	55,671	3,083	5.54 %	55,438	2,817	5.08 %		
Residential real estate	22,379	852	3.81 %	20,040	844	4.21 %	17,810	784	4.40 %		
Total loans	252,633	8,979	3.55 %	235,016	10,604	4.51 %	223,278	9,667	4.33 %		
Interest-earning deposits with banks	47,333	100	0.21 %	16,878	353	2.09 %	20,603	379	1.84 %		
Other interest-earning assets	9,553	239	2.50 %	12,425	458	3.69 %	8,093	362	4.47 %		
Total interest-earning assets/interest income	396,798	11,382	2.87 %	347,985	13,865	3.98 %	330,758	12,697	3.84 %		
Noninterest-earning assets	52,497			52,350			47,477				
Total assets	\$ 449,295		\$	400,335		5	\$ 378,235				
Liabilities and Equity	,		<u>-</u>			=					
Interest-bearing liabilities:											
Interest-bearing deposits											
Money market	\$ 60,229	138	0.23 % \$	55,505	609	1.10 %	56,353	416	0.74 %		
Demand	82,295	109	0.13 %	65,729	354	0.54 %	60,599	190	0.31 %		
Savings	75,574	233	0.31 %	62,938	696	1.11 %	51,908	428	0.82 %		
Time deposits	20,673	163	0.79 %	20,416	327	1.60 %	17,501	195	1.11 %		
Total interest-bearing deposits	238,771	643	0.27 %	204,588	1,986	0.97 %	186,361	1,229	0.66 %		
Borrowed funds	250,771	0.5		201,500	1,,,,,		100,501	1,22>			
Federal Home Loan Bank borrowings	9,470	103	1.09 %	22,253	569	2.56 %	20,970	478	2.28 %		
Bank notes and senior debt	27,030	428	1.58 %	26,781	869	3.24 %	27,855	818	2.94 %		
Subordinated debt	5,936	112	1.89 %	5,588	214	3.83 %	5,292	224	4.23 %		
Other	5,502	75	1.36 %	6,906	159	2.30 %	5,189	112	2.16 %		
Total borrowed funds	47,938	718	1.50 %	61,528	1,811	2.94 %	59,306	1,632	2.75 %		
Total interest-bearing liabilities/interest expense	286,709	1,361	0.47 %	266,116	3,797	1.43 %	245,667	2,861	1.16 %		
Noninterest-bearing liabilities and equity:	200,707	1,501	0/ /0	200,110	5,171	1.15 /0	213,007	2,001	1.10 /0		
Noninterest-bearing habitutes and equity. Noninterest-bearing deposits	95,055			72,212			76,303				
Accrued expenses and other liabilities	15,774			13,371			9,440				
Equity	51,757			48,636			46,825				
			6			-					
Total liabilities and equity	\$ 449,295		3 40 0/	400,335			\$ 378,235		2.00.00		
Interest rate spread			2.40 %			2.55 %			2.68 %		
Benefit from use of noninterest bearing sources			0.13			0.34			0.29		
Net interest income/margin	S	10,021	2.53 %		\$ 10,068	2.89 %	\$	9,836	2.97 %		

⁽a) Nonaccrual loans are included in loans, net of unearmed income. The impact of financial derivatives used in interest rate risk management is included in the interest income/expense and average yields/rates of the related assets and liabilities. Basis adjustments related to hedged items are included in noninterest-earning assets and noninterest-bearing liabilities. Average balances of securities are based on amortized historical cost (excluding adjustments to fair value, which are included in other assets). Average balances for certain loans and borrowed funds accounted for at fair value are included in noninterest-bearing liabilities, with changes in fair value recorded in Noninterest income.

⁽b) Loan fees for the years ended December 31, 2020, 2019 and 2018 were \$156 million, \$163 million and \$139 million, respectively.

Interest income calculated as taxable-equivalent interest income. To provide more meaningful comparisons of interest income and yields for all interest-earning assets, as well as net interest margins, we use interest income on a taxable-equivalent basis in calculating average yields and net interest margin by increasing the interest income earned on tax-exempt assets to make it fully equivalent to interest income earned on taxable investments. This adjustment is not permitted under GAAP. See Reconciliation of Taxable-Equivalent Net Interest Income in this Statistical Information section for more information.

ANALYSIS OF YEAR-TO-YEAR CHANGES IN NET INTEREST INCOME (a) (b)

		2020/2019								2019/2018							
				(Decrease) in Inco				/(Decrease) in Income/									
Taxable-equivalent basis	 ;		pense	e Due to Changes	in:	T . 1			xpens	se Due to Changes in:	m . 1						
In millions		Volume		Rate		Total		Volume		Rate	Total						
Interest-Earning Assets Investment securities																	
Securities available for sale																	
Residential mortgage-backed	ø	115	ø	(202)	ø.	242	ø	110	ø	8 \$	127						
Agency	\$	445	\$	(203)	2	242	\$	119	\$		127						
Non-agency	\$	(20)	\$	(12)		(32)	\$	(33)		28	(5)						
Commercial mortgage-backed	\$	32	\$	(11)		21	\$	32	\$	2	34						
Asset-backed	\$	(4)	\$	(39)		(43)	\$	()	\$	8	7						
U.S. Treasury and government agencies	\$	(10)		(101)		(111)	\$	32	\$	30	62						
Other	\$	48	\$	5		53	\$	(29)	\$	(6)	(35)						
Total securities available for sale	\$	532	\$	(402)		130	\$	160	\$	30	190						
Securities held to maturity																	
Residential mortgage-backed	\$	(219)	\$	(218)		(437)	\$	(7)	\$	(12)	(19)						
Commercial mortgage-backed	\$	(11)	\$	(11)		(22)	\$	(8)			(8)						
Asset-backed	\$	(2)	\$	(3)		(5)	\$	(3)	\$	1	(2)						
U.S. Treasury and government agencies	\$	1		(1)			\$	1	\$	1	2						
Other	\$	(50)	\$	(2)		(52)	\$	(3)	\$	1	(2)						
Total securities held to maturity	\$	(584)		68	_	(516)	\$	(18)		(11)	(29)						
Total investment securities	\$	102	\$	(488)	-	(386)	\$	147	\$	14	161						
Loans	Φ	102	Ф	(400)		(380)	Ф	147	Ф	14	101						
Commercial	\$	600	\$	(1,482)		(882)	\$	404	\$	147	551						
Commercial real estate	\$	10	\$			` '	\$	(10)		52	42						
	\$			(387)		(377)				25	18						
Equipment lease financing		(17)		(5)		(22)	\$		\$								
Consumer	\$	(14)	\$	(339)		(353)	\$	12	\$	254	266						
Residential real estate	\$	94	\$	(85)	_	9	\$	95	\$	(35)	60						
Total loans	\$	751	\$	(2,376)		(1,625)	\$	521	\$	416	937						
Interest-earning deposits with banks	\$	254	\$	(507)		(253)	\$	(74)		48	(26)						
Other interest-earning assets	\$	(92)	\$	(127)		(219)	\$	168	\$	(72)	96						
Total interest-earning assets	\$	1,755	\$	(4,238)	\$	(2,483)	\$	687	\$	481 \$	1,168						
Interest-Bearing Liabilities																	
Interest-bearing deposits																	
Money market	\$	48	\$	(519)	\$	(471)	\$	(6)	\$	199 \$	193						
Demand	\$	72	\$	(317)		(245)	\$	17	\$	147	164						
Savings	\$	118	\$	(581)		(463)	\$	101	\$	167	268						
Time deposits	\$	4	\$	(168)		(164)	\$	36	\$	96	132						
Total interest-bearing deposits	\$	287	\$	(1,630)	_	(1,343)	\$	130	\$	627	757						
Borrowed funds	Ψ	207	Ψ	(1,050)		(1,545)	Ψ	130	Ψ	027	757						
Federal Home Loan Bank borrowings	\$	(233)	\$	(233)		(466)	\$	30	\$	61	91						
Bank notes and senior debt	\$	(233)	\$	(449)		(441)	\$	(33)		84	51						
Subordinated debt	\$		\$			` '	\$	12	\$								
		12		(114)		(102)				(22)	(10)						
Other	\$	(28)		(56)		(84)	\$	40	\$	7	47						
Total borrowed funds	\$	(339)		(754)		(1,093)	\$	62	\$	117	179						
Total interest-bearing liabilities	\$	276	\$	(2,712)		(2,436)	\$	246	\$	690	936						
Change in net interest income	\$	1,302	\$	(1,349)	\$	(47)	\$	502	\$	(270) \$	232						

⁽a) Changes attributable to rate/volume are prorated into rate and volume components.
(b) Interest income calculated as taxable-equivalent interest income. To provide more meaningful comparisons of interest income, we use interest income on a taxable-equivalent basis by increasing the interest income earned on tax-exempt assets to make it fully equivalent to interest income earned on taxable investments. This adjustment is not permitted under GAAP. See Reconciliation of Taxable-Equivalent Net Interest Income in this Statistical Information section for more information.

RECONCILIATION OF TAXABLE-EQUIVALENT NET INTEREST INCOME (NON-GAAP) (a)

Year ended December 31 In millions	 2020	2019	2018	2017	2016
Net interest income (GAAP)	\$ 9,946	\$ 9,965	\$ 9,721	\$ 9,108	\$ 8,391
Taxable-equivalent adjustments	75	103	115	215	195
Net interest income (Non-GAAP)	\$ 10,021	\$ 10,068	\$ 9,836	\$ 9,323	\$ 8,586

⁽a) The interest income earned on certain earning assets is completely or partially exempt from federal income tax. As such, these tax-exempt instruments typically yield lower returns than taxable investments. To provide more meaningful comparisons of net interest income, we use interest income on a taxable-equivalent basis by increasing the interest income earned on tax-exempt assets to make it fully equivalent to interest income earned on taxable investments. This adjustment is not permitted under GAAP.

RECONCILIATION OF FEE INCOME (NON-GAAP)

Year ended December 31 In millions	20	20 20	19 2018
Noninterest income			
Asset management	\$ 83	6 \$ 862	2 \$ 883
Consumer services	1,48	4 1,55	5 1,502
Corporate services	2,16	7 1,91	1,849
Residential mortgage	60	4 36	316
Service charges on deposits	50	0 702	2 714
Total fee income	5,59	1 5,40	1 5,264
Other	1,36	4 1,47	3 1,205
Total noninterest income	\$ 6,95	5 \$ 6,874	4 \$ 6,469

RECONCILIATION OF TANGIBLE BOOK VALUE PER COMMON SHARE (NON-GAAP)

December 31 Dollars in millions, except per share data	 2020	2019	2018	2017	2016
Book value per common share	\$ 119.11 \$	104.59 \$	95.72 \$	91.94 \$	85.94
Tangible book value per common share					
Common shareholders' equity	\$ 50,493 \$	45,321 \$	43,742 \$	43,530 \$	41,723
Goodwill and other intangible assets	(9,381)	(9,441)	(9,467)	(9,498)	(9,376)
Deferred tax liabilities on Goodwill and other intangible assets	188	187	190	191	304
Tangible common shareholders' equity	\$ 41,300 \$	36,067 \$	34,465 \$	34,223 \$	32,651
Period-end common shares outstanding (in millions)	424	433	457	473	485
Tangible book value per common share (Non-GAAP) (a)	\$ 97.43 \$	83.30 \$	75.42 \$	72.28 \$	67.26

⁽a) We believe this non-GAAP financial measure serves as a useful tool to help evaluate the strength and discipline of a company's capital management strategies and as an additional conservative measure of total company value.

LOANS SUMMARY

December 31 In millions		2020	2019	2018	2017	2016
Commercial						
Commercial and industrial	\$	132,073	\$ 125,337	\$ 116,834	\$ 110,527 \$	101,364
Commercial real estate		28,716	28,110	28,140	28,978	29,010
Equipment lease financing		6,414	7,155	7,308	7,934	7,581
Total commercial		167,203	160,602	152,282	147,439	137,955
Consumer						
Home equity		24,088	25,085	26,123	28,364	29,949
Residential real estate		22,560	21,821	18,657	17,212	15,598
Automobile		14,218	16,754	14,419	12,880	12,380
Credit card		6,215	7,308	6,357	5,699	5,282
Education		2,946	3,336	3,822	4,454	5,159
Other consumer		4,698	4,937	4,585	4,410	4,510
Total consumer		74,725	79,241	73,963	73,019	72,878
Total loans	\$	241,928	\$ 239,843	\$ 226,245	\$ 220,458 \$	210,833

SELECTED LOAN MATURITIES AND INTEREST SENSITIVITY

December 31, 2020 In millions	 1 Year or Less	1 Through 5 Years	After 5 Years	Gross Loans
Commercial and industrial	\$ 55,612 \$	71,124 \$	5,337 \$	132,073
Commercial real estate	6,207	16,012	6,497	28,716
Total	\$ 61,819 \$	87,136 \$	11,834 \$	160,789
Loans with:				
Predetermined rate	\$ 17,439 \$	15,890 \$	5,815 \$	39,144
Floating or adjustable rate	44,380	71,246	6,019	121,645
Total	\$ 61,819 \$	87,136 \$	11,834 \$	160,789

At December 31, 2020, \$21.1 billion notional amount of receive-fixed interest rate swaps were designated as part of cash flow hedging strategies that converted the floating rate (LIBOR) on the underlying commercial loans to a fixed rate as part of risk management strategies.

NONPERFORMING ASSETS AND RELATED INFORMATION

Pecial part							
Commercial and industrial \$ 666 \$ 425 \$ 346 \$ 429 \$ 496 Commercial and industrial 224 44 75 123 143 Equipment lease financing 33 32 11 2 16 Total commercial 923 501 432 554 655 Consumer (a) 8 669 797 818 914 Residential real estate 528 315 350 400 501 Residential real estate 528 315 350 400 550 Residential real estate 528		 2020	2019		2018	2017	2016
Commercial and industrial \$ 666 \$ 425 \$ 346 \$ 429 \$ 496 Commercial real estate 224 44 75 123 143 Equipment lease financing 33 32 11 2 16 Total commercial 923 501 432 554 655 Consumer (a) 8 645 669 797 818 914 Residential real estate 528 315 350 400 501 Automobile 175 135 100 76 55 Credit card 8 11 7 6 4 Other consumer 7 4 8 11 15 Total consumer 1,363 1,134 1,262 1,311 1,489 Total consumer 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 5 2,373 5 1,52 1,811 17 2 Total consumer 5	Nonperforming loans						
Commercial real estate 224 44 75 123 143 Equipment lease financing 33 32 11 2 16 Total commercial 923 501 432 554 655 Consumer (a) 8 645 669 797 818 914 Residential real estate 528 315 350 400 501 Automobile 175 135 100 76 55 Cedit card 8 11 7 6 4 Other consumer 1,363 1,134 1,262 1,311 1,489 Total consumer 1,363 1,14 1,66 2,244 OREO and foreclosed assets 5 1,37 1,69 <td< td=""><td>Commercial</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Commercial						
Equipment lease financing 33 32 11 2 16 Total commercial 923 501 432 554 655 Consumer (a)	Commercial and industrial	\$ 666	\$ 425	\$	346	\$ 429	\$ 496
Total commercial 923 501 432 554 655	Commercial real estate	224	44		75	123	143
Consumer (a)	Equipment lease financing	33	32		11	2	16
Home equity 645 669 797 818 914 Residential real estate 528 315 350 400 501 Automobile 175 135 100 76 55 Credit card 8 11 7 6 4 Other consumer 7 4 8 11 15 Total consumer 1,363 1,134 1,262 1,311 1,489 Total nonperforming loans (b) (c) 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets to total loans 2,286 1,635 1,594 1,865 2,144 OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets to total loans 0,94% 0,68% 0,75% 0,85% 1,02% Nonperforming assets to total loans, OREO and foreclosed assets 0,97% 0,73% 0,80% 0,92% 1,12% Nonperforming assets to total assets 0,97% 0,43% 0,47% 0,53% 0,65% Troubled Debt Restructurings 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 902 5 843 5 863 5 964 5 1,112 Performing 5 903 5 855 5 629 5 737 5 782 As a percentage of total loans 90 days or more (d) (e) (f) 5 90 90 days or more (d) (e) (f) 5 90 days	Total commercial	923	501		432	554	655
Residential real estate 528 315 350 400 501 Automobile 175 135 100 76 55 Credit card 8 11 7 6 4 Other consumer 7 4 8 11 15 Total consumer 1,363 1,134 1,262 1,311 1,489 Total nonperforming loans (b) (c) 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets \$ 2,337 \$ 1,752 \$ 1,808 \$ 2,035 \$ 2,374 Nonperforming assets to total loans 0,94% 0,68% 0,75% 0,85% 1,02% Nonperforming assets to total loans, OREO and foreclosed assets 0,97% 0,73% 0,80% 0,92% 1,12% Nonperforming assets to total loans, OREO and foreclosed assets 0,50% 0,43% 0,47% 0,53% 0,65% Nonperforming assets to total loans, OREO and foreclosed assets 0,50%	Consumer (a)						
Automobile 175 135 100 76 55 Credit card 8 11 7 6 4 Other consumer 7 4 8 11 15 Total consumer 1,363 1,134 1,262 1,311 1,489 Total nonperforming loans (b) (c) 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets to total loans 9,237 1,752 1,808 2,035 2,374 Nonperforming loans to total loans 0,94% 0,68% 0,75% 0,85% 1,02% Nonperforming assets to total loans, OREO and foreclosed assets 0,97% 0,73% 0,80% 0,92% 1,12% Nonperforming assets to total loans, OREO and foreclosed assets 9,97 0,43% 0,47% 0,53% 0,65% Nonperforming assets to total assets 9 902 843 863 964 1,112 Performing 9 742	Home equity	645	669		797	818	914
Credit card 8 11 7 6 4 Other consumer 7 4 8 11 15 Total consumer 1,363 1,134 1,262 1,311 1,489 Total nonperforming loans (b) (c) 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets to stall loans 8 2,337 1,752 1,808 2,035 2,374 Nonperforming loans to total loans 0.94 % 0.68 % 0.75 % 0.85 % 1.12 % Nonperforming assets to total loans, OREO and foreclosed assets 0.97 % 0.73 % 0.80 % 0.92 % 1.12 % Nonperforming assets to total loans, OREO and foreclosed assets 0.50 % 0.43 % 0.47 % 0.53 % 0.65 % Troubled Debt Restructurings 8 902 \$ 8 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109	Residential real estate	528	315		350	400	501
Other consumer 7 4 8 11 15 Total consumer 1,363 1,134 1,262 1,311 1,489 Total nonperforming loans (b) (c) 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets \$ 2,337 \$ 1,752 \$ 1,808 \$ 2,035 \$ 2,374 Nonperforming loans to total loans 0.94 % 0.68 % 0.75 % 0.82 % 1.02 % Nonperforming assets to total loans, OREO and foreclosed assets 0.97 % 0.73 % 0.80 % 0.92 % 1.12 % Nonperforming assets to total assets 0.50 % 0.43 % 0.47 % 0.53 % 1.02 % Nonperforming assets to total assets 0.50 % 0.43 % 0.47 % 0.53 % 1.12 % Nonperforming \$ 902 \$ 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 Past due loans \$ 509 \$	Automobile	175	135		100	76	55
Total consumer	Credit card	8	11		7	6	4
Total nonperforming loans (b) (c) 2,286 1,635 1,694 1,865 2,144 OREO and foreclosed assets 51 1117 1114 170 230 Total nonperforming assets 5 1,594 0,885 2,035 \$ 2,374 Nonperforming loans to total loans 6 2,337 \$ 1,752 \$ 1,808 \$ 2,035 \$ 2,374 Nonperforming loans to total loans 6 0,94 % 0,68 % 0,75 % 0,85 % 1,02 % 0,75 % 0,85 % 1,02 % 0,75 % 0,85 % 1,02 % 0,75 % 0,85 % 1,02 % 0,75 % 0,85 % 0,85 % 1,02 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,12 % 0,80 % 0,92 % 1,10 % 0,80 % 0,92 % 1,10 % 0,80 % 0,92 % 1,10 % 0,80 % 0,92 % 1,10 % 0,80 % 0,92 % 1,10 % 0,80 % 0,92 % 0,80 % 0,80 % 0,80 % 0,80 % 0,92 % 0,80 %	Other consumer	7	4		8	11	15
OREO and foreclosed assets 51 117 114 170 230 Total nonperforming assets \$ 2,337 \$ 1,752 \$ 1,808 \$ 2,035 \$ 2,374 Nonperforming loans to total loans 0.94% 0.68% 0.75% 0.85% 1.02% Nonperforming assets to total loans, OREO and foreclosed assets 0.97% 0.73% 0.80% 0.92% 1.12% Nonperforming assets to total assets 0.50% 0.43% 0.47% 0.53% 0.65% Troubled Debt Restructurings \$ 902 \$ 843 \$ 863 964 \$ 1,112 Performing \$ 742 \$ 821 988 1,097 \$ 1,109 Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 585 629 737 782 As a percentage of total loans 0.21% 0.24% 0.28% 0.33% 0.37% Past due loans held for sale 4 3 4 3 4 3 4	Total consumer	1,363	1,134		1,262	1,311	1,489
Total nonperforming assets \$ 2,337 \$ 1,752 \$ 1,808 \$ 2,035 \$ 2,374 \$ Nonperforming loans to total loans \$ 0.94 % 0.68 % 0.75 % 0.85 % 1.02 % Nonperforming assets to total loans, OREO and foreclosed assets \$ 0.97 % 0.73 % 0.80 % 0.92 % 1.12 % Nonperforming assets to total assets \$ 0.50 % 0.43 % 0.47 % 0.53 % 0.65 % Troubled Debt Restructurings \$ 902 \$ 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 902 \$ 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 Past due loans \$ 400 Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans \$ 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$ \$ 3 \$ \$ 4 \$ \$ \$ \$	Total nonperforming loans (b) (c)	2,286	1,635		1,694	1,865	2,144
Nonperforming loans to total loans 0.94 % 0.68 % 0.75 % 0.85 % 1.02 %	OREO and foreclosed assets	51	117		114	170	230
Nonperforming assets to total loans, OREO and foreclosed assets 0.97 % 0.73 % 0.80 % 0.92 % 1.12 % Nonperforming assets to total assets 0.50 % 0.43 % 0.47 % 0.53 % 0.65 % Troubled Debt Restructurings Troubled Debt Restructurings Nonperforming \$ 902 \$ 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$ 3 \$ 4	Total nonperforming assets	\$ 2,337	\$ 1,752	\$	1,808	\$ 2,035	\$ 2,374
Nonperforming assets to total assets 0.50 % 0.43 % 0.47 % 0.53 % 0.65 % Troubled Debt Restructurings 8 902 \$ 843 \$ 863 \$ 964 \$ 1,112 \$ Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 \$ Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 \$ As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale 4 3 4 3 4 3 4 3 4	Nonperforming loans to total loans	0.94 %	0.68 %		0.75 %	0.85 %	1.02 %
Troubled Debt Restructurings Nonperforming \$ 902 \$ 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 4	Nonperforming assets to total loans, OREO and foreclosed assets	0.97 %	0.73 %		0.80 %	0.92 %	1.12 %
Nonperforming \$ 902 \$ 843 \$ 863 \$ 964 \$ 1,112 Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4	Nonperforming assets to total assets	0.50 %	0.43 %		0.47 %	0.53 %	0.65 %
Performing \$ 742 \$ 821 \$ 988 \$ 1,097 \$ 1,109 Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$	Troubled Debt Restructurings						
Past due loans Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$ 3 \$ 4 \$	Nonperforming	\$ 902	\$ 843	\$	863	\$ 964	\$ 1,112
Accruing loans past due 90 days or more (d) (e) (f) \$ 509 \$ 585 \$ 629 \$ 737 \$ 782 As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4	Performing	\$ 742	\$ 821	\$	988	\$ 1,097	\$ 1,109
As a percentage of total loans 0.21 % 0.24 % 0.28 % 0.33 % 0.37 % Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4	Past due loans						
Past due loans held for sale Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4	Accruing loans past due 90 days or more (d) (e) (f)	\$ 509	\$ 585	\$	629	\$ 737	\$ 782
Accruing loans held for sale past due 90 days or more (f) \$ 4 \$ 3 \$ 4 \$ 3 \$ 4	As a percentage of total loans	0.21 %	0.24 %		0.28 %	0.33 %	0.37 %
	Past due loans held for sale						
As a percentage of total loans held for sale 0.25 % 0.28 % 0.40 % 0.11 % 0.16 %	Accruing loans held for sale past due 90 days or more (f)	\$ 4	\$ 	-	4	\$ -	\$ 4
	As a percentage of total loans held for sale	0.25 %	0.28 %		0.40 %	0.11 %	0.16 %

- Excludes most unsecured consumer loans and lines of credit, which are charged off after 120 to 180 days past due and are not placed on nonperforming status.
- Nonperforming loans exclude certain government insured or guaranteed loans, loans held for sale and loans accounted for under the fair value option. Amounts prior to December 31, 2020 also excluded purchased impaired (b) loans.
- In 2020, \$0.1 billion of interest income was estimated to be contractually due on loans classified as nonperforming at December 31, 2020, based on original contractual terms.
- Amounts include government insured or guaranteed consumer loans of \$0.4 billion, \$0.6 billion, \$0.5 billion at December 31, 2020, 2019, 2018, 2017 and 2016, respectively. In connection with the adoption of the CECL standard, accruing loans past due amounts at December 31, 2020 include PCD loans while all amounts prior excluded purchased impaired loans.
- (e)
- Certain loans modified due to COVID-19 related hardships are not being reported as past due as of December 31, 2020 based on the contractual terms of the loan, even where borrowers may not be making payments on their loans during the modification period. See Note 4 Loans and Related Allowance for Credit Losses in the Notes To Consolidated Financial Statements in Item 8 of this Report for additional details on the delinquency status of loans modified due to COVID-19 related hardships.

SUMMARY OF LOAN LOSS EXPERIENCE

Year ended December 31 Dollars in millions	 2020)	2019	2019		2018		2017	
Allowance for loan and lease losses									
January 1	\$ 2,742	\$	2,629	\$	2,611	\$	2,589	\$	2,727
Adoption of ASU 2016-13 (a)	463								
Gross charge-offs									
Commercial and industrial	(382)		(183)		(108)		(186)		(332)
Commercial real estate	(2)		(18)		(8)		(24)		(26)
Equipment lease financing	(23)		(15)		(8)		(11)		(5)
Home equity	(42)		(68)		(110)		(123)		(143)
Residential real estate	(10)		(9)		(6)		(9)		(14)
Credit card	(300)		(263)		(217)		(182)		(161)
Other consumer (b)	(433)		(418)		(307)		(251)		(205)
Total gross charge-offs	(1,192)		(974)		(764)		(786)		(886)
Recoveries									
Commercial and industrial	75		59		67		81		117
Commercial real estate	9		11		24		28		51
Equipment lease financing	10		8		8		7		10
Home equity	61		74		98		91		84
Residential real estate	16		14		21		18		9
Credit card	35		27		24		21		19
Other consumer (b)	154		139		102		83		53
Total recoveries	360		332		344		329		343
Net (charge-offs)	(832)		(642)		(420)		(457)		(543)
Provision for credit losses - loans and leases	2,985		773		408		441		433
Net decrease / (increase) in allowance for unfunded loan commitments and letters of credit			(33)		12		4		(40)
Other	3		15		18		34		12
December 31	\$ 5,361	\$	2,742	\$	2,629	\$	2,611	\$	2,589
ALLL as a percentage of December 31:									
Loans	2.22 %)	1.14 %	,	1.16 %)	1.18 %	,	1.23 %
Nonperforming loans (c)	235 %)	168 %)	155 %)	140 %)	121 %
As a percentage of average loans:									
Net charge-offs	0.33 %)	0.27 %		0.19 %)	0.21 %)	0.26 %
Provision for credit losses - loans and leases (c)	1.18 %		0.33 %	,	0.18 %	,)	0.20 %	,	0.21 %
ALLL (c)	2.12 %)	1.17 %	1	1.18 %)	1.20 %)	1.24 %
ALLL as a multiple of net charge-offs	6.44x		4.27x		6.26x	(5.71x		4.77x

⁽a) Represents the impact of adopting ASU 2016-13, Financial Instruments - *Credit Losses* on January 1, 2020 and our transition from an incurred loss methodology for our reserves to an expected credit loss methodology. Includes automobile, education and other consumer.

(c) Ratio in 2020 reflects the transition impact on our ALLL from the adoption of the CECL standard along with the increases in reserves during 2020 due to the significant economic impacts of COVID-19 and loan growth.

The following table presents the assignment of the ALLL and the categories of loans as a percentage of total loans. Changes in the allocation over time reflect the changes in loan portfolio composition, risk profile and refinements to reserve methodologies. Allowance amounts for 2020 reflect our ALLL after the adoption of the CECL standard.

ALLOCATION OF ALLOWANCE FOR LOAN AND LEASE LOSSES

	 202	20	2019		201	18	201	7	2016	
December 31 Dollars in millions	 Allowance	Loans to Total Loans	Allowance	Loans to Total Loans						
Commercial and industrial	\$ 2,300	54.6 %	\$ 1,489	52.3 %	\$ 1,350	51.6 %	\$ 1,302	50.1 %	\$ 1,179	48.1 %
Commercial real estate	880	11.9	278	11.7	271	12.4	244	13.1	320	13.8
Equipment lease financing	157	2.6	45	3.0	42	3.2	36	3.6	35	3.6
Home equity	313	10.0	87	10.5	204	11.6	284	12.9	357	14.2
Residential real estate	28	9.3	258	9.1	297	8.3	300	7.8	332	7.4
Credit card	816	2.6	288	3.0	239	2.8	220	2.6	181	2.5
Other consumer (a)	867	9.0	297	10.4	226	10.1	225	9.9	185	10.4
Total	\$ 5,361	100.0 %	\$ 2,742	100.0 %	\$ 2,629	100.0 %	\$ 2,611	100.0 %	\$ 2,589	100.0 %

(a) Includes automobile, education and other consumer.

TIME DEPOSITS

The aggregate amount of time deposits with a denomination of \$100,000 or more was \$12.9 billion at December 31, 2020 and \$13.3 billion at December 31, 2019. Time deposits of \$100,000 or more included time deposits in foreign offices of \$8.4 billion at December 31, 2020. Domestic time deposits of \$100,000 or more were \$4.5 billion at December 31, 2020 with the following maturities:

December 31, 2020 - in billions	 Domestic Time Deposits
Three months or less	\$ 1.3
Over three through six months	1.0
Over six through twelve months	1.5
Over twelve months	0.7
Total	\$ 4.5

TRANSITIONAL BASEL III AND FULLY PHASED-IN BASEL III COMMON EQUITY TIER 1 CAPITAL RATIOS (NON-GAAP)

Our regulatory risk-based ratios for 2017 and 2016 were calculated using the standardized approach for determining risk-weighted assets, and the definitions of, and deductions from, regulatory capital under the Basel III rules (as such definitions and deductions were phased-in for 2017 and 2016). We refer to the capital ratios calculated using the phased-in Basel III provisions in effect for those periods and, for the risk-based ratios, standardized approach risk-weighted assets as the Transitional Basel III ratios.

	Transitio	nal B	asel III	Fully Phased-In Basel III (Non-GAAP) (estimated) (a)			
Dollars in millions	December 3 201		December 31 2016		December 31 2017	December 31 2016	
Common stock, related surplus and retained earnings, net of treasury stock	\$ 43,676	\$	41,987	\$	43,676 \$	41,987	
Less regulatory capital adjustments:							
Goodwill and disallowed intangibles, net of deferred tax liabilities	(9,243)		(8,974)		(9,307)	(9,073)	
Basel III total threshold deductions	(1,983)		(762)		(2,928)	(1,469)	
Accumulated other comprehensive income (b)	(166)		(238)		(207)	(396)	
All other adjustments	(138)		(214)		(141)	(221)	
Basel III Common equity Tier 1 capital	\$ 32,146	\$	31,799	\$	31,093 \$	30,828	
Basel III standardized approach risk-weighted assets (c)	\$ 309,460	\$	300,533	\$	316,120 \$	308,517	
Basel III advanced approaches risk-weighted assets (d)	N/A	1	N/A	\$	285,226 \$	277,896	
Basel III Common equity Tier 1 capital ratio	10.4 %	6	10.6 %		9.8 %	10.0 %	
Risk weight and associated rules utilized	ardized (with 2017 tion adjustments)		tandardized (with 2016 ransition adjustments)		Standardized		

Pro forma fully phased-in Basel III ratios are calculated without the benefit of phase-ins. We believe that the pro forma fully phased-in Basel III capital ratios are a useful tool to assess our capital position (without the benefit of (a) phase-ins), for the periods presented.

The PNC Financial Services Group, Inc. - 2020 Form 10-K 195

Represented net adjustments related to accumulated other comprehensive income for securities, and those transferred from available for sale, as well as pension and other postretirement plans.

Basel III standardized approach risk-weighted assets were based on the Basel III standardized approach rules and include credit and market risk-weighted assets.

Basel III advanced approaches risk-weighted assets were based on the Basel III advanced approaches rules, and include credit, market and operational risk-weighted assets.

GLOSSARY DEFINED TERMS

2019 Tailoring Rules – Rules adopted by the federal banking agencies to better tailor the application of their capital, liquidity, and enhanced prudential requirements for banking organizations to the asset size and risk profile (as measured by certain regulatory metrics) of the banking organization. Effective January 1, 2020, the agencies' capital and liquidity rules classify all BHCs with \$100 billion or more in total assets into one of four categories (Category II, Category III, and Category IV).

Adjusted average total assets – Primarily consisted of total average quarterly (or annual) assets plus/less unrealized losses (gains) on investment securities, less goodwill and certain other intangible assets (net of eligible deferred taxes).

Allowance for credit losses (ACL) – A valuation account that is deducted from or added to the amortized cost basis of the related financial assets to present the net carrying value at the amount expected to be collected on the financial asset.

Amortized cost basis – Amount at which a financial asset is originated or acquired, adjusted for applicable accretion or amortization of premiums, discounts and net deferred fees or costs, collection of cash, charge-offs, foreign exchange and fair value hedge accounting adjustments.

Basel III common equity Tier 1 (CET1) capital - Common stock plus related surplus, net of treasury stock, plus retained earnings, plus accumulated other comprehensive income for securities currently, and those transferred from, available for sale and pension and other postretirement benefit plans, subject to phase-in limits, less goodwill, net of associated deferred tax liabilities, less other disallowed intangibles, net of deferred tax liabilities and plus/less other adjustments. Significant common stock investments in unconsolidated financial institutions, as well as mortgage servicing rights and deferred tax assets, must then be deducted to the extent such items (net of associated deferred tax liabilities) individually exceed 10%, or in the aggregate exceed 15%, of our adjusted Basel III common equity Tier 1 capital.

Basel III common equity Tier 1 (CET1) capital (Tailoring Rules)- Common stock plus related surplus, net of treasury stock, plus retained earnings, less goodwill, net of associated deferred tax liabilities, less other disallowed intangibles, net of deferred tax liabilities and plus/less other adjustments. Investments in unconsolidated financial institutions, as well as mortgage servicing rights and deferred tax assets, must then be deducted to the extent such items (net of associated deferred tax liabilities) individually exceed 25% of our adjusted Basel III common equity Tier 1 capital.

Basel III common equity Tier 1 capital ratio - Common equity Tier 1 capital divided by period-end risk-weighted assets (as applicable).

Basel III Tier 1 capital – Common equity Tier 1 capital, plus qualifying preferred stock, plus certain trust preferred capital securities, plus certain noncontrolling interests that are held by others and plus/less other adjustments.

Basel III Tier 1 capital ratio - Tier 1 capital divided by period-end risk-weighted assets (as applicable).

Basel III Total capital – Tier 1 capital plus qualifying subordinated debt, plus certain trust preferred securities, plus, under the Basel III transitional rules and the standardized approach, the allowance for loan and lease losses included in Tier 2 capital and other.

Basel III Total capital ratio - Basel III Total capital divided by period-end risk-weighted assets (as applicable).

<u>Basel Committee</u> – Basel Committee on Banking Supervision.

BBVA - BBVA USA Bancshares, Inc.

BBVA, S.A. – Banco Bilbao Vizcaya Argentaria, S.A.

BBVA USA - BBVA USA, the Alabama-chartered bank subsidiary of BBVA USA Bancshares, Inc.

BlackRock, Inc.

<u>Charge-off</u> – Process of removing a loan or portion of a loan from our balance sheet because it is considered uncollectible. We also record a charge-off when a loan is transferred from portfolio holdings to held for sale by reducing the loan carrying amount to the fair value of the loan, if fair value is less than carrying amount.

196 The PNC Financial Services Group, Inc. – 2020 Form 10-K

<u>Collateral dependent loans</u> – Loans expected to be repaid substantially through the operation or sale of the collateral underlying the loan when a borrower is experiencing financial difficulty, and for which we have elected to measure the loan at the estimated fair value of collateral (less costs to sell if sale or foreclosure of the property is expected). Additionally, we consider a loan to be collateral dependent when foreclosure or liquidation of the underlying collateral is probable.

Combined loan-to-value ratio (CLTV) - This is the aggregate principal balance(s) of the mortgages on a property divided by its appraised value or purchase price.

Common shareholders' equity – Total shareholders' equity less the liquidation value of preferred stock.

Company - The PNC Financial Services Group, Inc. and its subsidiaries (interchangeable with "PNC", "we", "us", "the Company" or "the Corporation" on this Form).

COVID-19 - The coronavirus, which resulted in a worldwide pandemic beginning in 2020 (interchangeable with "the pandemic", or "the COVID-19 pandemic" on this Form).

Credit valuation adjustment - Represents an adjustment to the fair value of our derivatives for our own and counterparties' non-performance risk.

<u>Criticized commercial loans</u> – Loans with potential or identified weaknesses based upon internal risk ratings that comply with the regulatory classification definitions of "Special Mention," "Substandard" or "Doubtful."

<u>Current Expected Credit Loss (CECL)</u> – Methodology for estimating the ACL on in-scope financial assets held at amortized cost and unfunded lending related commitments, which uses a combination of expected losses over a reasonable and supportable forecast period, a reversion period and long run average credit losses for their estimated contractual term.

<u>Discretionary client assets under management</u> – Assets over which we have sole or shared investment authority for our customers/clients. We do not include these assets on our Consolidated Balance Sheet.

<u>Dodd-Frank</u> – Dodd-Frank Wall Street Reform and Consumer Protection Act.

Earning assets - Assets that generate income, which include: interest-earning deposits with banks, loans held for sale, loans, investment securities and certain other assets.

Effective duration – A measurement, expressed in years, that, when multiplied by a change in interest rates, would approximate the percentage change in value of on- and off-balance sheet positions.

Efficiency - Noninterest expense divided by total revenue.

Estimated contractual term - In the context of CECL, the contractual term of the financial asset or credit exposure, adjusted for estimated draws and prepayments, certain embedded extension options and extensions granted under troubled debt restructurings.

Exchange Act – Securities Exchange Act of 1934, as amended.

Exposure at default (EAD) - The credit exposure estimated to be outstanding in the event of default of a credit obligor.

Fair value - The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

<u>Federal Reserve</u> – The Board of Governors of the Federal Reserve System.

<u>Fee income</u> – Refers to the following categories within Noninterest income: Asset management, Consumer services, Corporate services, Residential mortgage and Service charges on deposits.

FICO score – A credit bureau-based industry standard score created by Fair Isaac Co. which predicts the likelihood of borrower default. We use FICO scores both in underwriting and assessing credit risk in our consumer lending portfolio. Lower FICO scores indicate likely higher risk of default, while higher FICO scores indicate likely lower risk of default. FICO scores are updated on a periodic basis.

Foreign exchange contracts - Contracts that provide for the future receipt and delivery of foreign currency at previously agreed-upon terms.

<u>Futures</u> and <u>forward contracts</u> – Contracts in which the buyer agrees to purchase and the seller agrees to deliver a specific financial instrument at a predetermined price or yield. May be settled either in cash or by delivery of the underlying financial instrument.

Home price index (HPI) – A broad measure of the movement of single-family house prices in the U.S.

Interest rate swap contracts - Contracts that are entered into primarily as an asset/liability management strategy to reduce interest rate risk. Interest rate swap contracts are exchanges of interest rate payments, such as fixed-rate payments for floating-rate payments, based on notional principal amounts.

Intrinsic value – The difference between the price, if any, required to be paid for stock issued pursuant to an equity compensation arrangement and the fair market value of the underlying stock.

<u>Leverage ratio</u> – Basel III Tier 1 capital divided by average quarterly adjusted total assets.

London InterBank Offered Rate (LIBOR) – LIBOR is the average interest rate charged when banks in the London wholesale money market (or interbank market) borrow unsecured funds from each other. LIBOR rates are used as a benchmark for interest rates on a global basis. Our product set includes loans priced using LIBOR as a benchmark.

<u>Loan-to-value ratio (LTV)</u> – A calculation of a loan's collateral coverage that is used both in underwriting and assessing credit risk in our lending portfolio. LTV is the sum total of loan obligations secured by collateral divided by the market value of that same collateral. Market value of the collateral is based on an independent valuation of the collateral. For example, a LTV of less than 90% is better secured and has less credit risk than a LTV of greater than or equal to 90%.

<u>Long run average</u>—In the context of CECL, expected credit losses or credit risk parameters for the remaining estimated contractual maturity beyond the reasonable and supportable forecast and reversion periods. The long run average is generally derived from historical loss information and current portfolio characteristics, without considering current or forecasted conditions.

Loss given default (LGD) – Assuming a credit obligor enters default status, an estimate of loss, based on collateral type, collateral value, loan exposure and other factors. LGD is net of recovery, through any means, including but not limited to the liquidation of collateral or deficiency judgments rendered from foreclosure or bankruptcy proceedings.

Nonaccrual loans – Loans for which we do not accrue interest income. Nonaccrual loans include nonperforming loans, in addition to loans accounted for under fair value option and loans accounted for as held for sale for which full collection of contractual principal and/or interest is not probable.

Nondiscretionary client assets under administration – Assets we hold for our customers/clients in a nondiscretionary, custodial capacity. We do not include these assets on our Consolidated Balance Sheet.

Nonperforming assets – Nonperforming assets include nonperforming loans, OREO and foreclosed assets. We do not accrue interest income on assets classified as nonperforming.

Nonperforming loans – Loans accounted for at amortized cost whose credit quality has deteriorated to the extent that full collection of contractual principal and interest is not probable, including TDRs which have not returned to performing status. Interest income is not recognized on nonperforming loans. Nonperforming loans exclude certain government insured or guaranteed loans for which we expect to collect substantially all principal and interest, loans held for sale, and loans accounted for under the fair value option.

Notional amount – The basis to which the underlying referenced interest rate, security price, credit spread or other index is applied to determine required payments under the derivative contract.

Operating leverage – The period to period dollar or percentage change in total revenue less the dollar or percentage change in noninterest expense. A positive variance indicates that revenue growth exceeded expense growth (*i.e.*, positive operating leverage) while a negative variance implies expense growth exceeded revenue growth (*i.e.*, negative operating leverage).

Options – Contracts that grant the purchaser, for a premium payment, the right, but not the obligation, to either purchase or sell the associated financial instrument at a set price during a specified period or at a specified date in the future.

Other real estate owned (OREO) and foreclosed assets – Assets taken in settlement of troubled loans primarily through deed-in-lieu of foreclosure or foreclosure. Foreclosed assets include real and personal property. Certain assets that have a government-guarantee which are classified as other receivables are excluded.

PNC Bank - PNC Bank, National Association.

198 The PNC Financial Services Group, Inc. – 2020 Form 10-K

Probability of default (PD) - An estimate of the likelihood that a credit obligor will enter default status.

<u>Purchased credit deteriorated assets (PCD)</u> – Acquired loans or debt securities that, at acquisition, are determined to have experienced a more-than-insignificant deterioration in credit quality since origination or issuance.

<u>Reasonable and supportable forecast period</u> – In the context of CECL, the period for which forecasts and projections of macroeconomic variables have been determined to be reasonable and supportable, and are used as inputs for ACL measurement.

Recovery - Cash proceeds received on a loan that we had previously charged-off. We credit the amount received to the allowance for loan and lease losses.

Reversion period – In the context of CECL, the period between the end of the reasonable and supportable forecast period and the point at which losses are expected to have reverted to their long run average, in order to reflect an overall reasonable estimate of expected credit losses.

<u>Risk appetite</u> – A dynamic, forward-looking view on the aggregate amount of risk we are willing and able to take in executing business strategy in light of the current business environment.

<u>Risk limits</u> – Quantitative measures based on forward-looking assumptions that allocate our aggregate risk appetite & g., measure of loss or negative events) to business lines, legal entities, specific risk categories, concentrations and as appropriate, other levels.

<u>Risk profile</u> – The risk profile is a point-in-time assessment of risk. The profile represents overall risk position in relation to the desired risk appetite. The determination of the risk profile's position is based on qualitative and quantitative analysis of reported risk limits, metrics, operating guidelines and qualitative assessments.

<u>Risk-weighted assets</u> – Computed by the assignment of specific risk-weights (as defined by the Board of Governors of the Federal Reserve System) to assets and off-balance sheet instruments.

Secured Overnight Financing Rate (SOFR) - SOFR is a reference rate that is based on overnight transactions in the U.S. Treasury repurchase market.

Servicing rights – Intangible assets or liabilities created by an obligation to service assets for others. Typical servicing rights include the right to receive a fee for collecting and forwarding payments on loans and related taxes and insurance premiums held in escrow.

<u>Supplementary leverage exposure</u> - The sum of adjusted average assets and certain off-balance sheet exposures, including undrawn credit commitments and derivative potential future exposures.

Supplementary leverage ratio - Basel III Tier 1 capital divided by Supplementary leverage exposure.

<u>Taxable-equivalent interest income</u> – The interest income earned on certain assets that is completely or partially exempt from federal income tax. These tax-exempt instruments typically yield lower returns than taxable investments. To provide more meaningful comparisons of yields and margins for all interest-earning assets, we use interest income on a taxable-equivalent basis in calculating average yields and net interest margins by increasing the interest income earned on tax-exempt assets to make it fully equivalent to interest income earned on other taxable investments. This adjustment is not permitted under GAAP on the Consolidated Income Statement.

Troubled debt restructuring (TDR) - A loan whose terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties.

<u>Unfunded lending related commitments</u> – Standby letters of credit, financial guarantees, commitments to extend credit and similar unfunded obligations that are not unilaterally, unconditionally, cancellable at PNC's option.

<u>Value-at-risk (VaR)</u> – A statistically-based measure of risk that describes the amount of potential loss which may be incurred due to adverse market movements. The measure is of the maximum loss which should not be exceeded on 95 out of 100 days for a 95% VaR.

<u>Yield curve</u> – A graph showing the relationship between the yields on financial instruments or market indices of the same credit quality with different maturities. For example, a "normal" or "positive" yield curve exists when long-term bonds have higher yields than short-term bonds. A "flat" yield curve exists when yields are the same for short-term and long-term bonds. A "steep" yield curve exists when yields on long-term bonds are significantly higher than on short-term bonds. An "inverted" or "negative" yield curve exists when short-term bonds have higher yields than long-term bonds.

Δ	\mathbf{C}	Q.	n	N	V	A	1	C

ACH	Automated clearing house	GNMA	Government National Mortgage Association
ACL	Allowance for credit losses	GSIB	Globally systemically important bank
ALLL	Allowance for loan and lease losses	HPI	Home price index
AML	Anti-Money Laundering	HQLA	High quality, unencumbered liquid assets
AOCI	Accumulated other comprehensive income	ISDA	International Swaps and Dealer Association
ASC	Accounting Standards Codification	ISP	The PNC Incentive Savings Plan
ASF	Available stable funding	LCR	Liquidity Coverage Ratio
ASU	Accounting Standards Update	LGD	Loss given default
BEC	Business email compromise scams	LIBOR	London Interbank Offered Rate
BHC	Bank holding company	LIHTC	Low income housing tax credit
BHC Act	Bank Holding Company Act of 1956	LLC	Limited liability company
bps	Basis points	LTV	Loan-to-value ratio
BSA	Bank Secrecy Act	MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
CARES Act	Coronavirus Aid, Relief and Economic Security Act	MSR	Mortgage servicing right
CCAR	Comprehensive Capital Analysis and Review	NAICS	North American Industry Classification System
CECL	Current expected credit losses	NAV	Net asset value
CECL RAC	PNC's Current Expected Credit Losses Reserve Adequacy Committee	NSFR	Net Stable Funding Ratio
CET1	Common equity tier 1	NYSE	New York Stock Exchange
CFPB	Consumer Financial Protection Bureau	OCC	Office of the Comptroller of the Currency
CFTC	Commodity Futures Trading Commission	OCI	Other comprehensive income
CLTV	Combined loan-to-value ratio	OREO	Other real estate owned
COSO	Committee of Sponsoring Organizations of the Treadway Commission	OTC	Over-the-counter
CRA	Community Reinvestment Act	OTTI	Other than temporary impairment
DDoS	Distributed denial of service cyber attacks	PCAOB	Public Company Accounting Oversight Board
DFAST	Dodd-Frank capital stress testing	PCD	Purchased credit deteriorated
DUS	Delegated Underwriting and Servicing program	PD	Probability of default
EAD	Exposure at default	PPP	Paycheck Protection Program
ERISA	Employee Retirement Income Security Act of 1974, as amended	ROAPs	Removal of account provisions
ERM	Enterprise Risk Management	ROU	Right-of-use assets
FASB	Financial Accounting Standards Board	RSF	Required stable funding
FDI Act	Federal Deposit Insurance Act	SBA	Small Business Administration
FDIC	Federal Deposit Insurance Corporation	SCB	Stress capital buffer
FFIEC	Federal Financial Institutions Examination Council	SCCL	Single counterparty credit limit
FHA	Federal Housing Administration	SEC	Securities and Exchange Commission
FHLB	Federal Home Loan Bank	SLR	Supplementary leverage ratio
FHLMC	Federal Home Loan Mortgage Corporation	SOFR	Secured Overnight Financing Rate
FICO	Fair Isaac Corporation (credit score)	SPE	Special purpose entity
FinCEN	Financial Crimes Enforcement Network	TDR	Troubled debt restructuring
FINRA	Financial Industry Regulatory Authority	TLAC	Total loss-absorbing capacity
FNMA	Federal National Mortgage Association	U.S.	United States of America
FOMC	Federal Open Market Committee	USD	United States Dollar
FSOC	Financial Stability Oversight Council	VA	Department of Veterans Affairs
GAAP	Accounting principles generally accepted in the United States of America	VaR	Value-at-risk
GDP	Gross Domestic Product	VEBA	Voluntary Employee Beneficiary Association
GLB Act	Gramm-Leach-Bliley Act	VIE	Variable interest entity

ITEM 9 - CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A – CONTROLS AND PROCEDURES

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of The PNC Financial Services Group, Inc. and subsidiaries (PNC) is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in the Exchange Act Rule 13a-15(f).

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

We performed an evaluation under the supervision and with the participation of our management, including the Chairman, President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer, of the effectiveness of PNC's internal control over financial reporting as of December 31, 2020. This assessment was based on criteria for effective internal control over financial reporting described in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that PNC maintained effective internal control over financial reporting as of December 31, 2020.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited our consolidated financial statements as of and for the year ended December 31, 2020 included in this Report, has also audited the effectiveness of PNC's internal control over financial reporting as of December 31, 2020. The report of PricewaterhouseCoopers LLP is included under Item 8 of this Report.

DISCLOSURE CONTROLS AND PROCEDURES AND CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

As of December 31, 2020, we performed an evaluation under the supervision and with the participation of our management, including the Chairman, President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures and of changes in our internal control over financial reporting.

Based on that evaluation, our Chairman, President and Chief Executive Officer and our Executive Vice President and Chief Financial Officer concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities and Exchange Act of 1934, as amended) were effective as of December 31, 2020, and that there has been no change in PNC's internal control over financial reporting that occurred during the fourth quarter of 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B – OTHER INFORMATION

None.

PART III

ITEM 10 – DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Certain of the information regarding our directors (or nominees for director), executive officers and Audit Committee (and Audit Committee financial experts), required by this item is included under the captions "Election of Directors (Item 1)," and "Corporate Governance – Board committees – Audit Committee," in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated herein by reference.

Additional information regarding our executive officers is included in Part I of this Report under the captions "Information about our Executive Officers."

Information regarding our compliance with Section 16(a) of the Securities Exchange Act of 1934 is included, to the extent necessary, under the caption "Delinquent Section 16(a) Reports" in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated herein by reference.

Certain information regarding our PNC Code of Business Conduct and Ethics required by this item is included under the caption "Corporate Governance – Our Code of Business Conduct and Ethics" and "Director and Executive Officer Relationships – Code of Business Conduct and Ethics" in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated

The PNC Financial Services Group, Inc. - 2020 Form 10-K 201

herein by reference. Our PNC Code of Business Conduct and Ethics is available on our corporate website at www.pnc.com/corporategovernance. In addition, any future amendments to, or waivers from, a provision of the PNC Code of Business Conduct and Ethics that applies to our directors or executive officers (including our principal executive officer, principal financial officer, and principal accounting officer or controller) will be posted at this internet address.

ITEM 11 - EXECUTIVE COMPENSATION

The information required by this item is included under the captions "Corporate Governance – Board committees – Personnel and Compensation Committee – Compensation committee interlocks and insider participation," "Director Compensation," "Compensation Discussion and Analysis," "Compensation Committee Report," "Compensation and Risk," "Compensation Tables," "Change in Control and Termination of Employment" and "CEO Pay Ratio" in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated herein by reference. In accordance with Item 407(e)(5) of Regulation S-K, the information set forth under the caption "Compensation Committee Report" in such Proxy Statement will be deemed to be furnished in this Report and will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act as a result of furnishing the disclosure in this manner.

ITEM 12 – SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item regarding security ownership of certain beneficial owners and management is included under the caption "Security Ownership of Management and Certain Beneficial Owners" in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated herein by reference.

Information regarding our compensation plans under which PNC equity securities are authorized for issuance as of December 31, 2020 is included in the table which follows. Additional information regarding these plans is included in Note 18 Stock Based Compensation Plans in the Notes To Consolidated Financial Statements in Item 8 of this Report.

Equity Compensation Plan Information At December 31, 2020

At December 31, 2020			
	(a)	(b)	(c)
	Number of securities to be issued upon exercise of outstanding options, warrants and rights	 ted-average exercise price of outstanding ptions, warrants and rights (1)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Plan Category			
Equity compensation plans approved by security holders	4,542,021 (2)	\$ 62.26	27,349,791 (3)
Equity compensation plans not approved by security holders			
Total	4,542,021	\$ 62.26	27,349,791

- (1) The weighted-average exercise price does not take into account restricted stock units or incentive performance units because they have no exercise price.
- (2) Of this total, the following amounts relate to the 2016 Incentive Award Plan (2016 Incentive Plan), approved by shareholders on April 26, 2016: 3,548,138 are stock-payable restricted stock units (at a maximum share award level), 681,816 are performance share units (at maximum share award level) and 43,114 are deferred stock units (at a maximum share award level). Also included in this total are the following amounts that relate to the 2006 Incentive Award Plan, as amended and restated (2006 Incentive Plan): 185,348 are stock options and 83,605 are stock-payable restricted stock units (at a maximum award level).

Following shareholder approval of the 2016 Incentive Plan, no further grants were permitted under the 2006 Incentive Plan.

(3) – Includes 2,109,811 shares available for issuance under the Employee Stock Purchase Plan, of which 86,095 shares are subject to purchase during the purchase period ending December 31, 2020. The amount available for awards under the 2016 Incentive Plan is 25,239,980.

ITEM 13 - CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is included under the captions "Director and Executive Officer Relationships – Director independence, – Transactions with directors, – Family relationships, and – Indemnification and advancement of costs" and "Related Person Transactions" in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated herein by reference.

ITEM 14 - PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is included under the caption "Ratification of Independent Registered Public Accounting Firm" in our Proxy Statement to be filed for the 2021 annual meeting of shareholders and is incorporated herein by reference.

PART IV

ITEM 15 – EXHIBITS, FINANCIAL STATEMENT SCHEDULES

FINANCIAL STATEMENTS, FINANCIAL STATEMENT SCHEDULES

Our consolidated financial statements required in response to this Item are incorporated by reference from Item 8 of this Report.

Audited consolidated financial statements of BlackRock, Inc. as of December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020 are filed with this Report as Exhibit 99.1 and incorporated herein by reference.

EXHIBIT INDEX

Exhibit No.	Description	Method of Filing +
2.1	Stock Purchase Agreement, dated as of November 15, 2020, between Banco Bilbao Vizcaya Argentaria, S.A. and The PNC Financial Services Group, Inc.	
		Incorporated herein by reference to Exhibit 2.1 of the Corporation's Current Report on Form 8-K filed November 19, 2020
3.1.1	Amended and Restated Articles of Incorporation of the Corporation, effective January 2, 2009	Incorporated herein by reference to Exhibit 3.1 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2008 (2008 Form 10-K)
3.1.2	Statement with Respect to Shares of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series O dated July 21, 2011	Incorporated herein by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K filed July 27, 2011
3.1.3	Statement with Respect to Shares of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series P dated April 19, 2012	Incorporated herein by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K filed April 24, 2012
3.1.4	Statement with Respect to Shares of 5.375% Non-Cumulative Perpetual Preferred Stock, Series Q dated September 14, 2012	Incorporated herein by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K filed September 21, 2012
3.1.5	Statement with Respect to Shares of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series R dated May 2, 2013	Incorporated herein by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K filed May 7, 2013
3.1.6	Amendment to Amended and Restated Articles of Incorporation of the Corporation, effective November 19, 2015	Incorporated herein by reference to Exhibit 3.1.6 of the Corporation's Current Report on Form 8-K filed November 20, 2015
3.1.7	Statement with Respect to Shares of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series S dated October 27, 2016	Incorporated herein by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K filed November 1, 2016
3.2	By-Laws of the Corporation, as amended and restated, effective August 11, 2016	Incorporated herein by reference to Exhibit 3.2 of the Corporation's Current Report on Form 8-K filed August 11, 2016
4.1	There are no instruments with respect to long-term debt of the Corporation and its subsidiaries that involve a total amount of securities authorized thereunder that exceed 10 percent of the total assets of the Corporation and its subsidiaries on a consolidated basis. The Corporation agrees to provide the SEC with a copy of instruments defining the rights of holders of long-term debt of the Corporation and its subsidiaries on request.	

The PNC Financial Services Group, Inc. – 2020 Form 10-K $\,$ 203

Exhibit No.	Description	Method of Filing +
4.2	Deposit Agreement dated July 27, 2011, between the Corporation, Computershare Trust Company, N.A., Computershare Inc. and the holders from time to time of the Depositary Receipts representing interests in the Series O preferred stock	Incorporated herein by reference to Exhibit 4.2 of the Corporation's Current Report on Form 8-K filed July 27, 2011
4.3	Deposit Agreement, dated April 24, 2012, between the Corporation, Computershare Trust Company, N.A., Computershare Inc. and the holders from time to time of the Depositary Receipts representing interests in the Series P preferred stock	Incorporated herein by reference to Exhibit 4.2 of the Corporation's Current Report on Form 8-K filed April 24, 2012
4.4	Deposit Agreement, dated May 7, 2013, between the Corporation, Computershare Trust Company, N.A., Computershare Inc. and the holders from time to time of the Depositary Receipts representing interests in the Series R preferred stock	Incorporated herein by reference to Exhibit 4.2 of the Corporation's Current Report on Form 8-K filed May 7, 2013
4.5	Deposit Agreement, dated November 1, 2016, between the Corporation, Computershare Trust Company, N.A., Computershare Inc. and the holders from time to time of the Depositary Receipts representing interests in the Series S preferred stock	Incorporated herein by reference to Exhibit 4.2 of the Corporation's Current Report on Form 8-K filed November 1, 2016
4.6	Form of PNC Bank, National Association Subordinated Fixed Rate Global Bank Note issued prior to January 16, 2014	Incorporated herein by reference to Exhibit 4.11 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004
4.7.1	Issuing and Paying Agency Agreement, dated January 16, 2014, between PNC Bank, National Association and PNC Bank, National Association, relating to the \$25 billion Global Bank Note Program for the Issue of Senior and Subordinated Bank Notes	Incorporated herein by reference to Exhibit 4.25 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2013 (2013 Form 10-K)
4.7.2	Amendment No. 1 to Issuing and Paying Agency Agreement, dated May 22, 2015, between PNC Bank, National Association and PNC Bank, National Association, relating to the \$30 billion Global Bank Note Program for the Issue of Senior and Subordinated Bank Notes	Incorporated herein by reference to Exhibit 4.21.2 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 (2nd Quarter 2015 Form 10-Q)
4.7.3	Amendment No. 2 to Issuing and Paying Agency Agreement, dated May 27, 2016, between PNC Bank, National Association and PNC Bank, National Association, relating to the \$40 billion Global Bank Note Program for the Issue of Senior and Subordinated Bank Notes	Incorporated herein by reference to Exhibit 4.20.3 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016 (2nd Quarter 2016 Form 10-Q)
4.8	Forms of PNC Bank, National Association Senior Global Bank Notes issued after January 16, 2014 (included in Exhibit 4.7.1)	Incorporated herein by reference to Exhibit 4.25 of the Corporation's 2013 Form $10\text{-}\mathrm{K}$
4.9	Forms of PNC Bank, National Association Subordinated Global Bank Notes issued on or after May 22, 2015 (included in Exhibit 4.7.2)	Incorporated herein by reference to Exhibit 4.21.2 of the Corporation's 2nd Quarter 2015 Form 10-Q
4.10	Description of the Corporation's Securities	Filed herewith
10.1.1	The Corporation's Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.2 of the Corporation's 2008 Form 10-K*
10.1.2	Amendment 2009-1 to the Corporation's Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.3 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2009 (2009 Form 10-K)*
10.1.3	Amendment 2013-1 to the Corporation's Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.1.3 of the Corporation's 2013 Form 10-K*

Exhibit No.	Description	Method of Filing +
10.2.1	The Corporation's ERISA Excess Pension Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.4 of the Corporation's 2008 Form 10-K*
10.2.2	Amendment 2009-1 to the Corporation's ERISA Excess Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.6 of the Corporation's 2009 Form 10-K*
10.2.3	Amendment 2011-1 to the Corporation's ERISA Excess Pension Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.8 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2011 (2011 Form 10-K)*
10.2.4	Amendment 2013-1 to the Corporation's ERISA Excess Pension Plan, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.2.4 of the Corporation's 2013 Form 10-K*
10.3.1	The Corporation's Key Executive Equity Program, as amended and restated effective January 1, 2009	Incorporated herein by reference to Exhibit 10.6 of the Corporation's 2008 Form 10-K*
10.3.2	Amendment 2009-1 to the Corporation's Key Executive Equity Program, as amended and restated as of January 1, 2009	Incorporated herein by reference to Exhibit 10.9 of the Corporation's 2009 Form 10-K*
10.4.1	The Corporation's Supplemental Incentive Savings Plan, as amended and restated effective January 1, 2010	Incorporated herein by reference to Exhibit 10.17 of the Corporation's 2011 Form 10-K*
10.4.2	Amendment 2013-1 to the Corporation's Supplemental Incentive Savings Plan, as amended and restated effective January 1, 2010	Incorporated herein by reference to Exhibit 10.4.2 of the Corporation's 2013 Form 10-K*
10.5.1	The Corporation and Affiliates Deferred Compensation Plan, as amended and restated May 5, 2009	Incorporated herein by reference to Exhibit 10.62 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009*
10.5.2	Amendment 2009-1 to the Corporation and Affiliates Deferred Compensation Plan, as amended and restated May 5, 2009	Incorporated herein by reference to Exhibit 10.17 of the Corporation's 2009 Form 10-K*
10.5.3	Amendment 2010-1 to the Corporation and Affiliates Deferred Compensation Plan, as amended and restated May 5, 2009	Incorporated herein by reference to Exhibit 10.20 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2010 (2010 Form 10-K)*
10.5.4	Amendment 2011-1 to the Corporation and Affiliates Deferred Compensation Plan, as amended and restated May 5, 2009	Incorporated herein by reference to Exhibit 10.23 of the Corporation's 2011 Form $10\text{-}K^*$
10.5.5	Amendment 2012-1 to the Corporation and Affiliates Deferred Compensation Plan, as amended and restated May 5, 2009	Incorporated herein by reference to Exhibit 10.24 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2012 (2012 Form 10-K)*
10.5.6	Amendment 2013-1 to the Corporation and Affiliates Deferred Compensation Plan, as amended and restated May 5, 2009	Incorporated herein by reference to Exhibit 10.5.6 of the Corporation's 2013 Form 10-K*
10.6	The Corporation and Affiliates Deferred Compensation and Incentive Plan, as amended and restated effective January 1, 2020	Incorporated herein by reference to Exhibit 10.6.3 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2019*
10.7	The PNC Financial Services Group, Inc. 2016 Incentive Award Plan	Incorporated herein by reference to Exhibit 99.1 of the Corporation's Form S-8 (File No. 333-210995) filed April 29, 2016*
10.8.1	The Corporation's 2006 Incentive Award Plan, as amended and restated effective as of March 11, 2011	Incorporated herein by reference to Exhibit 10.70 of the Corporation's Quarterly Report on Form 1O-Q for the quarter ended March 31, 2011 (1st Quarter 2011 Form 10-Q)*
10.8.2	Addendum to the Corporation's 2006 Incentive Award Plan, effective as of January 26, 2012	Incorporated herein by reference to Exhibit 10.28 of the Corporation's 2011 Form 10-K*

Exhibit No.	Description	Method of Filing +
10.9	The Corporation's Directors Deferred Compensation Plan, as amended and restated effective January 1, 2015	Incorporated herein by reference to Exhibit 10.52 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014*
10.10	The Corporation's 2016 Incentive Award Plan Directors Deferred Stock Unit Program effective January 1, 2017	Incorporated herein by reference to Exhibit 10.16 of the Corporation's 2016 Form 10-K*
10.11	Trust Agreement between the Corporation, as settlor, and Matrix Trust Company, as trustee	Incorporated herein by reference to Exhibit 10.15 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2017*
10.12	Trust Agreement between PNC Investment Corp., as settlor, and PNC Bank, National Association, as trustee	Incorporated herein by reference to Exhibit 10.34 of the Corporation's 3rd Quarter 2005 Form 10-Q*
10.13	Certificate of Corporate Action for Grantor Trusts effective January 1, 2012	Incorporated herein by reference to Exhibit 10.37 of the Corporation's 2011 Form 10-K*
10.14	The Corporation's Employee Stock Purchase Plan, as amended and restated as of January 1, 2020	Incorporated herein by reference to Exhibit 4.4 of the Corporation's Form S-8 (File No. 333-238049) filed May 6, 2020*
10.15	2011 forms of employee stock option, restricted stock, restricted share unit and performance unit agreements	Incorporated herein by reference to Exhibit 10.71 of the Corporation's 1st Quarter 2011 Form 10-Q*
10.16	2012 forms of employee stock option, restricted stock and restricted share unit agreements	Incorporated herein by reference to Exhibit 10.77 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (1st Quarter 2012 Form 10-Q)*
10.17	Forms of employee stock option, restricted stock and restricted share unit	Incorporated herein by reference to Exhibit 10.78 of the Corporation's 1st
10.18	agreements with varied vesting, payment and other circumstances 2013 forms of employee stock option and restricted share unit agreements	Quarter 2012 Form 10-Q* Incorporated herein by reference to Exhibit 10.64 of the Corporation's 2012
		Form 10-K*
10.19	Additional 2013 forms of employee stock option, performance unit, restricted stock and restricted share unit agreements	Incorporated herein by reference to Exhibit 10.82 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013*
10.20	2017 Form of Performance Restricted Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.56 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 (2nd Quarter 2017 Form 10-Q)*
10.21	2017 Form of Performance Restricted Share Units Award Agreement - Senior Leaders Program (Section 16 Executives)	Incorporated herein by reference to Exhibit 10.58 of the Corporation's 2nd Quarter 2017 Form 10-Q*
10.22	2018 Form of Performance Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.50 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 (2nd Quarter 2018 Form 10-Q)*
10.23	2018 Form of Restricted Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.51 of the Corporation's 2nd Quarter 2018 Form 10-Q*
10.24	2018 Form of Restricted Share Units Award Agreement - Senior Leader Program	Incorporated herein by reference to Exhibit 10.52 of the Corporation's 2nd Quarter 2018 Form 10-Q*
10.25	2019 Form of Performance Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.45 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 (3rd Quarter 2019 Form 10-Q)*
10.26	2019 Form of Restricted Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.46 of the Corporation's 3rd Quarter 2019 Form 10-Q*
10.27	2019 Form of Restricted Share Units Award Agreement - Senior Leader Program	Incorporated herein by reference to Exhibit 10.47 of the Corporation's 3rd Quarter 2019 Form 10-Q*

Exhibit No.	Description	Method of Filing +
10.28	2020 Form of Performance Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.39 of the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 (2nd Quarter 2020 Form 10-Q)*
10.29	2020 Form of Restricted Share Units Award Agreement	Incorporated herein by reference to Exhibit 10.40 of the Corporation's 2nd Quarter 2020 Form 10-Q*
10.30	2020 Form of Restricted Share Units Award Agreement - Senior Leader Program	Incorporated herein by reference to Exhibit 10.41 of the Corporation's 2nd Quarter 2020 Form 10-Q*
10.31.1	Time Sharing Agreement, dated as of November 15, 2017, by and between the Corporation and William S. Demchak	Filed herewith*
10.31.2	Time Sharing Agreements Amendment and Termination Agreement, dated asof February 27, 2020, by and between the Corporation and William S. Demchak	Filed herewith*
10.32	Form of change of control employment agreements	Incorporated herein by reference to Exhibit 10.51 of the Corporation's Current Report on Form 8-K filed August 16, 2016*
10.33.1	The National City Corporation 2004 Deferred Compensation Plan, as amended and restated effective January 1, 2005	Incorporated herein by reference to Exhibit 10.35 of National City Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2006*
10.33.2	Amendment to The National City Corporation 2004 Deferred Compensation Plan, as amended and restated effective January 1, 2005	Incorporated herein by reference to Exhibit 10.56 of the Corporation's 2010 Form 10-K*
10.34.1	Distribution Agreement, dated January 16, 2014, between PNC Bank, National Association and the Dealers named therein, relating to the \$25 billion Global Bank Note Program for the Issue of Senior and Subordinated Bank Notes	Incorporated by reference to Exhibit 10.47 of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2014
10.34.2	Amendment No. 1 to Distribution Agreement, dated May 22, 2015, between PNC Bank, National Association and the Dealers named therein, relating to the \$30 billion Global Bank Note Program for the Issue of Senior and Subordinated Bank Notes	Incorporated herein by reference to Exhibit 10.47.2 of the Corporation's 2nd Quarter 2015 Form 10-Q
10.34.3	Amendment No. 2 to Distribution Agreement, dated May 27, 2016, between PNC Bank, National Association and the Dealers named therein, relating to the \$40 billion Global Bank Note Program for the Issue of Senior and Subordinated Bank Notes	Incorporated herein by reference to Exhibit 10.48.3 of the Corporation's 2nd Quarter 2016 Form 10-Q
21	Schedule of Certain Subsidiaries of the Corporation	Filed herewith
23.1	Consent of PricewaterhouseCoopers LLP, the Corporation's Independent Registered Public Accounting Firm	Filed herewith
23.2	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm of BlackRock, Inc.	Filed herewith
24	Powers of Attorney	Filed herewith
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002	Filed herewith
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350	Furnished herewith

Exhibit No.	Description	Method of Filing +
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350	Furnished herewith
99.1	Audited consolidated financial statements of BlackRock, Inc. as of December 31, 2020 and 2019 and for each of the three years ended December 31, 2020	Filed herewith
101.INS	Inline XBRL Instance Document	Filed herewith**
101.SCH	Inline XBRL Taxonomy Extension Schema Document	Filed herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	Filed herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	Filed herewith
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)	

Incorporated document references to filings by the Corporation are to SEC File No. 001-09718, and to filings by National City Corporation are to SEC File No. 001-10074.

You can obtain copies of these Exhibits electronically at the SEC's website at www.sec.gov. The Exhibits are also available as part of this Form 10-K on PNC's corporate website at www.pnc.com/secfilings. Shareholders and bondholders may also obtain copies of Exhibits, without charge, by contacting Shareholder Relations at 800-843-2206 or via e-mail at investor.relations@pnc.com. The Interactive Data File (XBRL) exhibit is only available electronically.

ITEM 16 - FORM 10-K SUMMARY

None.

208 The PNC Financial Services Group, Inc. -2020 Form 10-K

Denotes management contract or compensatory plan.

^{**} The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

The PNC Financial Services Group, Inc.

(Registrant)

By: /s/ Robert Q. Reilly

Robert Q. Reilly

Executive Vice President and Chief Financial Officer

February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of The PNC Financial Services Group, Inc. and in the capacities indicated on February 26, 2021.

Signature		Capacities	
	liam S. Demchak n S. Demchak	Chairman, President, Chief Executive Officer and Director (Principal Executive Officer)	
/s/ Robert Q. Reilly Robert Q. Reilly		Executive Vice President and Chief Financial Officer (Principal Financial Officer)	
/s/ Gregory H. Kozich Gregory H. Kozich		Senior Vice President and Controller (Principal Accounting Officer)	
* Joseph Alvarado; Charles E. Bunch; Debra A. Cafaro; Marjorie Rodgers Cheshire; David Cohen; Andrew T. Feldstein; Richard J. Harshman; Daniel R. Hesse; Linda R. Medler, Martin Pfinsgraff; Toni Townes-Whitley; Michael J. Ward		Directors	
*By:	/s/ Alicia Powell Alicia Powell, Attorney-in-Fact, pursuant to Powers of Attorney filed herewith		

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

In this Exhibit 4.10, when we refer to ñPNCò, ñweò, ñusò, or ñourò or when we otherwise refer to ourselves, we mean The PNC Financial Services Group, Inc., excluding, unless otherwise expressly stated or the context requires, our subsidiaries.

We have three classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the ñActò): (1) our Common Stock; (2) Depositary Shares Each Representing a 1/4,000 Interest in a Share of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series P; and (3) \$1.80 Cumulative Convertible Preferred Stock - Series B, par value \$1.00.

DESCRIPTION OF COMMON STOCK

General

We are authorized to issue 800,000,000 shares of our common stock, par value \$5.00 per share.

The following summary is not complete. You should refer to the applicable provisions of the following for a complete statement of the terms and rights of the common stock:

- Å Our Amended and Restated Articles of Incorporation (the ñArticles of Incorporationò), which you can find as Exhibit 3.1 to our Annual Report on Form 10-K for the year ended December 31, 2008, including the statements with respect to shares pursuant to which certain outstanding series of preferred stock were issued,
- A an amendment to our Articles of Incorporation, which you can find as Exhibit 3.1.6 to our Current Report on Form 8-K filed November 20, 2015.
- he statement with respect to shares governing our Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series O, which you can find as Exhibit 3.1 to our Current Report on Form 8-K filed July 27, 2011,
- he statement with respect to shares governing our Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series P, which you can find as Exhibit 3.1 to our Current Report on Form 8-K filed April 24, 2012,
- hthe statement with respect to shares governing our 5.375% Non-Cumulative Perpetual Preferred Stock, Series Q, which you can find as Exhibit 3.1 to our Current Report on Form 8-K filed September 21, 2012,
- hthe statement with respect to shares governing our Non-Cumulative Perpetual Preferred Stock, Series R, which you can find as Exhibit 3.1 to our Current Report on Form 8-K filed May 7, 2013,
- hthe statement with respect to shares governing our Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series S, which you can find as Exhibit 3.1 to our Current Report on Form 8-K filed November 1, 2016, and
- A the Pennsylvania Business Corporation Law (the ñPBCLò).

Holders of common stock are entitled to one vote per share on all matters submitted to shareholders. Holders of common stock have neither cumulative voting rights nor any preemptive rights for the purchase of additional shares of any class of our stock, and are not subject to liability for further calls or assessments. The common stock does not have any sinking fund, conversion or redemption provisions.

In the event of dissolution or winding up of our affairs, holders of common stock will be entitled to share ratably in all assets remaining after payments to all creditors and payments required to be made in respect of outstanding preferred stock (including accrued and unpaid dividends thereon) have been made.

The Board may, except as otherwise required by applicable law or the rules of the NYSE, cause the issuance of authorized shares of common stock without shareholder approval to such persons and for such consideration as the Board may determine in connection with acquisitions by us or for other corporate purposes.

Computershare Trust Company, N.A., Canton, MA, is the transfer agent and registrar for our common stock. The shares of common stock are listed on the NYSE under the symbol ñPNC.ò The outstanding shares of common stock are validly issued, fully paid and nonassessable, and the holders of the common stock are not subject to any liability as shareholders.

Dividends and Other Payments

Holders of our common stock are only entitled to receive such dividends as the Board may declare out of funds legally available for such payments. The payment of future dividends is subject to the discretion of the Board, which will consider, among other factors, economic and market conditions, our financial condition and operating results, and other factors, including contractual restrictions and applicable government regulations and policies (such as those relating to the ability of bank and non-bank subsidiaries to pay dividends to the parent company and regulatory capital limitations).

The amount of our dividends also may be subject to limitations if PNCôs capital ratios do not meet or exceed the required regulatory minimums plus a stress capital buffer (ñSCBò) established by the Board of Governors of the Federal Reserve System (the ñFederal Reserveò) as part of the Federal Reserveôs Comprehensive Capital Analysis and Review (ñCCARò) process. The Federal Reserve also has imposed additional limitations on capital distributions through the first quarter of 2021 by CCAR-participating bank holding companies (including PNC) and may extend these limitations, potentially in modified form.

We are incorporated in Pennsylvania and governed by the PBCL. Under the PBCL, we cannot pay dividends if, after giving effect to the dividend payments, we would be unable to pay our debts as they become due in the usual course of our business or our total assets would be less than the sum of our total liabilities plus the amount that would be needed, if we were to be dissolved at the time as of which the dividend is measured, to satisfy the preferential rights upon dissolution of shareholders whose preferential rights are superior to those receiving the dividends.

Subject to certain important exceptions, the terms of certain of our outstanding series of preferred stock and capital securities prohibit us from declaring or paying dividends or distributions on or redeeming, purchasing, acquiring or making a liquidation payment with respect to our common stock unless all accrued and unpaid dividends for all completed dividend periods with respect to that preferred stock or capital security, as applicable, have been paid.

In addition, we have outstanding junior subordinated debentures associated with certain capital securities. The terms of these debentures permit us to defer interest payments on the debentures for up to five years. If we defer interest payments on these debentures, subject to certain important exceptions, we may not declare or pay any dividends or distributions on, redeem, purchase, acquire or a make a liquidation payment with respect to any of our common stock during the deferral period.

Dividends from our subsidiary banks are the primary source of funds for payment of dividends to our stockholders, and there are statutory limits on the amount of dividends that our subsidiary banks can pay to us without regulatory approval. We are a holding company that conducts substantially all of our operations through our bank subsidiaries and other subsidiaries. As a result, our ability to make dividend payments on the common stock depends primarily on certain federal regulatory considerations and the receipt of dividends and other distributions from our subsidiaries. There are various regulatory restrictions on the ability of our banking subsidiaries to pay dividends or make other payments to us, and those restrictions can vary among the different subsidiaries based on performance, capital and other factors.

Further information concerning dividend restrictions and other factors that could limit our ability to pay dividends, including restrictions on loans, dividends or advances from bank subsidiaries to the parent company are included in our Annual Report on Form 10-K.

Other Provisions

The Articles of Incorporation and our Amended and Restated By-Laws (the nBy-Laws) contain various provisions that may discourage or delay attempts to gain control of PNC. The By-Laws include provisions:

- A authorizing the Board to fix the size of the Board between five and 36 directors,
- A authorizing directors to fill vacancies on the Board occurring between annual shareholder meetings, including vacancies resulting from an increase in the number of directors,
- Å authorizing only the Board, the Chairman of the Board or the Chief Executive Officer to call a special meeting of shareholders,
- Å providing advance notice requirements for director nominations and business to be properly brought before a shareholder meeting, and
- A authorizing a majority of the Board to alter, amend, add to or repeal the By-Laws.

The Articles of Incorporation vest the authority to make, amend and repeal the By-Laws in the Board, subject to the power of our shareholders to change any such action.

Provisions of Pennsylvania law also could make it more difficult for a third party to acquire control of PNC or have the effect of discouraging a third party from attempting to control PNC. The PBCL allows Pennsylvania corporations to elect to either be covered or not be covered by certain ñanti-takeoverò provisions. We have elected in the By-Laws not to be covered by Subchapter G of Chapter 25 of the PBCL, which would otherwise enable existing shareholders of PNC in certain circumstances to block the voting rights of an acquiring person who makes or proposes to make a control-share acquisition. We have also opted out of the protection of Subchapter H of Chapter 25 of the PBCL, which would otherwise enable us to recover certain payments made to shareholders who have evidenced an intent to acquire control of PNC. However, the following provisions of the PBCL do apply to us:

- A shareholders are not entitled to call a special meeting (Section 2521),
- Å unless the Articles of Incorporation provide otherwise (which as of the date hereof they do not), action by shareholder consent must be unanimous (Section 2524),
- A shareholders are not entitled to propose an amendment to the Articles of Incorporation (Section 2535),
- A certain transactions with interested shareholders (such as mergers or sales of assets between PNC and a shareholder) where the interested shareholder is a party to the transaction or is treated differently from other shareholders require approval by a majority of the disinterested shareholders (Section 2538),
- Å a five-year moratorium exists on certain business combinations with a 20% or more shareholder (Sections 2551-2556), and
- Å shareholders have a right to ñputò their shares to a 20% shareholder at a ñfair valueò for a reasonable period after the 20% stake is acquired (Sections 2541-2547).

In addition, in certain instances the ability of the Board to issue authorized but unissued shares of common stock and preferred stock may have an anti-takeover effect.

Existence of the above provisions could result in PNC being less attractive to a potential acquirer, or result in our shareholders receiving less for their shares of common stock than otherwise might be available if there is a takeover attempt.

The ability of a third party to acquire PNC is also limited under applicable banking regulations. The Bank Holding Company Act of 1956 (the ñBank Holding Company Act) requires any ñbank holding companyò (as defined in the Bank Holding Company Act) to obtain the approval of the Federal Reserve prior to acquiring more than 5% of our outstanding common stock. Any person other than a bank holding company is required to obtain prior approval of the Federal Reserve to acquire 10% or more of our outstanding common stock under the Change in Bank Control Act of 1978. Any person (other than an individual) that seeks to acquire 25% or more of our outstanding common stock, or that would own or control more than 5% of our outstanding common stock and have other relationships that would, pursuant to Federal Reserve regulations or rulings, provide the holder a ñcontrolling influenceò over PNC, also must obtain the prior approval of the Federal Reserve under the Bank Holding Company Act and, if approved, is then subject to regulation as a bank holding company under the Bank Holding Company Act. Furthermore, while we do not have a shareholder rights plan currently in effect, under Pennsylvania law, the Board can adopt a shareholder rights plan without stockholder approval. If adopted, a shareholder rights plan could result in substantial dilution to a person or group that attempts to acquire PNC on terms not approved by the Board.

DESCRIPTION OF PREFERRED STOCK

General

Our authorized capital stock includes 20,000,000 shares of preferred stock, par value \$1.00 per share, as reflected in our Articles of Incorporation.

The following summary does not purport to be complete and is qualified in its entirety by reference to the pertinent sections of the Articles of Incorporation and any statements with respect to shares for any series of preferred stock. You should read the Articles of Incorporation, which includes the designations relating to each series of preferred stock.

We have five outstanding series of preferred stock:

- \$1.80 Cumulative Convertible Preferred Stock, Series B, with a per share liquidation preference of \$40.00 (ñSeries B Preferred Stockò) (38,542 authorized),
- Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series O, with a per share liquidation preference of \$100,000 (ñSeries O Preferred Stockò) (10,000 authorized),
- Å Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series P, with a per share liquidation preference of \$100,000 (ñSeries P Preferred Stockò) (15,750 authorized),
- Å Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series R, with a per share liquidation preference of \$100,000 (ñSeries R Preferred Stockò) (5,000 authorized), and
- Å Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series S, with a per share liquidation preference of \$100,000 (ñSeries S Preferred Stockò) (5,250 authorized).

The following authorized and issued preferred stock has been redeemed and restored to the status of authorized but unissued preferred stock and is no longer outstanding:

- A 98,583 shares of \$1.80 Cumulative Convertible Preferred Stock, Series A.
- Å 1,433,935 shares of \$1.60 Cumulative Convertible Preferred Stock, Series C,
- Å 1,766,140 shares of \$1.80 Cumulative Convertible Preferred Stock, Series D.
- A 338,100 shares of \$2.60 Cumulative Nonvoting Preferred Stock, Series E.

- A 6,000,000 shares of Fixed/Adjustable Rate Noncumulative Preferred Stock, Series F,
- § 50,000 shares of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series K.
- Å 1,500 shares of 9.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series L.
- Å 5,001 shares of Non-Cumulative Perpetual Preferred Stock, Series M, and
- Å 5,175 shares of Non-Cumulative Perpetual Preferred Stock, Series O.

The Board is authorized without further shareholder action to cause the issuance of additional shares of preferred stock in one or more series, each with the preferences, limitations, designations, conversion or exchange rights, voting rights, dividend rights, redemption provisions, voluntary and involuntary liquidation rights and other rights as the Board may determine at the time of issuance.

The rights of the holders of our common stock are subject to any rights and preferences of the outstanding series of preferred stock and the preferred stock that may be offered. In addition, the rights of the holders of our common stock and any outstanding series of our preferred stock would be subject to the rights and preferences of any additional shares of preferred stock, or any series thereof, which might be issued in the future.

Summary of Key Terms of Outstanding Preferred Stock

The following is a summary of certain terms of our outstanding preferred stock. To the extent not included in the table, we have also described certain aspects of our outstanding preferred stock below.

Preferred Series	Annual Dividend Rate	Cumulative Dividend	Conversion Rate	Voting Right (Based on Conversion Rate)	v	quidation Value er Share	Redeemable
В	\$1.80	Yes	1 preferred: 8 common	Yes	\$	40	No
0	(1)	No	None	(1)	\$	100,000	(1)
Р	(1)	No	None	(1)	\$	100,000	(1)
R	(1)	No	None	(1)	\$	100,000	(1)
S	(1)	No	None	(1)	\$	100,000	(1)
3	(1)	IVO	None	(1)	2	100,000	(1)

⁽¹⁾ See discussion of particular terms for this series of preferred stock below.

Computershare Trust Company, N.A., Canton, MA, is the transfer agent and registrar for the outstanding preferred stock. Series B Preferred Stock is currently traded in the over-the-counter market. The Series O, Series R and Series S Preferred Stock are currently traded in the over-the-counter market. The Series P Preferred Stock is listed on the NYSE under the symbol ñPNCPRP.ò The outstanding preferred stock is fully paid and nonassessable. Holders of the outstanding preferred stock have no preemptive rights to subscribe for any additional securities that may be issued by us.

Because we are a holding company, our rights and the rights of holders of our securities, including the holders of preferred stock, to participate in the assets of any PNC subsidiary upon its liquidation or recapitalization will be subject to the prior claims of such subsidiaryôs creditors and preferred shareholders, except to the extent we may be a creditor with recognized claims against such subsidiary or a holder of preferred shares of such subsidiary.

We have elected to offer depositary shares evidenced by depositary receipts for our Series O, Series P, Series R and Series S Preferred Stock. Each depositary share represents a fractional interest (as specified in the prospectus supplement relating to the particular series of preferred stock) in a share of a particular series of preferred stock issued and deposited with a depositary (as defined below). For a further description of the depositary shares, you should read nature of Depositary Shares below.

The holders of the outstanding preferred stock are entitled to receive dividends, if declared by the Board or a duly authorized committee thereof. We will pay dividends to the holders of record as they appear on our stock books on the record dates fixed by the Board or a duly authorized committee thereof.

All series of preferred stock, with respect to the priority of payment of dividends, rank senior to all classes of common stock and any class of preferred stock we issue that specifically provides that it will rank junior to such preferred stock in respect to dividends, whether or not the preferred stock is designated as cumulative or noncumulative. The Board will not declare and pay a dividend on our common stock or on any class or series of our stock ranking subordinate as to dividends to a series of preferred stock (other than dividends payable in our common stock or in any class or series of our stock ranking subordinate as to dividends and assets to such series), until we have paid in full dividends for all past dividend periods on all outstanding senior ranking cumulative preferred stock and have declared a current dividend on all preferred stock ranking senior to that series. If we do not pay in full dividends for any dividend period on all shares of preferred stock ranking equally as to dividends, all such shares will participate ratably in the payment of dividends for that period in proportion to the full amounts of dividends to which they are entitled.

Subject to certain important exceptions, the terms of certain of our outstanding series of capital securities prohibit us from paying dividends on or redeeming, purchasing, acquiring or making a liquidation payment with respect to our preferred stock unless all accrued and unpaid dividends for all completed dividend periods with respect to such capital security have been paid.

In addition, we have outstanding junior subordinated debentures associated with certain capital securities. The terms of these debentures permit us to defer interest payments on the debentures for up to five years. If we defer interest payments on these debentures, subject to certain important exceptions, we may not pay any dividends on, redeem, purchase, acquire or make a liquidation payment with respect to any of our preferred stock during the deferral period.

Dividends from our subsidiary banks are the primary source of funds for payment of dividends to holders of preferred stock, and there are statutory limits on the amount of dividends that our subsidiary banks can pay to us without regulatory approval. We are a holding company that conducts substantially all of our operations through our bank subsidiaries and other subsidiaries. As a result, our ability to make dividend payments on the preferred stock depends on the receipt of dividends and other distributions from our subsidiaries. There are various regulatory restrictions on the ability of our banking subsidiaries to pay dividends or make other payments to us, and those restrictions can vary among the different subsidiaries based on performance, capital and other factors.

Series B Preferred Stock Dividends. Holders of outstanding Series B Preferred Stock are entitled to cumulative dividends at the annual rate set forth above in the table titled ñSummary of Certain Key Terms of Preferred Stock,ò which are payable quarterly when and as declared by the Board.

Series O, Series P, Series R and Series S Preferred Stock Dividends. Dividends on shares of the Series O, Series P, Series R and S Preferred Stock are not mandatory. Holders of such series of preferred stock are entitled to receive, when, as, and if declared by the Board or a duly authorized committee thereof, out of assets legally available for the payment of dividends under Pennsylvania law, non-cumulative cash dividends based on the liquidation preference of such series of preferred stock at a rate equal to:

- Å In the case of the Series O Preferred Stock, 6.75% per annum for each semi-annual dividend period from the issue date of the depositary shares to, but excluding, August 1, 2021, payable in arrears on February 1 and August 1 of each year, and three-month LIBOR plus a spread of 3.678% per annum, for each quarterly dividend period from August 1, 2021 through the redemption date of the Series O Preferred Stock, if any, payable in arrears on February 1, May 1, August 1 and November 1 of each year.
- Å In the case of the Series P Preferred Stock, 6.125% per annum for each quarterly dividend period from the issue date of the depositary shares to, but excluding, May 1, 2022, and three-month LIBOR plus a spread of 4.0675% per annum, for each quarterly dividend period from May 1, 2022 through the redemption date of the Series P Preferred Stock, if any, payable in arrears on February 1, May 1, August 1 and November 1 of each year

- In the case of the Series R Preferred Stock, 4.850% per annum for each semi-annual dividend period from the issue date of the depositary shares to, but excluding, June 1, 2023, payable in arrears on June 1 and December 1 of each year, and three-month LIBOR plus a spread of 3.04% per annum, for each quarterly dividend period from June 1, 2023 through the redemption date of the Series R Preferred Stock, if any, payable in arrears on March 1, June 1, September 1 and December 1 of each year.
- Å In the case of the Series S Preferred Stock, 5.000% per annum for each semi-annual dividend period from the issue date of the depositary shares to, but excluding, November 1, 2026, payable in arrears on May 1 and November 1 of each year, and three-month LIBOR plus a spread of 3.30% per annum, for each quarterly dividend period from November 1, 2026 through the redemption date of the Series S Preferred Stock, if any, payable in arrears on February 1, May 1, August 1 and November 1 of each year.

In the event we issue additional shares of any such series of preferred stock after the original issue date, dividends on such shares will accrue from the original issue date of such additional shares.

A dividend period for any such series of preferred stock is the period from and including a dividend payment date to, but excluding, the next dividend payment date. Dividends payable on any such series of preferred stock for the period in which the interest rate is fixed are computed on the basis of a 360-day year consisting of twelve 30-day months. Dividends payable on any such series of preferred stock for any period in which the interest rate is based on three-month LIBOR will be computed based on the actual number of days in a dividend period and a 360-day year. Dollar amounts resulting from that calculation will be rounded to the nearest cent, with one-half cent being rounded upward. Dividends on any such series of preferred stock will cease to accrue on the redemption date, if any, as described below under $\tilde{n}_{Redemption}$ by PNC, \tilde{o} unless we default in the payment of the redemption price of the shares called for redemption.

Dividends on shares of Series O, Series P, Series R and Series S Preferred Stock are not cumulative. Accordingly, if the Board or a duly authorized committee thereof does not declare a dividend payable in respect of any dividend period before the related dividend payment date, such dividend will not accrue and we will have no obligation to pay a dividend for that dividend period on the dividend payment date or at any future time, whether or not dividends on such series of preferred stock are declared for any future dividend period.

During a dividend period with respect to each of the Series O, Series P, Series R and Series S Preferred Stock, so long as any share of such series remains outstanding, (i) no dividend will be declared or paid or set aside for payment and no distribution will be declared or made or set aside for payment on any junior stock (other than (a) a dividend payable solely in such junior stock or (b) any dividend in connection with the implementation of a shareholdersô rights plan, or the redemption or repurchase of any rights under any such plan), (ii) no shares of junior stock will be repurchased, redeemed or otherwise acquired for consideration by us (other than (a) as a result of a reclassification of such junior stock for or into other such junior stock, (b the exchange or conversion of one share of such junior stock for or into another share of such junior stock, (c) through the use of the proceeds of a substantially contemporaneous sale of other shares of such junior stock, (d) purchases, redemptions or other acquisitions of shares of such junior stock in connection with any employment contract, benefit plan or other similar arrangement with or for the benefit of employees, officers, directors or consultants, (e) purchases of shares of such junior stock pursuant to a contractually binding requirement to buy such junior stock existing prior to the preceding dividend period, including under a contractually binding stock repurchase plan, or (f) the purchase of fractional interests in shares of such junior stock pursuant to the conversion or exchange provisions of such stock or the security being converted or exchanged), nor will any monies be paid to or made available for a sinking fund for the redemption of any such securities by us and (iii) no shares of parity stock will be repurchased, redeemed or otherwise acquired for consideration by us otherwise than pursuant to pro rata offers to purchase all, or a pro rata portion, of the applicable series of preferred stock and such parity stock except by conversion into or exchange for junior stock, unless, in each case of clause (i) through (iii) above, the full dividends for the preceding dividend period on all outstanding shares of Series O, Series P, Series R or Series S Preferred Stock, as applicable, have been declared and paid or declared and a sum sufficient for the payment thereof has been set aside.

As used in this description, (i) ñjunior stockò means our common stock and any other class or series of our stock hereafter authorized over which the Series O. Series P. Series P. or Series S. Preferred Stock, as applicable, has

preference or priority in the payment of dividends or in the distribution of assets on any liquidation, dissolution or winding up of PNC and (ii) "parity stock" means any other class or series of our stock that ranks on parity with the Series O, Series P, Series R or Series S Preferred Stock, as applicable, in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of PNC. The following series of preferred stock are considered parity stock: Series B, Series O, Series P, Series R and Series S Preferred Stock, and Series H and Series I Preferred Stock, if issued.

When dividends are not paid in full upon the shares of Series O, Series P, Series R or Series S Preferred Stock, as applicable, and any parity stock, all dividends declared upon shares of such series of preferred stock and any parity stock will be declared on a proportional basis so that the amount of dividends declared per share will bear to each other the same ratio that accrued dividends for such series of preferred stock, and accrued dividends, including any accumulations, on any parity stock, bear to each other for the then-current dividend period.

Dividends on the Series R and Series S Preferred Stock will not be declared, paid or set aside for payment to the extent such act would cause us to fail to comply with the laws and regulations applicable to us, including applicable capital adequacy guidelines.

Subject to the foregoing, and not otherwise, dividends (payable in cash, stock or otherwise), as may be determined by the Board or a duly authorized committee thereof, may be declared and paid on our common stock and any other stock ranking equally with or junior to any of the Series O, Series P, Series R or Series S Preferred Stock from time to time out of any assets legally available for such payment, and the holders of Series O, Series P, Series R and Series S Preferred Stock shall not be entitled to participate in any such dividend.

Voting

Except as provided herein or in the applicable statement with respect to shares, or as required by applicable law, the holders of preferred stock are not be entitled to vote. Except as otherwise required by law or provided by the Board and described in the applicable statement with respect to shares, holders of preferred stock having voting rights and holders of common stock vote together as one class. Holders of preferred stock do not have cumulative voting rights. We are not required to obtain any consent of the holders of preferred stock of a given series in connection with the authorization, designation, increase or issuance of any shares of preferred stock that rank junior or equal to the preferred stock of such series with respect to dividends and liquidation rights.

Right to Elect Two Directors upon Nonpayment of Dividends. If we have failed to pay, or declare and set apart for payment, dividends on all outstanding shares of preferred stock in an amount that equals six quarterly dividends at the applicable dividend rate for such preferred stock, whether or not cumulative, then the number of directors on the Board will be increased by two at the first annual meeting of shareholders held thereafter, and at such meeting and each subsequent annual meeting held until cumulative dividends payable for all past dividend periods and continuous noncumulative dividends for at least one year on all outstanding shares of preferred stock entitled thereto shall have been paid, or declared and set apart for payment, in full, the holders of all outstanding preferred stock voting together as a class will be entitled to elect those two additional directors to hold office for a term of one year. Upon such payment, or declaration and setting apart for payment, in full, the terms of the two additional directors will end, the number of directors on the Board will be reduced by two and such voting rights of the holders of preferred stock will end, subject to an increase in the number of directors on the Board as described above and the revesting of this voting right in the event of each and every additional failure in the payment of dividends in an amount equal to six quarterly dividends as described above.

Under interpretations adopted by the Federal Reserve or its staff, if the holders of preferred stock of any series become entitled to vote for the election of directors because dividends on such series are in arrears as described above, that series may then be deemed a "class of voting securities" and a holder (other than an individual) of 25% or more of such series (or a holder of 5% or more if it otherwise exercises a "controlling influence" over PNC) may then be subject to regulation as a bank holding company in accordance with the Bank Holding Company Act. In addition, when the series is deemed a class of voting securities, any other bank holding company may be required to obtain the prior approval of the Federal Reserve to acquire or retain more than 5% of that series, and any person other than a bank holding company may be required to obtain the prior approval of the Federal Reserve to acquire or retain 10% or more of that series

Voting Rights under Pennsylvania Law. The PBCL attaches mandatory voting rights to preferred stock in connection with certain amendments to a companyôs articles of incorporation, providing that the holders of preferred stock of a particular series would be entitled to vote as a class if the amendment would:

- A authorize the Board to fix and determine the relative rights and preferences, as between series, of any preferred or special class,
- A make any change in the preferences, limitations or special rights (other than preemptive rights or the right to vote cumulatively) of the shares of a class or series adverse to the class or series.
- A authorize a new class or series of shares having a preference as to dividends or assets which is senior to the shares of a class or series.
- Å increase the number of authorized shares of any class or series having a preference as to dividends or assets which is senior in any respect to the shares of a class or series, or
- A make the outstanding shares of a class or series redeemable by a method that is not pro rata, by lot or otherwise equitable.

Holders of outstanding shares of preferred stock are also entitled under Pennsylvania law to vote as a class on a plan of merger that effects any change in the companyôs articles of incorporation if the holders would have been entitled to a class vote under the statutory provision relating to the adoption of articles amendments discussed above.

Series B Preferred Stock Voting. Holders of outstanding Series B Preferred Stock are entitled to a number of votes equal to the number of full shares of common stock into which their preferred stock is convertible. Unless we receive the consent of the holders of at least two-thirds of the outstanding shares of preferred stock of all series, we will not:

- Å create or increase the authorized number of shares of any class of stock ranking senior to the preferred stock as to dividends or assets, or
- Å change the preferences, qualifications, privileges, limitations, restrictions or special or relative rights of the preferred stock in any material respect adverse to the holders of the preferred stock.

Series O, Series P, Series R and Series S Preferred Stock Voting. Except as described above or otherwise herein or in the applicable statement with respect to shares, or as required by applicable law, holders of the Series O, Series P, Series R and Series S Preferred Stock have no voting rights.

So long as any shares of the Series O, Series P, Series R or Series S Preferred Stock, as applicable, remain outstanding, the affirmative vote or consent of the holders of at least two-thirds of all outstanding shares of the series, voting separately as a class, shall be required to:

- A authorize or increase the authorized amount of, or issue shares of, any class or series of stock ranking senior to such series of preferred stock with respect to dividends or the distribution of assets upon liquidation, dissolutions or winding up of PNC,
- A issue any obligation or security convertible into or evidencing the right to purchase any class or series of stock ranking senior to such series of preferred stock with respect to payment of dividends or the distribution of assets upon liquidation, dissolution or winding up of PNC,
- A amend the provisions of the Articles of Incorporation so as to adversely affect the powers, preferences, privileges or rights of such series of preferred stock, taken as a whole, or
- Å consolidate with or merge into any other corporation unless the shares of such series of preferred stock outstanding at the time of such consolidation or merger or sale are converted into or exchanged for

preference securities having such rights, privileges and voting powers, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers of such series of preferred stock, taken as a whole.

The foregoing voting provisions will not apply if, at or prior to the time when the act with respect to which such vote would otherwise be required shall be effected, all outstanding shares of Series O, Series P, Series R or Series S Preferred Stock, as applicable, have been redeemed or called for redemption upon proper notice and sufficient funds shall have been set aside by us for the benefit of the holders of such series of preferred stock to effect such redemption.

Liquidation of PNC

In the event of the voluntary or involuntary liquidation of PNC, the holders of each outstanding series of preferred stock will be entitled to receive liquidating distributions before any distribution is made to the holders of our common stock or of any class or series of our stock ranking subordinate to that series, in the amount fixed by the Board for that series and described in the applicable statement with respect to shares, plus, if dividends on that series are cumulative, accrued and unpaid dividends.

Subject to certain important exceptions, the terms of certain of our outstanding capital securities prohibit us from making a liquidation payment with respect to our preferred stock unless all accrued and unpaid dividends for all completed dividend periods with respect to that capital security have been paid.

In addition, we have outstanding junior subordinated debentures associated with certain capital securities. The terms of these debentures permit us to defer interest payments on the debentures for up to five years. If we defer interest payments on these debentures, subject to certain important exceptions, we may not make a liquidation payment with respect to any of our preferred stock during the deferral period.

Redemption by PNC

Subject to certain important exceptions, the terms of certain of our outstanding capital securities prohibit us from redeeming our preferred stock unless all accrued and unpaid dividends for all completed dividend periods with respect to that capital security have been paid.

In addition, we have outstanding junior subordinated debentures associated with certain capital securities. The terms of these debentures permit us to defer interest payments on the debentures for up to five years. If we defer interest payments on these debentures, subject to certain important exceptions, we may not redeem any of our preferred stock during the deferral period.

Redemption of preferred stock is generally subject to prior regulatory approval.

Series B Preferred Stock Redemption. The Series B Preferred Stock are not currently redeemable nor entitled to the benefit of any retirement or sinking fund to be applied to the purchase or redemption of such shares.

Series O, Series P, Series R and Series S Preferred Stock Redemption. The Series O, Series P, Series R and Series S Preferred Stock are not subject to any mandatory redemption, sinking fund or other similar provisions, and the holders of such series of preferred stock have no right to require the redemption or repurchase of such series of preferred stock (or any depositary shares representing such series of preferred stock).

The Series O Preferred Stock is redeemable at our option, in whole or part, on any dividend payment date on or after August 1, 2021, at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

The Series P Preferred Stock is redeemable at our option, in whole or in part, from time to time, on any dividend payment date on or after May 1, 2022, at a redemption price equal to \$100,000 per share (equivalent to \$25.00 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends

The Series R Preferred Stock is redeemable at our option, in whole or in part, from time to time, on any dividend payment date on or after June 1, 2023, at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

The Series S Preferred Stock is redeemable at our option, in whole or in part, from time to time, on any dividend payment date on or after November 1, 2026, at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends.

We may redeem shares of the Series O, Series P, Series R or Series S Preferred Stock at any time within 90 days following the occurrence of a regulatory capital treatment event (as defined below), in whole but not part, at a redemption price equal to \$100,000 per share of preferred stock (equivalent to \$1,000 per depositary share in the case of the Series O, Series R and Series S Preferred Stock and \$25.00 per depositary share in the case of the Series P Preferred Stock), plus any declared and unpaid dividends and any accrued and unpaid dividends on the shares of preferred stock called for redemption up to the redemption date. A firegulatory capital treatment eventò means the good faith determination by us that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of the applicable series of preferred stock; (ii) any proposed change in those laws or regulations that is announced after the initial issuance of any share of the applicable series of preferred stock; or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws or regulations that is announced after the initial issuance of any share of the applicable series of preferred stock, there is more than an insubstantial risk that we will not be entitled to treat the full liquidation value of the shares of the applicable series of preferred stock then outstanding as ñTier 1 capitalò (or its equivalent) for purposes of the regulatory capital rules of the Federal Reserve (or, as and if applicable, the regulatory capital regulations of any successor appropriate federal banking agency), as then in effect and applicable, for as long as any share of the applicable series of preferred stock is outstanding.

Our ability to redeem the Series O, Series P, Series R or Series S Preferred Stock, as applicable, may be limited if PNCôs regulatory capital levels would not meet or exceed the applicable regulatory minimums plus our SCB as established by the Federal Reserve. Our ability to redeem the Series O, Series P, Series R or Series S Preferred Stock, as applicable, also may be subject to other limitations or restrictions imposed by the Federal Reserve and is subject to the satisfaction of any conditions set forth in the regulatory capital rules of the Federal Reserve applicable to the redemption of such series of preferred stock.

Conversion

Series B Preferred Stock. Holders of outstanding Series B Preferred Stock currently are entitled to the conversion privileges set forth above in the table titled ñSummary of Certain Key Terms of Preferred Stock.ò Series B Preferred Stock is convertible into our common stock (unless called for redemption and not converted within the time allowed therefor) at any time at the option of the holder. No adjustment will be made for dividends on preferred stock converted or on common stock issuable upon conversion. The conversion rate of Series B Preferred Stock will be adjusted in certain events, including payment of stock dividends on, or splits or combinations of, the common stock or issuance to holders of common stock of rights to purchase common stock at a price per share less than 90% of current market price as defined in the Articles of Incorporation. Appropriate adjustments in the conversion provisions also will be made in the event of certain reclassifications, consolidations or mergers or the sale of substantially all of the assets of PNC.

Series O, Series P, Series R and Series S Preferred Stock Conversion. The Series O, Series P, Series R and Series S Preferred Stock are not currently entitled to any conversion privileges.

DESCRIPTION OF DEPOSITARY SHARES

We have elected to offer fractional interests in the Series O, Series P, Series R and Series S Preferred Stock, rather than whole shares of preferred stock as follows:

- Depositary Shares, each representing a 1/100 interest in a share of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series O,
- Depositary Shares Each Representing a 1/4,000 interest in a Share of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series P,
- Depositary Shares, each representing a 1/100 interest in a share of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series R, and
- Depositary Shares, each representing a 1/100 interest in a share of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series S.

We have provided for the issuance by a depositary to the public of receipts for depositary shares, and each of these depositary shares represents a fraction of a share of a particular series of preferred stock.

The shares of any series of preferred stock underlying the depositary shares are deposited under a deposit agreement between us and a depositary selected by us. The depositary is a bank or trust company and will have its principal office in the United States and a combined capital and surplus of at least \$50,000,000. The prospectus supplement relating to a series of depositary shares will set forth the name and address of the depositary. Subject to the terms of the deposit agreement, each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in a share of preferred stock underlying that depositary share, to all the rights and preferences of the preferred stock underlying that depositary share. Those rights include dividend, voting, redemption, conversion and liquidation rights.

The depositary shares are evidenced by depositary receipts issued under the deposit agreement.

Dividends and Other Distributions

The depositary will distribute all cash dividends or other cash distributions received in respect of the preferred stock to the record holders of related depositary shares in proportion to the number of depositary shares owned by those holders.

If we make a distribution other than in cash, the depositary will distribute property received by it to the record holders of depositary shares that are entitled to receive the distribution, unless the depositary determines that it is not feasible to make the distribution. If this occurs, the depositary may, with our approval, sell the property and distribute the net proceeds from the sale to the applicable holders.

Redemption of Depositary Shares

Whenever we redeem shares of preferred stock that are held by the depositary, the depositary will redeem, as of the same redemption date, the number of depositary shares representing the shares of preferred stock so redeemed. The redemption price per depositary share will be equal to the applicable fraction of the redemption price per share payable with respect to that series of preferred stock. If fewer than all the depositary shares are to be redeemed, the depositary will select the depositary shares to be redeemed by lot or pro rata as may be determined by the depositary.

Depositary shares called for redemption will no longer be outstanding after the applicable redemption date, and all rights of the holders of these depositary shares will cease, except the right to receive any money or other property upon surrender to the depositary of the depositary receipts evidencing those depositary shares.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of depositary shares representing shares of such preferred stock. Each record holder of those depositary shares on the record date (which will be the same date as the record date for the preferred stock) will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of preferred stock underlying that holderos depositary shares.

depositary shares in accordance with those instructions, and we will agree to take all action which the depositary deems necessary in order to enable the depositary to do so. The depositary will not vote the shares of preferred stock to the extent it does not receive specific instructions from the holders of depositary shares representing shares of such preferred stock.

Conversion of Preferred Stock

If a series of the preferred stock underlying the depositary shares is convertible into shares of our common stock or any other class of our capital securities, we will accept the delivery of depositary receipts to convert the preferred stock using the same procedures as those for delivery of certificates for the preferred stock. If the depositary shares represented by a depositary receipt are to be converted in part only, the depositary will issue a new depositary receipt or depositary receipts for the depositary shares that are not converted.

Amendment and Termination of the Deposit Agreement

We and the depositary may amend the form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement at any time. However, any amendment that materially and adversely alters the rights of the holders of depositary shares will not be effective unless the amendment has been approved by the holders of at least a majority of the depositary shares then outstanding. We or the depositary may terminate the deposit agreement only if (i) all outstanding depositary shares have been redeemed or (ii) there has been a final distribution of the underlying preferred stock in connection with any liquidation, dissolution or winding up of PNC.

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will also pay charges of the depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary shares will pay other transfer and other taxes and governmental charges and such other charges as are expressly provided in the deposit agreement to be for their accounts.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering to us notice of its election to do so, and we may remove the depositary at any time. Any such resignation or removal will take effect only upon the appointment of a successor depositary and its acceptance of its appointment. The successor depositary must be a bank or trust company having its principal office in the United States and having a combined capital and surplus of at least \$50.000.000.

Miscellaneous

The depositary will forward to the holders of depositary shares all reports and communications that we deliver to the depositary and that we are required to furnish to the holders of the preferred stock.

Neither we nor the depositary will be liable if we are prevented or delayed by law or any circumstance beyond our control in performing our obligations under the deposit agreement. Our obligations and the obligations of the depositary under the deposit agreement will be limited to performance in good faith of our respective duties under the deposit agreement. Neither we nor the depositary will be obligated to prosecute or defend any legal proceeding relating to any depositary shares or preferred stock unless satisfactory indemnity is furnished. Both we and the depositary may rely upon written advice of counsel or accountants, or upon information provided by holders of depositary shares or other persons we believe to be competent, and on documents we believe to be genuine. The depositary may also rely on information provided by us.

TIME SHARING AGREEMENT

This Time Sharing Agreement (the "Agreement") is entered into as of November 15, 2017 by and between The PNC Financial Services Group, Inc., a Pennsylvania corporation, with offices at The Tower at PNC Plaza, 300 Fifth Avenue, Pittsburgh, PA 15222-2401 ("Lessor"), and William S. Demchak, with a business address of The Tower at PNC Plaza, 300 Fifth Avenue, Pittsburgh, PA 15222-2401 ("Lessee").

RECITALS

WHEREAS, Lessor is the owner and operator of certain aircraft, a list of which is attached as Schedule A hereto (hereinafter referred to individually and collectively as the "PNC Aircraft");

WHEREAS, Lessor employs a fully qualified flight crew to operate the PNC Aircraft; and

WHEREAS, Lessor and Lessee desire to lease said PNC Aircraft with flight crew on a non-exclusive time-sharing basis as defined in Section 91.501(c)(1) of the Federal Aviation Regulations ("FAR");

The parties agree as follows:

- 1. Lessor agrees to lease the PNC Aircraft to Lessee pursuant to the provisions of FAR 91.501(c)(1) and to provide a fully qualified flight crew for all operations. This Agreement shall commence on the date hereof (the "Effective Date"), and continue for the remaining portion of the Calendar Year ("Calendar Year" being defined as the period beginning January 1st of each year and ending December 31st of the same year). Thereafter, this Agreement shall automatically renew on January 1st of each subsequent Calendar Year, unless and until terminated pursuant to the terms of this Agreement. Except as otherwise provided in Section 9, either party may at any time terminate this Agreement upon thirty (30) days written notice to the other party.
- 2. Lessee shall pay Lessor the incremental cost of each flight conducted under this Agreement, including the cost of any "deadhead" flights made for Lessee, calculated in accordance with Lessor's Aviation Policy and Aviation Procedures. Such cost shall in no event exceed the sum of the following expenses authorized by FAR Part 91.501(d):
 - (a) Fuel, oil, lubricants, and other additives;
 - (b) Travel expenses of the crew, including food, lodging and ground transportation;
 - (c) Hangar and tie down costs away from the PNC Aircraft's base of operation;
 - (d) Insurance obtained for the specific flight;

- (e) Landing fees, airport taxes, and similar assessments;
- (f) Customs, foreign permit, and similar fees directly related to the flight;
- (g) In-flight food and beverages;
- (h) Passenger ground transportation;
- (i) Flight planning and weather contract services; and
- (j) An additional charge equal to 100 percent of the expenses listed in 2.(a) above.
- 3. Lessor will pay all expenses related to the operation of the PNC Aircraft when incurred, and will provide an invoice to Lessee for the expenses enumerated in paragraph 2 above within ten business days of the last day of the month in which any flight or flights for the account of Lessee occur. Lessee shall pay Lessor for said expenses within thirty (30) calendar days of receipt of the invoice therefore.

Lessee shall include with each payment any federal transportation excise tax due with respect to such payment, and Lessor shall be responsible for collecting, reporting and remitting such tax to the U.S. Internal Revenue Service.

- 4. Lessee will provide Lessor with requests for flight time and proposed flight schedules as far in advance of any given flight as possible, and in any case, at least twenty-four (24) hours in advance of Lessee's planned departure. Requests for flight time shall be in a form, whether written or oral, mutually convenient to, and agreed upon by the parties. In addition to the proposed schedules and flight times, Lessee shall provide at least the following information for each proposed flight at some time prior to scheduled departure as required by the Lessor or Lessor's flight crew:
 - (a) proposed departure point;
 - (b) destination;
 - (c) date and time of flight;
 - (d) the number of anticipated passengers;
 - (e) the nature and extent of luggage and/or cargo to be carried;
 - (f) the date and time of return flight, if any; and

- (g) any other information concerning the proposed flight that may be pertinent or required by Lessor or Lessor's flight crew.
- 5. Lessor shall have final authority over the scheduling of the PNC Aircraft; provided, that Lessor will use its best efforts to accommodate Lessee's needs and to avoid conflicts in scheduling, consistent with the Lessor's use of the PNC Aircraft in connection with its business operations. Lessor shall have no obligation under this Agreement to arrange for or to provide air travel in the event that the PNC Aircraft is unavailable to satisfy Lessee's requests for flight time.
- 6. Lessor shall be solely responsible for securing repairs, maintenance, preventive maintenance and required or otherwise necessary inspections of the PNC Aircraft, and shall take such requirements into account in scheduling the PNC Aircraft. No repair, period of maintenance, preventive maintenance, or inspection shall be delayed or postponed for the purpose of scheduling the PNC Aircraft, unless said repair, maintenance, or inspection can be safely conducted at a later time in compliance with all applicable laws and regulations, and within the sound discretion of the pilot in command. The pilot in command shall have final and complete authority to delay or cancel any flight for any reason or condition which in his judgment would compromise the safety of the flight. No such action of the pilot in command shall create or support any liability for loss, injury, damage, or delay to Lessee or any other person.
- 7. Lessor shall employ, pay for and provide to Lessee a qualified flight crew for each flight undertaken under this Agreement.
- 8. In accordance with applicable FAR, the qualified flight crew provided by Lessor will exercise all of its duties and responsibilities in regard to the safety of each flight conducted hereunder. Lessee specifically agrees that the flight crew, in its sole discretion, may terminate any flight, refuse to commence any flight, or take other action which in the considered judgment of the pilot in command is necessitated by considerations of safety. No such action of the pilot in command shall create or support any liability for loss, injury, damage, or delay to Lessee or any other person. The parties further agree that Lessor shall not be liable for delay or failure to furnish the PNC Aircraft and crew pursuant to this Agreement when such failure is caused by the demands of the Lessor's business operations requiring its use of the PNC Aircraft, government regulation or authority, mechanical difficulty, war, civil commotion, strikes or labor disputes, weather conditions, or acts of God.
- 9. At all times during the term of this Lease, Lessor shall maintain the following insurance coverages from insurance carriers acceptable to Lessee:
 - (a) PNC Aircraft Physical Damage insurance in an amount at least equal to the fair market value of the PNC Aircraft; and

- (b) PNC Aircraft Liability Insurance Combined Single Limit Bodily Injury and Property Damage, Including Passengers, of at least \$100,000,000 for each occurrence. Such coverage shall:
 - i. Be primary, non-contributing with any insurance maintained by Lessee;
 - ii. Name Lessee and his guests as additional insureds;
 - iii. Expressly waive subrogation against Lessee; and
 - iv. Provide at least thirty (30) days advance written notice to Lessee of any material changes, cancellation, or non-renewal.

Lessor shall furnish Lessee with duly executed certificates evidencing all required insurance coverages, limits and requirements, together with satisfactory evidence of the premium payment as of the effective date of this Agreement. Lessor shall provide certificates of insurance upon each renewal no less than thirty (30) days prior to coverage expiration. Lessee's acceptance of such certificates is not to be construed as any waiver of Lessee's rights to the insurance required. Further, if Lessee fails for any reason to receive certificates or other evidence of insurance from Lessor, such failure shall not be deemed a waiver of required coverage. Lessee retains the right to terminate this Agreement immediately if Lessor fails to provide adequate and proper evidence of required insurance.

Lessor shall also bear the cost of paying any deductible amount on any policy of insurance in the event of a claim or loss.

Each liability policy shall be primary without right of contribution from any other insurance which is carried by Lessee or Lessor and shall expressly provide that all of the provisions thereof, except the limits of liability, shall operate in the same manner as if there were a separate policy covering each insured.

Lessor warrants that this Agreement has been reviewed by the insurance carrier for each policy of insurance on the PNC Aircraft and that the relevant terms and conditions of this Agreement are acceptable to each such carrier.

10. Lessee warrants that:

- (a) He will use the PNC Aircraft for and on account of his and his guests' personal travel needs and will not use the PNC Aircraft for the purpose of providing transportation of passengers or cargo in air commerce for compensation or hire; and
- (b) He will refrain from incurring any mechanics or other lien and shall not attempt to convey, mortgage, assign or lease the PNC Aircraft or create any kind of lien or security Page 4 of 7

interest involving the PNC Aircraft or do anything or take any action that might mature into such a lien.

- 11. For purposes of this Agreement, the permanent base of operation of the PNC Aircraft shall be 25 Allegheny County Airport, West Mifflin, PA 15122.
- 12. Neither this Agreement nor any party's interest herein shall be assignable. This Agreement shall inure to the benefit of and be binding upon the parties hereto, their representatives and successors. This Agreement constitutes the entire understanding between the parties, and any change or modification must be in writing and signed by both parties.
- 13. All communications and notices provided for herein shall be in writing and shall become effective when delivered by facsimile transmission (to Lessor at [redacted] or to Lessee at [redacted]) or by Federal Express or other overnight courier or four (4) days following deposit in the United States mail, with correct postage for first-class mail prepaid, addressed to Lessor or Lessee at their respective addresses set forth above, or else as otherwise directed by the other party from time to time in writing.
- 14. This Agreement is entered into under, and is to be construed in accordance with, the laws of the Commonwealth of Pennsylvania and the applicable FAR.

15. TRUTH IN LEASING STATEMENT

THE PNC AIRCRAFT HAVE BEEN MAINTAINED AND INSPECTED UNDER FAR PART 91 DURING THE 12 MONTH PERIOD PRECEDING THE DATE OF THIS AGREEMENT.

THE PNC AIRCRAFT WILL BE MAINTAINED AND INSPECTED UNDER FAR PART 91 FOR OPERATIONS TO BE CONDUCTED UNDER THIS AGREEMENT. DURING THE DURATION OF THIS AGREEMENT, THE PNC FINANCIAL SERVICES GROUP, INC., ONE PNC PLAZA, 249 FIFTH AVENUE, PITTSBURGH, PA 15222-2707, IS CONSIDERED RESPONSIBLE FOR OPERATIONAL CONTROL OF THE PNC AIRCRAFT UNDER THIS AGREEMENT.

AN EXPLANATION OF FACTORS BEARING ON OPERATIONAL CONTROL AND PERTINENT FEDERAL AVIATION REGULATIONS CAN BE OBTAINED FROM THE NEAREST FAA FLIGHT STANDARDS DISTRICT OFFICE.

THE "INSTRUCTIONS FOR COMPLIANCE WITH TRUTH IN LEASING REQUIREMENTS" ATTACHED HERETO IN EXHIBIT B ARE INCORPORATED HEREIN BY REFERENCE.

THE UNDERSIGNED, AS A DULY AUTHORIZED OFFICER OF THE PNC Page 5 of 7

FINANCIAL SERVICES GROUP, INC., THE TOWER AT PNC PLAZA, 300 FIFTH AVENUE, PITTSBURGH, PA 15222-2401, CERTIFIES THAT IT IS RESPONSIBLE FOR OPERATIONAL CONTROL OF THE PNC AIRCRAFT AND THAT IT UNDERSTANDS ITS RESPONSIBILITIES FOR COMPLIANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

[SIGNATURE BLOCK IS ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have executed this Agreement, intending to be legally bound.

THE PNC FINANCIAL SERVICES GROUP, INC. (LESSOR)

By: /s/Christi Davis

Name: Christi Davis

Title: Corporate Secretary

Date: 11/15/17

WILLIAM S. DEMCHAK (LESSEE)

/s/William Demchak

Date: 11/15/17

TIME SHARING AGREEMENTS AMENDMENT AND TERMINATION AGREEMENT

This Time Sharing Agreements Amendment and Termination Agreement (the "Amendment and Termination Agreement") to various Time Sharing Agreements between THE PNC FINANCIAL SERVICES GROUP, INC. ("Lessor") and WILLIAM S. DEMCHAK ("Lessee") is made and entered between Lessor and Lessee this 27th day of February, 2020.

WHEREAS, The PNC Financial Services Group, Inc. ("Lessor") and William S. Demchak ("Lessee") have entered into the following Time Sharing Agreements, whereby Lessor agrees to lease aircraft to Lessee pursuant to the provisions of FAR 91.501(c)(1) and to provide a fully qualified flight crew for all such operations:

1.	September 15, 2010	re	N710DL	Challenger 350	S/N 20282	("TSA 1")
2.	March 15, 2016	re	N305DL	Challenger 350	S/N 20608	("TSA 2")
3.	November 15, 2017	re	N513DL	Global 5000	S/N 9786	("TSA 3")

WHEREAS, Lessor and Lessee desire to terminate TSA 1 and TSA 2;

WHEREAS, Lessor and Lessee desire to amend TSA 3 to attach a revised and updated Exhibit A to add certain aircraft to the list of aircraft which are covered by TSA 3 (the aircraft on Exhibit A to be hereinafter referred to individually and collectively as the "PNC Aircraft").

NOW THEREFORE, in consideration of the covenants and agreements herein contained in this Amendment and Termination Agreement and its preamble, which Lessor and Lessee agree constitute good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. - TERMINATION of TSA 1 and TSA 2

1.1 In consideration of and subject to the provisions of this Amendment and Termination Agreement, Lessor and Lessee hereby mutually agree to terminate TSA 1 and TSA 2, such terminations to become effective upon execution of this Amendment and Termination Agreement.

2. - AMENDMENT NO. 1 TO TSA 3

- 2.1 The changes to TSA 3 between Lessor and Lessee dated November 15, 2017, as set forth in this Section 2, shall be known as "Amendment No. 1."
- 2.2 In consideration of and subject to the provisions of this Amendment No. 1, Lessor and Lessee hereby mutually agree to amend TSA 3 as follows:
- 2.2.1 Delete Section 11 in its entirety and replace with, "For purposes of this Agreement, the

permanent base of operation of the PNC African shall be 24 Afregheny County Airport, west within, PA 15122."

- 2.2.2 Delete Exhibit A dated November 15, 2017 in its entirety.
- 2.2.3 Insert Exhibit A dated February _____, 2020, in the form attached to this Amendment and Termination Agreement.
- 2.3 <u>Definitions</u>. All defined terms used herein and not otherwise defined shall have the meaning given to them in TSA 3, as amended from time to time.

2.4 Miscellaneous.

- 2.4.1 Except as expressly amended by this Amendment No. 1, TSA 3 remains in full force and effect, and this Amendment No. 1 shall not be construed to alter or amend any of the other terms and conditions set forth in TSA 3. In the event of a conflict between the terms of TSA 3, any Schedules and this Amendment No. 1, the provisions of this Amendment No. 1 shall prevail.
- 2.4.2 This Amendment No. 1, together with TSA 3 (collectively hereinafter referred to as the "Time Sharing Agreement") constitute the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of the Time Sharing Agreement and supersede and cancel all prior and contemporaneous understandings or agreements of the parties, whether oral or written. No party has been induced to enter into this Amendment No. 1 by, nor is any party relying on, any representation or warranty outside those expressly set forth in this Amendment No. 1.

3. - OTHER PROVISIONS

3.1 This Amendment and Termination Agreement may be executed in any number of counterparts, and by each of the parties on separate counterparts, each of which, when so executed, shall be deemed an original, but all of which shall constitute but one and the same instrument. Delivery of an executed counterpart of this Amendment and Termination Agreement by facsimile or electronic format shall be equally as effective as delivery of a manually executed counterpart of this Amendment and Termination Agreement. Any party delivering an executed counterpart of this Amendment and Termination Agreement by facsimile or electronic format shall deliver a manually executed counterpart, but the failure to deliver a manually executed counterpart shall not affect the validity, enforceability or binding effect of this Amendment and Termination Agreement.

[Signature Page Follows]

The parties have executed this Time Sharing Agreements Amendment and Termination Agreement, by their authorized representatives, as of the day and year written below.

THE PNC FINANCIAL SERVICES GROUP, INC. ("Lessor")

By: /s/Alicia G. Powell

Printed Name: Alicia G. Powell

Title: Corporate Secretary

Date: 2-27-20

Address: The Tower at PNC Plaza

300 Fifth Avenue

Pittsburgh, PA 15222-2401

WILLIAM S. DEMCHAK ("Lessee")

By: /s/William Demchak

Printed Name: William Demchak

Title: CEO Date: 2/27/20

Address: The Tower at PNC Plaza

300 Fifth Avenue

Pittsburgh, PA 15222-2401

THE PNC FINANCIAL SERVICES GROUP, INC. SCHEDULE OF CERTAIN SUBSIDIARIES (As of December 31, 2020)

	State or Other Jurisdiction of
Name	Incorporation or Organization

PNC Bancorp, Inc. (1)

PNC Bank, National Association (1)

PNC Equipment Finance, LLC

PNC Merchant Services Company

PNC NCNVINV, Inc.

PNC Investments, LLC

Delaware

Delaware

Delaware

Delaware

PNC Holding, LLC (1)

PNC Investment Company, LLC

PNC Capital Markets, LLC

PNC Capital Finance, LLC

Delaware

PNC Capital Finance, LLC

Delaware

(1) The names of the subsidiaries of the indicated entities are omitted because such subsidiaries, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-210994 and 333-228804), Form S-4 (No. 333-155248) and Form S-8 (Nos. 333-156540, 333-18069, 333-65040, 333-136808, 333-172931, 333-156886, 333-177896, 333-134169, 333-139345, 333-143182, 333-177898, 333-156527, 333-198461, 333-210995, 333-229874, 333-238049 and 033-62311) of The PNC Financial Services Group, Inc. of our report dated February 26, 2021 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Pittsburgh, Pennsylvania February 26, 2021 $Price waterhouse Coopers\ LLP,\ 600\ Grant\ Street,\ Pittsburgh,\ Pennsylvania\ 15219\\ T:\ (412)\ 355\ 6000;\ F:\ (412)\ 355\ 8089,\ (412)\ 391\ 0609\ WMS,\ www.pwc.com/us$

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference of our report dated February 25, 2021, relating to the financial statements of BlackRock, Inc. appearing in Exhibit 99.1 to this Annual Report on Form 10-K of The PNC Financial Services Group, Inc. (the "Corporation") for the year ended December 31, 2020, in the following Registration Statements of the Corporation:

- Form S-3 relating to the Corporation's Dividend Reinvestment and Stock Purchase Plan (No. 333-210994)
- Form S-8 relating to the Corporation's Employee Stock Purchase Plan (Nos. 333-156540, 333-238049, and 033-62311)
- Forms S-8 relating to the Corporation's Supplemental Incentive Savings Plan and the Corporation and Affiliates' Deferred Compensation Plan (Nos. 333-18069, 333-65040, 333-136808, and 333-172931)
- Form S-8 relating to the Corporation's Supplemental Incentive Savings Plan and the Corporation and Affiliates' Deferred Compensation Plan (No. 333-156886)
- Forms S-8 relating to the Corporation's Deferred Compensation and Incentive Plan (Nos. 333-177896 and 333-198461)
- Forms S-8 relating to the Corporation's 2006 Incentive Award Plan (Nos. 333-134169, 333-139345, 333-143182 and 333-177898)
- Form S-8 relating to various National City plans (No. 333-156527)
- Form S-8 relating to the Corporation's 2016 Incentive Award Plan (No. 333-210995)
- Form S-8 relating to the Corporation's Deferred Compensation and Incentive Plan and the Corporation's Directors Deferred Compensation Plan (No. 333-229874)
- Form S-3 relating to the shelf registration statement of debt securities, common stock, preferred stock, purchase contracts, units, warrants and depositary shares to be issued by the Corporation (No. 333-228804)

/s/ Deloitte & Touche LLP New York, New York February 25, 2021

POWER OF ATTORNEY

The PNC Financial Services Group, Inc.

KNOW ALL PERSONS BY THESE PRESENTS, that each of the undersigned Directors and/or Officers of The PNC Financial Services Group, Inc. (the "Corporation"), a Pennsylvania corporation, hereby names, constitutes and appoints Robert Q. Reilly, Gregory H. Kozich, Laura L. Long and Alicia G. Powell, and each of them, as such person's true and lawful attorney-in-fact with power of substitution and resubstitution to sign in his or her name, place and stead, in any and all capacities, and to do any and all things and execute any and all instruments that such attorney may deem necessary or advisable under the Securities Exchange Act of 1934, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission (the "Commission"), in connection with the filing with the Commission of an Annual Report on Form 10-K of the Corporation for the fiscal year ended December 31, 2020 (the "2020 Form 10-K"); including specifically, but without limiting the generality of the foregoing, the power and authority to sign his or her name in his or her capacity as a member of the Board of Directors of the Corporation and/or as an Officer of the Corporation to the 2020 Form 10-K and such other form or forms as may be appropriate to be filed with the Commission as he or she may deem appropriate, together with all exhibits thereto, and to any and all amendments or supplements thereto and to any other documents filed with the Commission, as fully for all intents and purposes as he or she might or could do in person, and hereby ratifies and confirms all that said attorney-in-fact and agent, acting alone may lawfully do or cause to be done by virtue hereof.

This Power of Attorney will be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania. The execution of this Power of Attorney is not intended to, and does not, revoke any prior powers of attorney other than the revocation, in accordance with applicable laws, of any power of attorney previously granted specifically in connection with the filing of the 2020 Form 10-K (and any and all related documents, including any amendments or supplements to the 2020 Form 10-K).

IN WITNESS WHEREOF, the following persons have duly signed this Power of Attorney in the capacities indicated as of this 17th day of February, 2021.

Name/Signature	Capacity Chairman, Chief Executive Officer and President (Principal Executive Officer) and Director			
/s/ William S. Demchak William S. Demchak				
/s/ Robert Q. Reilly Robert Q. Reilly	Executive Vice President and Chief Financial Officer (Principal Financial Officer)			
/s/ Gregory H. Kozich Gregory H. Kozich	Senior Vice President and Controller (Principal Accounting Officer)			

/s/ Joseph Alvarado Joseph Alvarado	_ Director
/s/ Charles E. Bunch Charles E. Bunch	_ Director
/s/ Debra A. Cafaro Debra A. Cafaro	Director
/s/ Marjorie Rodgers Cheshire Marjorie Rodgers Cheshire	_ Director
/s/ David L. Cohen David L. Cohen	_ Director
/s/ Andrew T. Feldstein Andrew T. Feldstein	_ Director
/s/ Richard J. Harshman Richard J. Harshman	_ Director
/s/ Daniel R. Hesse Daniel R. Hesse	_ Director
/s/ Linda R. Medler Linda R. Medler	_ Director
/s/ Martin Pfinsgraff Martin Pfinsgraff	_ Director
/s/ Toni Townes-Whitley Toni Townes-Whitley	_ Director
/s/ Michael J. Ward Michael J. Ward	_ Director

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, William S. Demchak, certify that:

- 1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2020 of The PNC Financial Services Group, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

/s/ William S. Demchak

William S. Demchak Chairman, President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

- I, Robert Q. Reilly, certify that:
- 1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2020 of The PNC Financial Services Group, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

/s/ Robert Q. Reilly

Robert Q. Reilly Executive Vice President and Chief Financial Officer

CERTIFICATION BY CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the year ended December 31, 2020 of The PNC Financial Services Group, Inc. (Corporation) as filed with the Securities and Exchange Commission on the date hereof (Report), I, William S. Demchak, Chairman, President and Chief Executive Officer of the Corporation, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation for the dates and periods covered by the Report.

This certificate is being made for the exclusive purpose of compliance by the Chief Executive Officer of the Corporation with the requirements of Section 906 of the Sarbanes-Oxley Act of 2002, and may not be used by any person or for any reason other than as specifically required by law.

/s/ William S. Demchak

William S. Demchak Chairman, President and Chief Executive Officer

February 26, 2021

CERTIFICATION BY CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the year ended December 31, 2020 of The PNC Financial Services Group, Inc. (Corporation) as filed with the Securities and Exchange Commission on the date hereof (Report), I, Robert Q. Reilly, Executive Vice President and Chief Financial Officer of the Corporation, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation for the dates and periods covered by the Report.

This certificate is being made for the exclusive purpose of compliance by the Chief Financial Officer of the Corporation with the requirements of Section 906 of the Sarbanes-Oxley Act of 2002, and may not be used by any person or for any reason other than as specifically required by law.

/s/ Robert Q. Reilly

Robert Q. Reilly
Executive Vice President and Chief Financial Officer

February 26, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of BlackRock, Inc.:

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial condition of BlackRock, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Impairment of indefinite-lived intangible assets — Refer to Notes 2 and 12 to the financial statements

Critical Audit Matter Description

The Company's indefinite-lived intangible assets are comprised of management contracts and trade names/trademarks acquired in business acquisitions. The Company performs its impairment assessment of its indefinite-lived intangible assets at least annually, as of July 31st. In evaluating whether it is more likely than not that the fair value of indefinite-lived intangibles is less than carrying value, the Company performs certain quantitative assessments and assesses various significant qualitative factors. If an indefinite-lived intangible asset is determined to be more likely than not impaired, the fair value of the asset is then compared with its carrying value and any excess of the carrying value over the fair value would be recognized as an expense in the period in which the impairment occurs. The determination of fair value requires management to make estimates and assumptions related to projected assets under management ("AUM") growth rates, revenue basis points, operating margins, tax rates, and discount rates.

Given the significant judgments made by management to estimate the fair value of its indefinite-lived intangible assets, performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to projected AUM growth rates, revenue basis points, operating margins, tax rates, and discount rates, required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the determination of fair value of indefinite-lived intangible assets included the following, among others:

- We tested the design, implementation and operating effectiveness of controls over the Company's indefinite-lived intangible asset impairment analysis, including
 those related to management's determination of fair value for the indefinite-lived intangible asset. This includes controls related to management's projected AUM
 growth rates, operating margins, tax rates, and the selection of the discount rates.
- We evaluated the reasonableness of management's projected AUM growth rates, revenue basis points, operating margins, and tax rates by comparing management's projections to:
 - historical amounts,
 - internal communications to management and the Board of Directors, and
 - forecasted information included in analyst and industry reports for the Company and certain of its peer companies.
- We evaluated management's ability to accurately project AUM growth rates, operating margins, and tax rates by comparing actual results to management's historical forecasts.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the Company's valuation methodology and assumptions, including the selection of the discount rate by: (1) testing the source information underlying the determination of the discount rate and the mathematical accuracy of the evaluation and (2) developing a range of independent estimates and compared those to the discount rate selected by management.
- · We evaluated the impact of changes in management's forecasts from July 31, 2020, the annual impairment assessment date, to December 31, 2020.

/s/ Deloitte & Touche, LLP

New York, New York February 25, 2021

We have served as the Company's auditor since 2002.

BlackRock, Inc. Consolidated Statements of Financial Condition

(in millions, except shares and per share data)	Dec	ember 31, 2020	Dec	ember 31, 2019
Assets	-			
Cash and cash equivalents(1)	s	8,664	S	4.829
Accounts receivable	*	3,535		3,179
Investments(1)		6,919		5.489
Separate account assets		104,663		102.844
Separate account collateral held under securities lending agreements		16,507		15.466
Property and equipment (net of accumulated depreciation of \$1,098 and \$880 at December 31,		10,501		15,400
2020 and 2019, respectively)		681		715
Intangible assets (net of accumulated amortization of \$291 and \$185 at December 31, 2020				
and 2019, respectively)		18.263		18,369
Goodwill		14,551		14,562
Other assets(1)		3,199		3,169
Total assets	\$	176,982	S	168,622
Liabilities		,	*	1001022
Accrued compensation and benefits	\$	2,499	\$	2.057
Accounts payable and accrued liabilities	*	1,028	· ·	1,167
Borrowings		7,264		4,955
Separate account liabilities		104,663		102,844
Separate account realisates Separate account collateral liabilities under securities lending agreements		16,507		15,466
Deferred income tax liabilities		3,673		3,734
Other liabilities(1)		3,692		3,470
Total liabilities		139.326		133,693
Commitments and contingencies (Note 16)		133,320		100,000
Temporary equity				
Redeemable noncontrolling interests		2,322		1,316
Permanent equity		2,322		1,310
BlackRock, Inc. stockholders' equity				
				2
Common stock, \$0.01 par value;		2		2
Shares authorized: 500,000,000 at December 31, 2020 and 2019; Shares issued: 172,075,373 and 171,252,185 at December 31, 2020 and 2019, respectively;				
Shares outstanding: 152,532,885 and 154,375,780 at December 31, 2020 and				
2019, respectively				
Series B nonvoting participating preferred stock, \$0.01 par value;		<u> </u>		N <u>=</u>
Shares authorized: 0 and 150,000,000 at December 31, 2020 and 2019, respectively:				
Shares issued and outstanding: 0 and 823,188 at December 31, 2020 and 2019, respectively				
Additional paid-in capital		19,293		19,186
Retained earnings		24,334		21,662
Accumulated other comprehensive loss		(337)		(571
Treasury stock, common, at cost (19,542,488 and 16,876,405 shares held at December 31, 2020 and		(337)		(5/1
2019, respectively)		(8,009)		(6,732
Total BlackRock, Inc. stockholders' equity		35,283		33,547
Nonredeemable noncontrolling interests		51		66
Total permanent equity		35,334		33,613
Total liabilities, temporary equity and permanent equity	s	176,982	S	168,622

⁽¹⁾ At December 31, 2020, cash and cash equivalents, investments, other assets and other liabilities include \$155 million, \$4,253 million, \$90 million and \$952 million, respectively, related to consolidated variable interest entities ("VIEs"). At December 31, 2019, cash and cash equivalents, investments, other assets and other liabilities include \$131 million, \$3,301 million, \$68 million and \$820 million, respectively, related to consolidated VIEs.

BlackRock, Inc. Consolidated Statements of Income

(in millions, except shares and per share data)	2020		2019		2018
Revenue					
Investment advisory, administration fees and securities lending revenue:					
Related parties	\$ 9,079	\$	8,323	\$	8,226
Other third parties	3,560	10.90	3,454	2000	3,327
Total investment advisory, administration fees and securities lending revenue	12,639		11,777		11,553
Investment advisory performance fees	1,104		450		412
Technology services revenue	1,139		974		785
Distribution fees	1,131		1,069		1,155
Advisory and other revenue	192		269		293
Total revenue	16,205		14,539		14,198
Expense					
Employee compensation and benefits	5,041		4,470		4,320
Distribution and servicing costs	1,835		1,685		1,675
Direct fund expense	1,063		978		998
General and administration	2,465		1,758		1,638
Restructuring charge	-		_		60
Amortization of intangible assets	106		97		50
Total expense	10,510		8,988		8,741
Operating income	5,695		5,551		5,457
Nonoperating income (expense)					
Net gain (loss) on investments	972		342		1
Interest and dividend income	62		97		104
Interest expense	(205)		(203)		(184)
Total nonoperating income (expense)	829		236		(79)
Income before income taxes	6,524		5,787		5,378
Income tax expense	1,238		1,261		1,076
Net income	5,286		4,526		4,302
Less:					
Net income (loss) attributable to noncontrolling interests	354		50		(3)
Net income attributable to BlackRock, Inc.	\$ 4,932	\$	4,476	\$	4,305
Earnings per share attributable to BlackRock, Inc. common stockholders:	Same	La La	1400000	0.002	25-25-27-22
Basic	\$ 32.13	\$	28.69	\$	26.86
Diluted	\$ 31.85	\$	28.43	\$	26.58
Weighted-average common shares outstanding:					
Basic	153,489,422		156,014,343		160,301,116
Diluted	154,840,582		157,459,546		161,948,732

BlackRock, Inc. Consolidated Statements of Comprehensive Income

(in millions)	2	2020	2019	2018
Net income	\$	5,286	\$ 4,526	\$ 4,302
Other comprehensive income (loss):				
Foreign currency translation adjustments(1)		234	120	(253)
Other comprehensive income (loss)		234	120	(253)
Comprehensive income		5,520	4,646	4,049
Less: Comprehensive income (loss) attributable to noncontrolling interests		354	50	(3)
Comprehensive income attributable to BlackRock, Inc.	S	5,166	\$ 4.596	\$ 4,052

⁽¹⁾ Amount for 2020 includes a loss from a net investment hedge of \$54 million (net of tax benefit of \$17 million). Amounts for 2019 and 2018 include gains from a net investment hedge of \$11 million (net of tax expense of \$3 million) and \$30 million (net of tax expense of \$10 million), respectively.

BlackRock, Inc. Consolidated Statements of Changes in Equity

(in millions)	F	Iditional Paid-in apital(1)	15.015	etained ernings	Cor	Other mprehensive	reasury Stock ommon		Total BlackRock lockholders' Equity		nredeemable ncontrolling Interests	Pe	Total ermanent Equity	No	edeemable ncontrolling Interests / Femporary Equity
December 31, 2017	\$	19,258	\$	16,939	S	(432)	\$ (3,967)	S	31,798	\$	50	\$	31,848	S	416
Net income		_		4.305			_		4,305		_		4,305		(3)
Dividends declared (\$12.02 per share)		_		(1,968)		_	_		(1,968)		_		(1,968)		
Stock-based compensation		564		(,,,,,,,					564		_		564		
PNC preferred stock capital contribution		58							58				58		
Retirement of preferred stock		(58)							(58)				(58)		
Issuance of common shares related to employee stock transactions		(652)		-		-	667		15		_		15		_
Employee tax withholdings related to employee stock transactions		2-				_	(427)		(427)		_		(427)		_
Shares repurchased		-				-	(1,660)		(1,660)		_		(1,660)		-
Subscriptions (redemptions/distributions) — noncontrolling interest holders		_		_		_	_		_		9		9		1,254
Net consolidations (deconsolidations) of															179
sponsored investment funds		_		_			_		_		_		-		(560)
Other comprehensive income (loss)		_		_		(253)	_		(253)		_		(253)		_
Adoption of new accounting															
pronouncement				6		(6)			(<u>—</u>)				2000		
December 31, 2018	\$	19,170	\$	19,282	\$	(691)	\$ (5,387)	\$	32,374	\$	59	\$	32,433	\$	1,107
Net income	-	7-	-	4,476			_		4,476		7		4,483		43
Dividends declared (\$13.20 per share)		-		(2,096)		-	-		(2,096)		_		(2,096)		_
Stock-based compensation		567				-			567		_		567		-
PNC preferred stock capital contribution		60		_		_	_		60		_		60		_
Retirement of preferred stock		(60)		12_1		01-01	-		(60)		10-20		(60)		89_19
Issuance of common shares related to employee stock transactions		(549)				18_23	566		17				17		10-21
Employee tax withholdings related to		(040)					300				-		**		3.7
employee stock transactions		-		0-		_	(245)		(245)		-		(245)		$(-1)^{-1}$
Shares repurchased							(1,666)		(1,666)		() ((1,666)		(100)
Subscriptions (redemptions/distributions) — noncontrolling interest holders				_		-	_		2-3		2		2		1,456
Net consolidations (deconsolidations) of															
sponsored investment funds		_		_		_	_		_		(2)		(2)		(1,290)
Other comprehensive income (loss)	00.00					120	 		120	NO DECISION		33.00	120		
December 31, 2019	\$	19,188	\$	21,662	\$	(571)	\$ (6,732)	\$	33,547	\$	66	\$	33,613	\$	1,316
Net income		_		4,932					4,932		(1)		4,931		355
Dividends declared (\$14.52 per share)		-		(2,260)			-		(2,260)				(2,260)		1,0
Stock-based compensation		622					_		622		_		622		_
Issuance of common shares related to		\$7.57							S7777						
employee stock transactions		(515)		-		_	532		17		-		17		-
Employee tax withholdings related to															
employee stock transactions		_		-		: -	(297)		(297)		_		(297)		-
Shares repurchased		_		-		33-	(1,512)		(1,512)		-		(1,512)		1
Subscriptions (redemptions/distributions) — noncontrolling interest holders		_		_		-	_		_		(14)		(14)		2,065
Net consolidations (deconsolidations) of											10.18		27 ES		200
sponsored investment funds		_		_		_	_		_		_		_		(1,414)
Other comprehensive income (loss)		_		_		234	_		234		_		234		
December 31, 2020	\$	19,295	\$	24,334	S	(337)	\$ (8,009)	\$	35,283	\$	51	\$	35,334	S	2,322

⁽¹⁾ Amounts include \$2 million of common stock at December 31, 2020, 2019, 2018 and 2017.

BlackRock, Inc. Consolidated Statements of Cash Flows

(in millions)		2020		2019		2018
Operating activities				4.500	•	4.000
Net income	\$	5,286	\$	4,526	\$	4,302
Adjustments to reconcile net income to net cash provided by/(used in)						
operating activities:		250		296		220
Depreciation and amortization		358 118		109		220
Noncash lease expense		622		567		564
Stock-based compensation						10.7070000
Deferred income tax expense (benefit)		(157)		17		(226)
Charitable Contribution		589		_		
Gain related to the Charitable Contribution		(122)		_		_
Contingent consideration fair value adjustments		23		53		65
Other investment gains		(244)		(30)		(50)
Net (gains) losses within consolidated sponsored investment products		(501)		(254)		149
Net (purchases) proceeds within consolidated sponsored investment products		(2,282)		(1,746)		(1,938)
(Earnings) losses from equity method investees		(148)		(116)		(94)
Distributions of earnings from equity method investees		32		70		30
Changes in operating assets and liabilities:		(040)		(400)		120
Accounts receivable		(313)		(433)		4
Investments, trading		160		(21)		179
Other assets		(60)		141		(223)
Accrued compensation and benefits		487		58		(230)
Accounts payable and accrued liabilities		(115)		(111)		43
Other liabilities		10		(242)		280
Net cash provided by/(used in) operating activities		3,743		2,884		3,075
Investing activities Purchases of investments		(359)		(693)		(327)
		187		417		449
Proceeds from sales and maturities of investments		183		136		24
Distributions of capital from equity method investees						
Net consolidations (deconsolidations) of sponsored investment funds		(71)		(110)		(51)
Acquisitions, net of cash acquired		(194)		(1,510)		(699)
Purchases of property and equipment		(254)		(254)		(204)
Net cash provided by/(used in) investing activities Financing activities		(234)		(2,014)		(808)
Proceeds from long-term borrowings		2,245		992		941
Repayments of long-term borrowings		-,		(1,000)		_
Cash dividends paid		(2,260)		(2,096)		(1,968)
Repurchases of common stock		(1,809)		(1,911)		(2,087)
Net proceeds from (repayments of) borrowings by consolidated sponsored		(1,000)		(1,01.1)		(2,00.)
investment products		51		111		40
Net (redemptions/distributions paid)/subscriptions received from noncontrolling						
interest holders		2,051		1,458		1,263
Other financing activities		(34)		(137)		(13)
Net cash provided by/(used in) financing activities		244		(2,583)		(2,765)
Effect of exchange rate changes on cash, cash equivalents and restricted cash		102		54		(93)
Net increase/(decrease) in cash, cash equivalents and restricted cash		3,835		(1,659)		(591)
Cash, cash equivalents and restricted cash, beginning of year		4,846		6,505	•	7,096
Cash, cash equivalents and restricted cash, end of year	\$	8,681	\$	4,846	\$	6,505
Supplemental disclosure of cash flow information: Cash paid for:						
		402	e	402	e.	477
Interest	\$	183	\$	193	\$	177
Income taxes (net of refunds)	\$	1,308	\$	1,168	\$	1,159
Supplemental schedule of noncash investing and financing transactions:			•	F46	•	050
Issuance of common stock	\$	515	\$	549	\$	652
PNC preferred stock capital contribution	\$		\$	60	\$	58
Charitable Contribution of an investment	\$	(589)	\$	_	\$	_
Increase/(decrease) in noncontrolling interests due to net consolidation (deconsolidation) of sponsored investment funds	s	(1,414)	\$	(1,292)	\$	(560)
aponaorou intradinanti unua	•	(1,414)	Ψ	(1,282)	Ψ	(300)

BlackRock, Inc. Notes to the Consolidated Financial Statements

1. Business Overview

BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company") is a leading publicly traded investment management firm providing a broad range of investment and technology services to institutional and retail clients worldwide.

BlackRock's diverse platform of alpha-seeking active, index and cash management investment strategies across asset classes enables the Company to tailor investment outcomes and asset allocation solutions for clients. Product offerings include single- and multi-asset portfolios investing in equities, fixed income, alternatives and money market instruments. Products are offered directly and through intermediaries in a variety of vehicles, including open-end and closed-end mutual funds, iShares® exchange-traded funds ("ETFs"), separate accounts, collective trust funds ("CTFs") and other pooled investment vehicles. BlackRock also offers technology services, including the investment and risk management technology platform, Aladdin®, Aladdin Wealth, eFront, Cachematrix and FutureAdvisor, as well as advisory services and solutions to a broad base of institutional and wealth management clients.

2. Significant Accounting Policies

Basis of Presentation

These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include the accounts of the Company and its controlled subsidiaries. Noncontrolling interests ("NCI") on the consolidated statements of financial condition represents the portion of consolidated sponsored investment funds in which the Company does not have direct equity ownership. Accounts and transactions between consolidated entities have been eliminated

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting periods. Actual results could differ from those estimates.

Certain prior period presentations and disclosures, while not required to be recast, were reclassified to ensure comparability with current period classifications.

Accounting Pronouncements Adopted in 2020

Measurement of Credit Losses. In June 2016, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") 2016-13, Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"), which significantly changes the accounting and disclosures for credit losses for most financial assets. The new guidance requires an estimate of expected lifetime credit losses and eliminates the existing recognition thresholds under current guidance. The adoption of ASU 2016-13, which was effective for the Company on January 1, 2020, did not have a material impact on its consolidated financial statements.

Cash and Cash Equivalents. Cash and cash equivalents primarily consists of cash, money market funds and short-term, highly liquid investments with original maturities of three months or less in which the Company is exposed to market and credit risk. Cash and cash equivalent balances that are legally restricted from use by the Company are recorded in other assets on the consolidated statements of financial condition. Cash balances maintained by consolidated VIEs and voting rights entities ("VREs") are not considered legally restricted and are included in cash and cash equivalents on the consolidated statements of financial condition.

Investments

Investments in Debt Securities. The Company classifies debt investments as held-to-maturity or trading based on the Company's intent and ability to hold the debt security to maturity or, its intent to sell the security.

Held-to-maturity securities are purchased with the positive intent and ability to be held to maturity and are recorded at amortized cost on the consolidated statements of financial condition.

Trading securities are those investments that are purchased principally for the purpose of selling them in the near term. Trading securities are carried at fair value on the consolidated statements of financial condition with changes in fair value recorded in nonoperating income (expense) on the consolidated statements of income. Trading securities include certain investments in collateralized loan obligations ("CLOs") for which the fair value option is elected in order to reduce operational complexity of bifurcating embedded derivatives.

Investments in Equity Securities. Equity securities are generally carried at fair value on the consolidated statements of financial condition with changes in the fair value recorded through net income ("FVTNI") within nonoperating income (expense). For nonmarketable equity securities, the Company generally elects to apply the practicality exception to fair value measurement, under which such securities will be measured at cost, less impairment, plus or minus observable price changes for identical or similar securities of the same issuer with such changes recorded in the consolidated statements of income. Dividends received are recorded as dividend income within nonoperating income (expense).

Equity Method. The Company applies the equity method of accounting for equity investments where the Company does not consolidate the investee, but can exert significant influence over the financial and operating policies of the investee. The Company's share of the investee's underlying net income or loss is recorded as net gain (loss) on investments within nonoperating income (expense) and as other revenue for certain corporate minority investments since such investees are considered to be an extension of the Company's core business. The Company's share of net income of the investee is recorded based upon the most current information available at the time, which may precede the date of the consolidated statement of financial condition. Distributions received reduce the Company's carrying value of the investee and the cost basis if deemed to be a return of capital.

Impairments of Investments. Management periodically assesses equity method and held-to-maturity investments for other-than-temporary impairment ("OTTI"). If an OTTI exists, an impairment charge would be recorded for the excess of the carrying amount of the investment over its estimated fair value in the consolidated statements of income.

For equity method investments and held-to-maturity investments, if circumstances indicate that an OTTI may exist, the investments are evaluated using market values, where available, or the expected future cash flows of the investment.

For the Company's investments in CLOs, the Company reviews cash flow estimates over the life of each CLO investment. On a quarterly basis, if the present value of the estimated future cash flows is lower than the carrying value of the investment and there is an adverse change in estimated cash flows, an impairment is considered to be other-than-temporary.

In addition, for nonmarketable equity securities that are accounted for under the measurement alternative to fair value, the Company applies the impairment model that does not require the Company to consider whether the impairment is other-than-temporary.

Consolidation. The Company performs an analysis for investment products to determine if the product is a VIE or a VRE. Assessing whether an entity is a VIE or a VRE involves judgment and analysis. Factors considered in this assessment include the entity's legal organization, the entity's capital structure and equity ownership, and any related party or de facto agent implications of the Company's involvement with the entity. Investments that are determined to be VIEs are consolidated if the Company is the primary beneficiary ("PB") of the entity. VREs are typically consolidated if the Company holds the majority voting interest. Upon the occurrence of certain events (such as contributions and redemptions, either by the Company, or third parties, or amendments to the governing documents of the Company's investment products), management reviews and reconsiders its previous conclusion regarding the status of an entity as a VIE or a VRE. Additionally, management continually reconsiders whether the Company is deemed to be a VIE's PB that consolidates such entity.

Consolidation of Variable Interest Entities. Certain investment products for which a controlling financial interest is achieved through arrangements that do not involve or are not directly linked to voting interests are deemed VIEs. BlackRock reviews factors, including whether or not i) the entity has equity at risk that is sufficient to permit the entity to finance its activities without additional subordinated support from other parties and ii) the equity holders at risk have the obligation to absorb losses, the right to receive residual returns, and the right to direct the activities of the entity that most significantly impact the entity's economic performance, to determine if the investment product is a VIE. BlackRock re-evaluates such factors as facts and circumstances change.

The PB of a VIE is defined as the variable interest holder that has a controlling financial interest in the VIE. A controlling financial interest is defined as (i) the power to direct the activities of the VIE that most significantly impact its economic performance and (ii) the obligation to absorb losses of the entity or the right to receive benefits from the entity that potentially could be significant to the VIE. The Company generally consolidates VIEs in which it holds an economic interest of 10% or greater and deconsolidates such VIEs once equity ownership falls below 10%.

Consolidation of Voting Rights Entities. BlackRock is required to consolidate an investee to the extent that BlackRock can exert control over the financial and operating policies of the investee, which generally exists if there is a greater than 50% voting equity interest.

Retention of Specialized Investment Company Accounting Principles. Upon consolidation of sponsored investment funds, the Company retains the specialized investment company accounting principles of the underlying funds. All of the underlying investments held by such consolidated sponsored investment funds are carried at fair value with corresponding changes in the investments' fair values reflected in nonoperating income (expense) on the consolidated statements of income. When the Company no longer controls these funds due to reduced ownership percentage or other reasons, the funds are deconsolidated and accounted for as an equity method investment or equity securities FVTNI if the Company still maintains an investment.

Separate Account Assets and Liabilities. Separate account assets are maintained by BlackRock Life Limited, a wholly owned subsidiary of the Company, which is a registered life insurance company in the United Kingdom, and represent segregated assets held for purposes of funding individual and group pension contracts. The life insurance company does not underwrite any insurance contracts that involve any insurance risk transfer from the insured to the life insurance company. The separate account assets primarily include equity securities, debt securities, money market funds and derivatives. The separate account assets are not subject to general claims of the creditors of BlackRock. These separate account assets and the related equal and offsetting liabilities are recorded as separate account assets and separate account liabilities on the consolidated statements of financial condition.

The net investment income attributable to separate account assets supporting individual and group pension contracts accrues directly to the contract owner and is not reported on the consolidated statements of income. While BlackRock has no economic interest in these separate account assets and liabilities, BlackRock earns policy administration and management fees associated with these products, which are included in investment advisory, administration fees and securities lending revenue on the consolidated statements of income.

Separate Account Collateral Assets Held and Liabilities Under Securities Lending Agreements. The Company facilitates securities lending arrangements whereby securities held by separate accounts maintained by BlackRock Life Limited are lent to third parties under global master securities lending agreements. In exchange, the Company receives legal title to the collateral with minimum values generally ranging from approximately 102% to 112% of the value of the securities lent in order to reduce counterparty risk. The required collateral value is calculated on a daily basis. The global master securities lending agreements provide the Company the right to request additional collateral or, in the event of borrower default, the right to liquidate collateral. The securities lending transactions entered into by the Company are accompanied by an agreement that entitles the Company to request the borrower to return the securities at any time; therefore, these transactions are not reported as sales.

The Company records on the consolidated statements of financial condition the cash and noncash collateral received under these BlackRock Life Limited securities lending arrangements as its own asset in addition to an equal and offsetting collateral liability for the obligation to return the collateral. The securities lending revenue earned from lending securities held by the separate accounts is included in investment advisory, administration fees and securities lending revenue on the consolidated statements of income. During 2020 and 2019, the Company had not resold or repledged any of the collateral received under these arrangements. At December 31, 2020 and 2019, the fair value of loaned

securities held by separate accounts was approximately \$15.2 billion and \$14.4 billion, respectively, and the fair value of the collateral held under these securities lending agreements was approximately \$16.5 billion and \$15.5 billion, respectively.

Property and Equipment. Property and equipment are recorded at cost less accumulated depreciation. Depreciation is generally determined by cost less any estimated residual value using the straight-line method over the estimated useful lives of the various classes of property and equipment. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful life or the remaining lease term.

The Company capitalizes certain costs incurred in connection with developing or obtaining software within property and equipment. Capitalized software costs are amortized, beginning when the software product is ready for its intended use, over the estimated useful life of the software of approximately three years.

Goodwill and Intangible Assets. Goodwill represents the cost of a business acquisition in excess of the fair value of the net assets acquired. The Company has determined that it has one reporting unit for goodwill impairment testing purposes, the consolidated BlackRock single operating segment, which is consistent with internal management reporting and management's oversight of operations. In its assessment of goodwill for impairment, the Company considers such factors as the book value and market capitalization of the Company.

On a quarterly basis, the Company considers if triggering events have occurred that may indicate a potential goodwill impairment. If a triggering event has occurred, the Company performs assessments, which may include reviews of significant valuation assumptions, to determine if goodwill may be impaired. The Company performs an impairment assessment of its goodwill at least annually, as of July 31st.

Intangible assets are comprised of indefinite-lived intangible assets and finite-lived intangible assets acquired in a business acquisition. The value of contracts to manage assets in proprietary open-end funds and collective trust funds and certain other commingled products without a specified termination date is generally classified as indefinite-lived intangible assets. The assignment of indefinite lives to such contracts primarily is based upon the following: (i) the assumption that there is no foreseeable limit on the contract period to manage these products; (ii) the Company expects to, and has the ability to, continue to operate these products indefinitely; (iii) the products have multiple investors and are not reliant on a single investor or small group of investors for their continued operation; (iv) current competitive factors and economic conditions do not indicate a finite life; and (v) there is a high likelihood of continued renewal based on historical experience. In addition, trade names/trademarks are considered indefinite-lived intangible assets when they are expected to generate cash flows indefinitely.

Indefinite-lived intangible assets and goodwill are not amortized. Finite-lived management contracts, which relate to acquired separate accounts and funds and investor/customer relationships, and technology-related assets that are expected to contribute to the future cash flows of the Company for a specified period of time, are amortized over their remaining useful lives.

The Company performs assessments to determine if any intangible assets are potentially impaired and whether the indefinite-lived and finite-lived classifications are still appropriate at least annually, as of July 31st. The carrying value of finite-lived assets and their remaining useful lives are reviewed at least annually to determine if circumstances exist which may indicate a potential impairment or revisions to the amortization period.

In evaluating whether it is more likely than not that the fair value of indefinite-lived intangibles is less than its carrying value, BlackRock assesses various significant qualitative factors, including assets under management ("AUM"), revenue basis points, projected AUM growth rates, operating margins, tax rates and discount rates. In addition, the Company considers other factors, including (i) macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets; (ii) industry and market considerations such as a deterioration in the environment in which the entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics, a change in the market for an entity's services, or regulatory, legal or political developments; and (iii) entity-specific events, such as a change in management or key personnel, overall financial performance and litigation that could affect significant inputs used to determine the fair value of the indefinite-lived intangible asset. If an indefinite-lived intangible is determined to be more likely than not impaired, then the fair value of the asset is compared with its carrying value and any excess of the carrying value over the fair value would be recognized as an expense in the period in which the impairment occurs.

For finite-lived intangible assets, if potential impairment circumstances are considered to exist, the Company will perform a recoverability test using an undiscounted cash flow analysis. Actual results could differ from these cash flow estimates, which could materially impact the impairment conclusion. If the carrying value of the asset is determined not to be recoverable based on the undiscounted cash flow test, the difference between the carrying value of the asset and its current fair value would be recognized as an expense in the period in which the impairment occurs.

Noncontrolling Interests. The Company reports noncontrolling interests as equity, separate from the parent's equity, on the consolidated statements of financial condition. In addition, the Company's consolidated net income on the consolidated statements of income includes the income (loss) attributable to noncontrolling interest holders of the Company's consolidated sponsored investment products. Income (loss) attributable to noncontrolling interests is not adjusted for income taxes for consolidated sponsored investment products that are treated as pass-through entities for tax purposes.

Classification and Measurement of Redeemable Securities. The Company includes redeemable noncontrolling interests related to certain consolidated sponsored investment products in temporary equity on the consolidated statements of financial condition.

Treasury Stock. The Company records common stock purchased for treasury at cost. At the date of subsequent reissuance, the treasury stock account is reduced by the cost of such stock using the average cost method.

Revenue Recognition. Revenue is recognized upon transfer of control of promised services to customers in an amount to which the Company expects to be entitled in exchange for those services. The Company enters into contracts that can include multiple services, which are accounted for separately if they are determined to be distinct. Consideration for the Company's services is generally in the form of variable consideration because the amount of fees is subject to market conditions that are outside of the Company's influence. The Company includes

variable consideration in revenue when it is no longer probable of significant reversal, i.e. when the associated uncertainty is resolved. For some contracts with customers, the Company has discretion to involve a third party in providing services to the customer. Generally, the Company is deemed to be the principal in these arrangements because the Company controls the promised services before they are transferred to customers, and accordingly presents the revenue gross of related costs.

Investment Advisory, Administration Fees and Securities Lending Revenue. Investment advisory and administration fees are recognized as the services are performed over time because the customer is receiving and consuming the benefits as they are provided by the Company. Fees are primarily based on agreed-upon percentages of AUM and recognized for services provided during the period, which are distinct from services provided in other periods. Such fees are affected by changes in AUM, including market appreciation or depreciation, foreign exchange translation and net inflows or outflows. Investment advisory and administration fees for investment funds are shown net of fee waivers. In addition, the Company may contract with third parties to provide sub-advisory services on its behalf. The Company presents the investment advisory fees and associated costs to such third-party advisors on a gross basis where it is deemed to be the principal and on a net basis where it is deemed to be the agent. Management judgment involved in making these assessments is focused on ascertaining whether the Company is primarily responsible for fulfilling the promised service.

The Company earns revenue by lending securities on behalf of clients, primarily to highly rated banks and broker-dealers. Revenue is recognized over time as services are performed. Generally, the securities lending fees are shared between the Company and the funds or other third-party accounts managed by the Company from which the securities are borrowed.

Money Market Fee Waivers. The Company may voluntarily waive a portion of its management fees on certain money market funds to ensure that they maintain a targeted level of daily net investment income (the "Yield Support waivers"). During 2020, these waivers resulted in a reduction of management fees of approximately \$35 million, which was partially offset by a reduction of BlackRock's distribution and servicing costs paid to financial intermediaries. There were no Yield Support waivers in 2019 and 2018. The Company may increase or decrease the level of Yield Support waivers in future periods.

Investment Advisory Performance Fees / Carried Interest. The Company receives investment advisory performance fees, including incentive allocations (carried interest) from certain actively managed investment funds and certain separately managed accounts. These performance fees are dependent upon exceeding specified relative or absolute investment return thresholds, which may vary by product or account, and include monthly, quarterly, annual or longer measurement periods.

Performance fees, including carried interest, are recognized when it is determined that they are no longer probable of significant reversal (such as upon the sale of a fund's investment or when the amount of AUM becomes known as of the end of a specified measurement period). Given the unique nature of each fee arrangement, contracts with customers are evaluated on an individual basis to determine the timing of revenue recognition. Significant judgement is involved in making such determination. Performance fees typically arise from investment management services that began in prior reporting periods. Consequently, a portion of the fees the Company recognizes may be partially related to the services performed in prior periods that meet the recognition criteria in the current period. At each reporting date, the Company considers various factors in estimating performance fees to be recognized, including carried interest. These factors include but are not limited to whether: (1) the fees are dependent on the market and thus are highly susceptible to factors outside the Company's influence; (2) the fees have a large number and a broad range of possible amounts; and (3) the funds or separately managed accounts have the ability to invest or reinvest their sales proceeds.

The Company is allocated carried interest from certain alternative investment products upon exceeding performance thresholds. The Company may be required to reverse/return all, or part, of such carried interest allocations/distributions depending upon future performance of these funds. Carried interest subject to such clawback provisions is recorded in investments or cash and cash equivalents to the extent that it is distributed, on its consolidated statements of financial condition.

The Company records a liability for deferred carried interest to the extent it receives cash or capital allocations related to carried interest prior to meeting the revenue recognition criteria. A portion of the deferred carried interest may also be paid to certain employees. The ultimate timing of the recognition of performance fee revenue and related compensation expense, if any, for these products is unknown.

Technology services revenue. The Company offers investment management technology systems, risk management services, wealth management and digital distribution tools, all on a fee basis. Clients include banks, insurance companies, official institutions, pension funds, asset managers, retail distributors and other investors. Fees earned for technology services are primarily recorded as services are performed over time and are generally determined using the value of positions on the Aladdin platform, or on a fixed-rate basis. Revenue derived from the sale of software licenses is recognized upon the granting of access rights.

Distribution Fees. The Company earns distribution and service fees for distributing investment products and providing ongoing shareholder support services to investment portfolios. Distribution fees are passed-through to third-party distributors, which perform various fund distribution services and shareholder servicing of certain funds on the Company's behalf, and are recognized as distribution and servicing costs. The Company presents distribution fees and related distribution and servicing costs incurred on a gross basis.

Distribution fees primarily consist of ongoing distribution fees, shareholder servicing fees and upfront sales commissions for serving as the principal underwriter and/or distributor for certain managed mutual funds. The service of distribution is satisfied at the point in time when an investor makes an investment in a share class of the managed mutual funds. Fees are generally considered variable consideration because they are based on the value of AUM and are uncertain on trade date. Accordingly, the Company recognizes distribution fees over the investment period as the amounts become known and the portion recognized in the current period may relate to distribution services performed in prior periods. Upfront sales commissions are recognized on a trade date basis. Shareholder servicing fees are based on AUM and recognized in revenue as the services are performed.

Advisory and other revenue. Advisory and other revenue primarily includes fees earned for advisory services, fees earned for transition management services primarily comprised of commissions recognized in connection with buying and selling securities on behalf of customers, and equity method investment earnings related to certain corporate minority investments.

Advisory services fees are determined using fixed-rate fees and are recognized over time as the related services are completed.

Commissions related to transition management services are recorded on a trade-date basis as transactions occur.

Stock-based Compensation. The Company recognizes compensation cost for equity classified awards based on the grant-date fair value of the award. The compensation cost is recognized over the period during which an employee is required to provide service (usually the vesting period) in exchange for the stock-based award.

The Company measures the grant-date fair value of restricted stock units ("RSUs") using the Company's stock price on the date of grant. For employee stock options and instruments with market conditions, the Company uses pricing models. Stock option awards may have performance, market and/or service conditions. If a stock-based award is modified after the grant-date, incremental compensation cost is recognized for an amount equal to the excess of the fair value of the modified award over the fair value of the original award immediately before the modification. Awards under the Company's stock-based compensation plans vest over various periods. Compensation cost is recorded by the Company on a straight-line basis over the requisite service period for each separate vesting portion of the award as if the award is, in-substance, multiple awards and is adjusted for actual forfeitures as they occur.

The Company amortizes the grant-date fair value of stock-based compensation awards made to retirement-eligible employees over the requisite service period. Upon notification of retirement, the Company accelerates the unamortized portion of the award over the contractually required retirement notification period.

The Company recognizes all excess tax benefits and deficiencies in income tax expense on the consolidated statements of income, which results in volatility of income tax expense as a result of fluctuations in the Company's stock price. Accordingly, the Company recorded a discrete income tax benefit of \$36 million, \$23 million and \$64 million during 2020, 2019 and 2018, respectively, for vested RSUs where the grant date stock price was lower than the vesting date stock price.

Distribution and Servicing Costs. Distribution and servicing costs include payments to third parties, primarily associated with distribution and servicing of client investments in certain BlackRock products. Distribution and servicing costs are expensed when incurred.

Direct Fund Expense. Direct fund expense, which is expensed as incurred, primarily consists of third-party nonadvisory expense incurred by BlackRock related to certain funds for the use of certain index trademarks, reference data for certain indices, custodial services, fund administration, fund accounting, transfer agent services, shareholder reporting services, audit and tax services as well as other fund-related expense directly attributable to the nonadvisory operations of the fund.

Leases. The Company determines if a contract is a lease or contains a lease at inception. The Company accounts for its office facility leases as operating leases, which may include escalation clauses that are based on an index or market rate. The Company accounts for lease and non-lease components, including common areas maintenance charges, as a single component for its leases. The Company elected the short-term lease exception for leases with an initial term of 12 months or less. Consequently, such leases are not recorded on the consolidated statements of financial condition. The Company's lease terms include options to extend or terminate the lease when it is reasonably certain they will be exercised or not, respectively.

Fixed lease payments are included in right-of-use ("ROU") assets and lease liabilities within other assets and other liabilities, respectively, on the consolidated statements of financial condition. The Company recognizes ROU assets and lease liabilities based on the present value of these future lease payments over the lease term at the commencement date discounted using the Company's incremental borrowing rate ("IBR"). The Company determines its IBR, by assessing the Company's credit rating using various financial metrics, such as revenue, operating margin and revenue growth, and, as appropriate, performing market analysis of yields on publicly traded bonds (secured or unsecured) with similar terms of comparable companies in a similar economic environment. Fixed lease payments made over the lease term are recorded as lease expense on a straight-line basis. Variable lease payments based on usage, changes in an index or market rate are expensed as incurred.

Upon adoption of ASU 2016-02, Leases and several amendments (collectively, "ASU 2016-02"), for existing leases, the Company elected to determine the discount rate based on the remaining lease term as of January 1, 2019 and for lease payments based on an index or rate to apply the rate at commencement date. For new leases, the discount rates are based on the entire noncancelable lease term.

Foreign Exchange. Foreign currency transactions are recorded at the exchange rates prevailing on the dates of the transactions. Monetary assets and liabilities that are denominated in foreign currencies are subsequently remeasured into the functional currencies of the Company's subsidiaries at the rates prevailing at each balance sheet date. Gains and losses arising on remeasurement are included in general and administration expense on the consolidated statements of income. Revenue and expenses are translated at average exchange rates during the period. Gains or losses resulting from translating foreign currency financial statements into US dollars are included in accumulated other comprehensive income (loss) ("AOCI"), a separate component of stockholders' equity, on the consolidated statements of financial condition.

Income Taxes. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases using currently enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred income tax assets and liabilities is recognized on the consolidated statements of income in the period that includes the enactment date.

Management periodically assesses the recoverability of its deferred income tax assets based upon expected future earnings, taxable income in prior carryback years, future deductibility of the asset, changes in applicable tax laws and other factors. If management determines that it is not more likely than not that the deferred tax asset will be fully recoverable in the future, a valuation allowance will be established for the difference between the asset balance and the amount expected to be recoverable in the future. This allowance will result in additional income tax expense. Further, the Company records its income taxes receivable and payable based upon its estimated income tax position.

Excess tax benefits related to stock-based compensation are recognized as an income tax benefit on the consolidated statements of income and are reflected as operating cash flows on the consolidated statements of cash flows.

Earnings per Share ("EPS"). Basic EPS is calculated by dividing net income applicable to common shareholders by the weighted-average number of shares outstanding during the period. Diluted EPS includes the determinants of basic EPS and common stock equivalents outstanding during the period. Diluted EPS is computed using the treasury stock method.

Due to the similarities in terms between BlackRock's nonvoting participating preferred stock and the Company's common stock, the Company considered its nonvoting participating preferred stock to be a common stock equivalent for purposes of EPS calculations. As such, the Company has included the outstanding nonvoting participating preferred stock in the calculation of average basic and diluted shares outstanding. As of December 31, 2020, there were no shares of preferred stock outstanding.

Business Segments. The Company's management directs BlackRock's operations as one business, the asset management business. The Company utilizes a consolidated approach to assess performance and allocate resources. As such, the Company operates in one business segment.

Fair Value Measurements

Hierarchy of Fair Value Inputs. The Company uses a fair value hierarchy that prioritizes inputs to valuation approaches used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. Assets and liabilities measured and reported at fair value are classified and disclosed in one of the following categories:

Level 1 Inputs

Quoted prices (unadjusted) in active markets for identical assets or liabilities at the reporting date.

Level 1 assets may include listed mutual funds, ETFs, listed equities and certain exchange-traded derivatives.

Level 2 Inputs:

Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities that are not active; quotes from pricing services or brokers for which the Company can determine that orderly transactions took place at the quoted price or that the inputs used to arrive at the price are observable; and inputs other than quoted prices that are observable, such as models or other valuation methodologies.

Level 2 assets may include debt securities, investments in CLOs, bank loans, short-term floating-rate notes, asset-backed securities, securities
held within consolidated hedge funds, restricted public securities valued at a discount, as well as over-the-counter derivatives, including interest
and inflation rate swaps and foreign currency exchange contracts that have inputs to the valuations that generally can be corroborated by
observable market data.

Level 3 Inputs:

Unobservable inputs for the valuation of the asset or liability, which may include nonbinding broker quotes. Level 3 assets include investments for which there is little, if any, market activity. These inputs require significant management judgment or estimation.

- Level 3 assets may include direct private equity investments held within consolidated funds, investments in CLOs and bank loans held within consolidated CLOs.
- Level 3 liabilities may include contingent liabilities related to borrowings of consolidated CLOs and acquisitions valued based upon discounted
 cash flow analyses using unobservable market data.

Significance of Inputs. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument.

Valuation Approaches. The fair values of certain Level 3 assets and liabilities were determined using various valuation approaches as appropriate, including third-party pricing vendors, broker quotes and market and income approaches.

A significant number of inputs used to value equity, debt securities, investments in CLOs and bank loans is sourced from third-party pricing vendors. Generally, prices obtained from pricing vendors are categorized as Level 1 inputs for identical securities traded in active markets and as Level 2 for other similar securities if the vendor uses observable inputs in determining the price.

In addition, quotes obtained from brokers generally are nonbinding and categorized as Level 3 inputs. However, if the Company is able to determine that market participants have transacted for the asset in an orderly manner near the quoted price or if the Company can determine that the inputs used by the broker are observable, the quote is classified as a Level 2 input.

Investments Measured at Net Asset Value. As a practical expedient, the Company uses net asset value ("NAV") as the fair value for certain investments. The inputs to value these investments may include the Company's capital accounts for its partnership interests in various alternative investments, including hedge funds, real assets and private equity funds, which may be adjusted by using the returns of certain market indices. The various partnerships generally are investment companies, which record their underlying investments at fair value based on fair value policies established by management of the underlying fund. Fair value policies at the underlying fund generally require the fund to utilize pricing/valuation information from third-party sources, including independent appraisals. However, in some instances, current valuation information for illiquid securities or securities in markets that are not active may not be available from any third-party source or fund management may conclude that the valuations that are available from third-party sources are not reliable. In these instances, fund management may perform model-based analytical valuations that could be used as an input to value these investments.

Fair Value Assets and Liabilities of Consolidated CLO. The Company applies the fair value option provisions for eligible assets, including bank loans, held by a consolidated CLO. As the fair value of the financial assets of the consolidated CLO is more observable than the fair value of the borrowings of the consolidated CLO, the Company measures the fair value of the borrowings of the consolidated CLO equal to the fair value of the assets of the consolidated CLO less the fair value of the CLO.

Derivatives and Hedging Activities. The Company does not use derivative financial instruments for trading or speculative purposes. The Company uses derivative financial instruments primarily for purposes of hedging exposures to fluctuations in foreign currency exchange rates

of certain assets and liabilities, and market exposures for certain seed investments. However, certain consolidated sponsored investment funds may also utilize derivatives as a part of their investment strategy.

The Company records all derivative financial instruments as either assets or liabilities at fair value on a gross basis in the consolidated statements of financial condition. Credit risks are managed through master netting and collateral support agreements. The amounts related to the right to reclaim or the obligation to return cash collateral may not be used to offset amounts due under the derivative instruments in the normal course of settlement. Therefore, such amounts are not offset against fair value amounts recognized for derivative instruments with the same counterparty and are included in other assets and other liabilities. Changes in the fair value of the Company's derivative financial instruments are recognized in earnings and, where applicable, are offset by the corresponding gain or loss on the related foreign-denominated assets or liabilities or hedged investments, on the consolidated statements of income.

The Company may also use financial instruments designated as net investment hedges for accounting purposes to hedge net investments in international subsidiaries whose functional currency is not US dollars. The gain or loss from revaluing net investment hedges at the spot rate is deferred and reported within AOCI on the consolidated statements of financial condition. Amounts excluded from the effectiveness assessment are reported in the consolidated statements of income using a systematic and rational method. The Company reassesses the effectiveness of its net investment hedge at least quarterly.

3. Acquisition

On May 10, 2019, the Company acquired 100% of the equity interests of eFront Holding SAS ("eFront Transaction" or "eFront"), a leading alternative investment management software and solutions provider for approximately \$1.3 billion, excluding the settlement of eFront's outstanding debt. The acquisition of eFront expanded *Aladdin*'s illiquid alternative capabilities and enables BlackRock to provide individual alternative or whole-portfolio technology solutions to clients.

The purchase price was funded through a combination of existing cash and issuance of commercial paper (subsequently repaid with existing cash) and long-term notes in April 2019. See Note 15, *Borrowings*, for information on the debt issuance in April 2019. A summary of the fair values of the assets acquired and liabilities assumed in this acquisition is as follows:

(in millions)	Fai	r Value
Accounts receivable	\$	61
Finite-lived intangible assets:		
Customer relationships		400
Technology-related		203
Trade name		14
Goodwill		1,044
Other assets		49
Deferred income tax liabilities		(146)
Other liabilities assumed		(125)
Total consideration, net of cash acquired	\$	1,500
Summary of consideration, net of cash acquired:		
Cash paid including settlement of outstanding debt of approximately \$0.2 billion	\$	1,555
Cash acquired	18	(55)
Total consideration, net of cash acquired	\$	1,500

4. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash and cash equivalents reported within the consolidated statements of financial condition to the cash, cash equivalents, and restricted cash reported within the consolidated statements of cash flows.

(in millions)	December 31, 2020	December 31, 2019
Cash and cash equivalents	\$ 8,664	\$ 4,829
Restricted cash included in other assets	17	17
Total cash, cash equivalents and restricted cash	\$ 8,681	\$ 4,846

5. Investments

A summary of the carrying value of total investments is as follows:

(in millions)		December 31, 2020	December 31, 2019	
Debt securities:				
Held-to-maturity investments	S	310	\$	249
Trading securities		1,964		1,249
Total debt securities		2,274		1,498
Equity securities at FVTNI		2,317		1,926
Equity method investments(1)		1,081		943
Bank loans		248		204
Federal Reserve Bank stock(2)		94		93
Carried interest(3)		627		528
Other investments(4)		278		297
Total investments	\$	6,919	\$	5,489

- Equity method investments primarily include BlackRock's direct investments in certain BlackRock sponsored investment funds.

 At both December 31, 2020 and 2019, there were no indicators of impairment of Federal Reserve Bank stock, which is held for regulatory purposes and is restricted from sale.
- Carried interest represents allocations to BlackRock's general partner capital accounts from certain sponsored investment funds. These balances are subject to change upon cash distributions, additional
- allocations or reallocations back to limited partners within the respective funds.

 Other investments include BlackRock's investments in nonmarketable equity securities, which are measured at cost, adjusted for observable price changes and private equity and real asset investments of consolidated sponsored investment products measured at fair value.

Available-for-Sale Investments

A summary of sale activity of available-for-sale during 2020, 2019 and 2018 is shown below.

		Υ	ear ended De	ecember 31,	
(in millions)	2020)	201	9	 2018
Sales proceeds	\$		\$	-	\$ 173
Net realized gain (loss):					
Gross realized gains	\$	_	\$	_	\$
Gross realized losses		\$ <u>111</u>			<u> </u>
Net realized gain (loss)	S	22	\$		\$ 8.07

There were no available-for-sale investments at both December 31, 2020 and 2019.

Held-to-Maturity Investments

The carrying value of held-to-maturity investments was \$310 million and \$249 million at December 31, 2020 and 2019, respectively. Held-to-maturity investments included certain investments in BlackRock sponsored CLOs and foreign government debt held primarily for regulatory purposes. The amortized cost (carrying value) of these investments approximated fair value (primarily a Level 2 input). At December 31, 2020, \$11 million of these investments mature between one year to five years, \$169 million of these investments mature between five years to ten years and \$130 million mature after ten years.

Trading Debt Securities and Equity Securities at FVTNI

A summary of the cost and carrying value of trading debt securities and equity securities at FVTNI is as follows:

	December 31, 2020						119
(in millions)	Cost		arrying Value		Cost		Carrying Value
Trading debt securities:							
Corporate debt	\$ 1,591	\$	1,641	\$	822	\$	844
Government debt	203		210		268		269
Asset/mortgage backed debt	132		113		141		136
Total trading debt securities	\$ 1,926	\$	1,964	\$	1,231	\$	1,249
Equity securities at FVTNI:			***		35		
Equity securities/mutual funds	\$ 2,055	\$	2,317	\$	1,769	\$	1,926
Total equity securities at FVTNI	\$ 2,055	\$	2,317	\$	1,769	\$	1,926

6. Consolidated Sponsored Investment Products

The Company consolidates certain sponsored investment funds accounted for as VREs because it is deemed to control such funds.

In the normal course of business, the Company is the manager of various types of sponsored investment vehicles, which may be considered VIEs. The Company may from time to time own equity or debt securities or enter into derivatives with the vehicles, each of which are considered variable interests. The Company's involvement in financing the operations of the VIEs is generally limited to its investments in the entity. The Company's consolidated VIEs include certain sponsored investment products in which BlackRock has an investment and as the investment manager, is deemed to have both the power to direct the most significant activities of the products and the right to receive benefits (or the obligation to absorb losses) that could potentially be significant to these sponsored investment products. The assets of these VIEs are not available to creditors of the Company. In addition, the investors in these VIEs have no recourse to the credit of the Company.

The following table presents the balances related to these consolidated sponsored investment products accounted for as VIEs and VREs that were recorded on the consolidated statements of financial condition, including BlackRock's net interest in these products:

		Dece	mber 31, 2020			Dec	cember 31, 2019	
(in millions)	VIEs		VREs	 Total	VIEs		VREs	 Total
Cash and cash equivalents	\$ 155	\$	51	\$ 206	\$ 131	\$	10	\$ 141
Investments:								
Trading debt securities	1,618		310	1,928	1,059		151	\$ 1,210
Equity securities at FVTNI	1,592		413	2,005	1,330		332	1,662
Bank loans	248		_	248	204		_	204
Other investments	191		_	191	194		_	194
Carried interest	604		_	604	514		_	514
Total investments	4,253		723	4,976	3,301		483	3,784
Other assets	90		9	99	68		5	73
Other liabilities(1)	(952)		(70)	(1,022)	(820)		(20)	(840)
Noncontrolling interests	(2,193)		(180)	(2,373)	 (1,348)		(34)	(1,382)
BlackRock's net interest in consolidated investment products	\$ 1,353	\$	533	\$ 1,886	\$ 1,332	s	444	\$ 1,776

⁽¹⁾ At December 31, 2020 and 2019, other liabilities of VIEs primarily include deferred carried interest liabilities and borrowings of a consolidated CLO.

BlackRock's total exposure to consolidated sponsored investment products represents the value of its economic ownership interest in these sponsored investment products. Valuation changes associated with investments held at fair value by these consolidated sponsored investment products are reflected in nonoperating income (expense) and partially offset in net income (loss) attributable to noncontrolling interests for the portion not attributable to BlackRock.

The Company cannot readily access cash and cash equivalents held by consolidated sponsored investment products to use in its operating activities.

Net gain (loss) related to consolidated VIEs is presented in the following table:

(in millions)	20	20	-57.5	2019	-20	2018
Nonoperating net gain (loss) on consolidated VIEs	\$	477	\$	210	\$	(105)
Net income (loss) attributable to NCI on consolidated VIEs	s	348	\$	42	\$	(6)

7. Variable Interest Entities

Nonconsolidated VIEs. At December 31, 2020 and 2019, the Company's carrying value of assets and liabilities included on the consolidated statements of financial condition pertaining to nonconsolidated VIEs and its maximum risk of loss related to VIEs for which it held a variable interest, but for which it was not the PB, was as follows:

(in millions) At December 31, 2020	Investmen	ts	dvisory Fee ceivables	Other Net Assets (Liabilities)	kimum of Loss(1)
Sponsored investment products	S	662	\$ 71	\$ (13)	\$ 750
At December 31, 2019 Sponsored investment products	\$	539	\$ 71	\$ (10)	\$ 627

⁽¹⁾ At both December 31, 2020 and 2019, BlackRock's maximum risk of loss associated with these VIEs primarily related to BlackRock's investments and the collection of advisory fee receivables.

The net assets of sponsored investment products that are nonconsolidated VIEs approximated \$16 billion and \$12 billion at December 31, 2020 and 2019, respectively.

8. Fair Value Disclosures

Fair Value Hierarchy

Assets and liabilities measured at fair value on a recurring basis

December 31, 2020 (in millions)	in Ma Ident	ted Prices Active rkets for ical Assets evel 1)	Obse	ificant Other rvable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Investments Measured at NAV(1)	Other(2)	De	ecember 31, 2020
Assets:											
Investments:											
Debt securities:											
Held-to-maturity investments	\$	_	S		\$	_	\$	_	\$ 310	\$	310
Trading securities				1,953		11					1,964
Total debt securities		_		1,953		11		-	310		2,274
Equity securities at FVTNI:											
Equity securities/mutual funds		2,317		0,000		_		_	<u>-</u>		2,317
Equity method:											
Equity and fixed income mutual funds		235		-		-		_	_		235
Hedge funds/funds of hedge funds		-		_		_		309	2		309
Private equity funds		_		200		_		315	_		315
Real assets funds		_		_		_		218	_		218
Other		_		_		_		4	_		4
Total equity method		235		_		_		846			1,081
Bank loans		_		16		232		_	_		248
Federal Reserve Bank Stock		_		_		_		_	94		94
Carried interest		-		_		_		_	627		627
Other investments(3)		1-		_		9		94	175		278
Total investments		2,552		1,969		252		940	1,206		6,919
Other assets(4)		205		13		_			-		218
Separate account assets		71,392		32,404		_		_	867		104,663
Separate account collateral held under securities lending				100000000000000000000000000000000000000							1970/1970
agreements;											
Equity securities		13,126				_		_	_		13,126
Debt securities		_		3,381		_		_	(-		3,381
Total separate account collateral held under				- 2							
securities lending agreements		13,126		3,381		_		,			16,507
Total	S	87,275	\$	37,767	\$	252	\$	940	\$ 2,073		128,307
Liabilities:	A de					3,000	-				
Separate account collateral liabilities under											
securities lending agreements	S	13,126	\$	3,381	\$	_	\$	_	\$ _	\$	16,507
Other liabilities(5)	0.00		100	68	(0.5)	272		_	_	*/	340
Total	S	13,126	S	3,449	\$	272	\$	_	\$ 8=1	\$	16,847

⁽¹⁾ Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient.
(2) Amounts are comprised of investments held at amortized cost and cost, adjusted for observable price changes, carried interest and certain equity method investments, which include sponsored investment funds and other assets, which are not accounted for under a fair value measure. In accordance with GAAP, certain equity method investees do not account for both their financial assets and liabilities under fair value measures; therefore, the Company's investment in such equity method investees may not represent fair value.
(3) Level 3 amounts primarily include direct investments in private equity companies held by consolidated private equity funds.

 ⁽⁴⁾ Level 1 amount includes a minority investment in a publicly traded company.
 (5) Level 2 amount primarily includes fair value of derivatives (See Note 9, Derivatives and Hedging, for more information). Level 3 amounts primarily include borrowings of a consolidated CLO classified based on the significance of unobservable inputs used for calculating the fair value of consolidated CLO assets, and contingent liabilities related to certain acquisitions (see Note 16, Commitments and Contingencies, for more information).

December 31, 2019 (in millions)	ir Ma Ident	eted Prices n Active arkets for dical Assets Level 1)	Obse	ficant Other rvable Inputs Level 2)	Ur	Significant nobservable Inputs (Level 3)	Meas	tments ured at .V(1)	0	ther(2)	Dec	ember 31, 2019
Assets:												
Investments:												
Debt securities:												
Held-to-maturity investments	\$	_	\$	-	\$	_	S	_	\$	249	\$	249
Trading securities				1,241		8		-		_		1,249
Total debt securities		_		1,241		8		-		249		1,498
Equity securities at FVTNI:												
Equity securities/mutual funds		1,926		-		_		-				1,926
Equity method:												
Equity and fixed income mutual funds		157		_		_		_		-		157
Hedge funds/funds of hedge funds		_		_		_		220		-		220
Private equity funds		_						248		E-10		248
Real assets funds		_		_		_		296		_		296
Other		12		-		-		10				22
Total equity method		169		_		_		774		-		943
Bank loans		-		27		177		-		-		204
Federal Reserve Bank Stock		_		-		_		_		93		93
Carried interest		_				_		-		528		528
Other investments(3)		· -				9		98		190		297
Total investments		2,095		1,268		194		872		1,060		5,489
Other assets(4)		173		-		8-8		-		-		173
Separate account assets		72,515		29,582		_		_		747		102,844
Separate account collateral held under securities lending												
agreements:												
Equity securities		10,209		_		-		_		-		10,209
Debt securities		_		5,257		_		_		_		5,257
Total separate account collateral held under												
securities lending agreements		10,209		5,257								15,466
Total	\$	84,992	\$	36,107	\$	194	\$	872	\$	1,807	\$	123,972
Liabilities:												
Separate account collateral liabilities under												
securities lending agreements	\$	10,209	S	5,257	S	_	S	_	\$	-	\$	15,466
Other liabilities(5)				10		388				-		398
Total	\$	10,209	\$	5,267	\$	388	S	_	\$	_	\$	15,864

⁽¹⁾ Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient.
(2) Amounts are comprised of investments held at amortized cost and cost, adjusted for observable price changes, carried interest and certain equity method investments, which include sponsored investment funds and other assets, which are not accounted for under a fair value measure. In accordance with GAAP, certain equity method investees do not account for both their financial assets and liabilities under fair value measures; therefore, the Company's investment in such equity method investees may not represent fair value.
(3) Level 3 amounts include direct investments in private equity companies held by consolidated private equity funds.
(4) Level 1 amount includes a minority investment in a publicly traded company.
(5) Level 3 amounts primarily includes contingent liabilities related to certain acquisitions (see Note 16, Commitments and Contingencies, for more information) and borrowings of a consolidated CLO classified based on the significance of unobservable inputs used for calculating the fair value of consolidated CLO assets.

Level 3 Assets. Level 3 assets may include investments in CLOs and bank loans of consolidated CLOs, which were valued based on single-broker nonbinding quotes and direct private equity investments, which were valued using the market or income approach.

Level 3 investments of \$252 million and \$194 million at December 31, 2020 and 2019, respectively, primarily included bank loans of a consolidated CLO.

Level 3 Liabilities. Level 3 liabilities primarily include borrowings of a consolidated CLO, which were valued based on the fair value of the assets of the consolidated CLO less the fair value of the Company's economic interest in the CLO, and contingent liabilities related to certain acquisitions, which were valued based upon discounted cash flow analyses using unobservable market data inputs.

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for 2020

(in millions)	De	cember 31, 2019	Un	ealized and realized Gains osses)	Pı	urchases	 ales and aturities		Issuances and Other Settlements(1)		ransfers into Level 3		ansfers out of evel 3	D	December 31, 2020	G	Total Net Unrealized iains (Losses) Included in Earnings(2)
Assets: Investments:																	
Debt securities:																	
Trading	\$	8	\$		\$	3	\$ -	\$	_	\$		\$	-	\$	11	\$	-
Total debt securities	100	8		_		3	-				-		_		11		_
Private equity		9				8	(8)				-			П	9	20	_
Bank loans	-	177		_		75	(34)				20		(6)		232	777	_
Total investments		194	545	_		86	 (42)	1121	_	- 00	20	202	(6)		252		
Total Level 3 assets	\$	194	\$	-	\$	86	\$ (42)	\$	_	\$	20	\$	(6)	\$	252	\$	_
Liabilities:								777				77	150 150			30.00	100
Other liabilities	\$	388	\$	(23)	\$	_	\$ -	\$	(139)	\$	_	\$	_	\$	272	\$	(5)
Total Level 3 liabilities	\$	388	\$	(23)	\$		\$ 	\$	(139)	\$		\$		\$	272	\$	(5)

Amounts include contingent liability payments related to certain acquisitions and proceeds from borrowings of a consolidated CLO. Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date.

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for 2019

(in millions)	Dec	ember 31, 2018	Uni	ealized and realized Gains osses)	Pur	chases		les and turities		Issuances and Other ettlements(1)		ansfers into evel 3	0	nsfers ut of rel 3(2)	Dec	cember 31, 2019	Ga	Total Net Unrealized ains (Losses) Included in Earnings(3)
Assets:			0.0	7.9														1200
Investments:																		
Debt securities:																		
Trading	\$	4	\$	-	\$	10	\$	-	\$	_	\$	-	\$	(6)	\$	8	\$	_
Total debt securities	0.00	4	100	-	0.0	10	760	_	100	_	7.7	-	- 22	(6)	100	8	100	_
Private equity		82		-				_		_		-		(73)		9	20.	_
Bank loans		70		-		107		-		_		_		_		177		_
Total investments	-	156		_		117		_		_				(79)		194		_
Total Level 3 assets	\$	156	\$	_	\$	117	\$	-	\$	1020	\$		\$	(79)	\$	194	\$	
Liabilities:	2000			0.000		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-		- 77			- Annoualism				
Other liabilities	\$	371	\$	(53)	\$	-	\$	-	\$	(36)	S	-	\$	-	\$	388	\$	(53)
Total Level 3 liabilities	\$	371	\$	(53)	\$		\$		\$	(36)	S	° (1—0)	\$		\$	388	\$	(53)

Amounts include proceeds from borrowings of a consolidated CLO and contingent liability payments, related to certain acquisitions.

Amounts include an investment in a consolidated entity that no longer qualifies as an investment company and is no longer accounted for under a fair value measure.

Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date.

Realized and Unrealized Gains (Losses) for Level 3 Assets and Liabilities. Realized and unrealized gains (losses) recorded for Level 3 assets and liabilities are reported in nonoperating income (expense) on the consolidated statements of income. A portion of net income (loss) for consolidated sponsored investment funds are allocated to noncontrolling interests to reflect net income (loss) not attributable to the Company.

Transfers in and/or out of Levels. Transfers in and/or out of levels are reflected when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable/unobservable, or when the carrying value of certain equity method investments no longer represents fair value as determined under valuation methodologies.

Disclosures of Fair Value for Financial Instruments Not Held at Fair Value. At December 31, 2020 and 2019, the fair value of the Company's financial instruments not held at fair value are categorized in the table below.

	Decembe	er 31, 2	2020	Decembe		
(in millions) Financial Assets(1):	arrying Imount		Estimated Fair Value	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy
Cash and cash equivalents	\$ 8,664	\$	8,664	\$ 4,829	\$ 4,829	(2) Level 1(3)
Other assets	69		69	68	68	(2) Level 1(4)
Financial Liabilities: Long-term borrowings	7,264		7,883	4,955	5,254	Level 2(5)

- See Note 5, Investments, for further information on investments not held at fair value.
- Cash and cash equivalents are carried at either cost or amortized cost, which approximates fair value due to their short-term maturities.

 At December 31, 2020 and 2019, approximately \$1,249 million and \$674 million of money market funds were recorded within cash and cash equivalents on the consolidated statements of financial condition. Money market funds are valued based on quoted market prices, or \$1.00 per share, which generally is the NAV of the fund.
- Other assets include restricted cash and cash collateral deposited with certain derivative counterparties. The carrying values of these assets approximate fair value due to their short-term maturities. Long-term borrowings are recorded at amortized cost, net of debt issuance costs. The fair value of the long-term borrowings, including the current portion of long-term borrowings, is determined using market prices at the end of December 2020 and 2019, respectively. See Note 15, Borrowings, for the fair value of each of the Company's long-term borrowings.

Investments in Certain Entities that Calculate NAV Per Share

As a practical expedient to value certain investments that do not have a readily determinable fair value and have attributes of an investment company, the Company uses NAV as the fair value. The following tables list information regarding all investments that use a fair value measurement to account for both their financial assets and financial liabilities in their calculation of a NAV per share (or equivalent).

December 31, 2020

(in millions)	Ref		Fair Value		Total Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity method:(1)		101		150			
Hedge funds/funds of hedge funds	(a)	\$	309	\$	96	Daily/Monthly (21%) Quarterly (21%) N/R (58%)	1 – 90 days
Private equity funds	(b)		315		372	N/R	N/R
Real assets funds	(c)		218		205	Quarterly (31%) N/R (69%)	60 days
Other			4		5	N/R	N/R
Consolidated sponsored investment products:							
Private equity funds of funds	(d)		16		7	N/R	N/R
Hedge fund	(a)		3		_	Quarterly	90 days
Real assets funds	(c)		75		94	NR	NR
Total	955	\$	940	\$	779		

December 31, 2019

(in millions)	Ref	Fair Value	Total Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity method:(1)					
Hedge funds/funds of hedge funds	(a)	\$ 220	\$ 120	Daily/Monthly (27%) Quarterly (15%) N/R (58%)	1 – 90 days
Private equity funds	(b)	248	212	N/R	N/R
Real assets funds	(c)	296	120	Quarterly (57%) N/R (43%)	60 days
Other		10	9	N/R	N/R
Consolidated sponsored investment products:					
Private equity funds of funds	(d)	23	9	N/R	N/R
Hedge fund	(a)	3	-	Quarterly	90 days
Real assets funds	(c)	72	83	_ NR	NR
Total		\$ 872	\$ 553		

N/R - not redeemable

- (1) Comprised of equity method investments, which include investment companies that account for their financial assets and most financial liabilities under fair value measures; therefore, the Company's investment in such equity method investees approximates fair value.
- (a) This category includes hedge funds and funds of hedge funds that invest primarily in equities, fixed income securities, distressed credit, opportunistic and mortgage instruments and other third-party hedge funds. The fair values of the investments have been estimated using the NAV of the Company's ownership interest in partners' capital. The liquidation period for the investments in the funds that are not subject to redemption is unknown at both December 31, 2020 and 2019.
- (b) This category includes private equity funds that initially invest in nonmarketable securities of private companies, which ultimately may become public in the future. The fair values of these investments have been estimated using capital accounts representing the Company's ownership interest in the funds as well as other performance inputs. The Company's investment in each fund is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets of the private equity funds. The liquidation period for the investments in these funds is unknown at both December 31, 2020 and 2019.
- (c) This category includes several real assets funds that invest directly and indirectly in real estate or infrastructure. The fair values of the investments have been estimated using capital accounts representing the Company's ownership interest in the funds. The Company's investments that are not subject to redemption or are not currently redemable are normally returned through distributions and realizations of the underlying assets of the funds. The liquidation period for the investments in the funds that are not subject to redemptions is unknown at both December 31, 2020 and 2019. The total remaining unfunded commitments to real assets funds were \$299 million and \$203 million at December 31, 2020 and 2019, respectively. The Company's portion of the total remaining unfunded commitments was \$267 million at December 31, 2020 and 2019, respectively.
- (d) This category includes the underlying third-party private equity funds within consolidated BlackRock sponsored private equity funds of funds. The fair values of the investments in the third-party funds have been estimated using capital accounts representing the Company's ownership interest in each fund in the portfolio as well as other performance inputs. These investments are not subject to redemption or are not currently redeemable; however, for certain funds, the Company may sell or transfer its interest, which may need approval by the general partner of the underlying funds. Due to the nature of the investments in this category, the Company reduces its investment by distributions that are received through the realization of the underlying assets of the funds. The liquidation period for the underlying assets of these funds is unknown at both December 31, 2020 and 2019. The total remaining unfunded commitments to other third-party funds were \$7 million and \$9 million at December 31, 2020 and 2019, respectively. The Company had contractual obligations to the consolidated funds of \$17 million and \$22 million at December 31, 2020 and 2019, respectively.

Fair Value Option

At December 31, 2020 and 2019, the Company elected the fair value option for certain investments in CLOs of approximately \$35 million and \$37 million, respectively, reported within investments.

In addition, the Company elected the fair value option for bank loans and borrowings of a consolidated CLO, recorded within investments and other liabilities, respectively. The following table summarizes the information related to these bank loans and borrowings at December 31, 2020 and 2019:

(in millions)	nber 31, 020	ember 31, 2019
CLO Bank loans:		
Aggregate principal amounts outstanding	\$ 250	\$ 204
Fair value	248	 204
Aggregate unpaid principal balance in excess of (less than) fair value	\$ 2	\$ -
CLO Borrowings:		
Aggregate principal amounts outstanding	\$ 244	\$ 195
Fair value	\$ 246	\$ 195

At December 31, 2020, the principal amounts outstanding of the borrowings issued by the CLOs mature in 2030.

During the year ended December 31, 2020 and 2019, the net gains (losses) from the change in fair value of the bank loans and borrowings held by the consolidated CLO were not material and were recorded in net gain (loss) on the consolidated statements of income. The change in fair value of the assets and liabilities included interest income and expense, respectively.

9. Derivatives and Hedging

The Company maintains a program to enter into swaps to hedge against market price and interest rate exposures with respect to certain seed investments in sponsored investment products. At December 31, 2020 and 2019, the Company had outstanding total return swaps with aggregate notional values of approximately \$833 million and \$644 million, respectively.

The Company executes forward foreign currency exchange contracts to mitigate the risk of certain foreign exchange movements. At December 31, 2020 and 2019, the Company had outstanding forward foreign currency exchange contracts with aggregate notional values of approximately \$2.8 billion and \$3.4 billion, respectively and with expiration dates in January 2021 and January 2020, respectively.

At both December 31, 2020 and 2019, the Company had a derivative providing credit protection with a notional amount of approximately \$17 million to a counterparty, representing the Company's maximum risk of loss with respect to the derivative. The Company carries the derivative at fair value based on the expected discounted future cash outflows under the arrangement.

The following table presents the fair values of derivative instruments recognized in the consolidated statements of financial condition at December 31, 2020:

	December 31, 2020									
(in millions)	Assets			Liabiliti	es					
Derivative instruments	Statement of Financial Condition Classification	Fa	air Value	Statement of Financial Condition Classification	Fair	· Value				
Total return swaps	Other assets	\$	_	Other liabilities	\$	50				
Forward foreign currency exchange contracts	Other assets	3000	13	Other liabilities	151	5				
Total		\$	13	CONSOCIONITIES .	\$	55				

The fair values of the outstanding total return swaps and forward foreign currency exchange contracts were not material to the consolidated statement of financial condition at December 31, 2019.

The following table presents realized and unrealized gains (losses) recognized in the consolidated statements of income on derivative instruments:

(in millions)		100		Ga	ins (Losses)		
Derivative Instruments	Statement of Income Classification		2020		2019		2018
Total return swaps	Nonoperating income (expense)	\$	(93)	\$	(106)	\$	54
Forward foreign currency exchange contracts	General and administration expense	18	47	100	55	220	(124)
Total gain (loss) from derivative instruments		\$	(46)	\$	(51)	\$	(70)

The Company consolidates certain sponsored investment funds, which may utilize derivative instruments as a part of the funds' investment strategies. The change in fair value of such derivatives, which is recorded in nonoperating income (expense), was not material for 2020, 2019 and 2018.

See Note 15, Borrowings, for more information on the Company's net investment hedge.

10. Property and Equipment

Property and equipment consists of the following:

	Estimated useful		Decem	ber 31,	
(in millions)	life-in years	ilia.	2020	7	2019
Property and equipment:					3
Land	N/A	\$	6	\$	6
Building	39		33		33
Building improvements	39 15		30		30
Leasehold improvements	1-15		593		565
Equipment and computer software	3		822		672
Other transportation equipment	10		179		136
Furniture and fixtures	7		70		70
Construction in progress	N/A		46		83
Total			1,779		1,595
Less: accumulated depreciation and amortization			1,098		880
Property and equipment, net		\$	681	\$	715

N/A - Not Applicable

Qualifying software costs of approximately \$95 million, \$93 million and \$77 million have been capitalized within equipment and computer software during 2020, 2019 and 2018, respectively, and are being amortized over an estimated useful life of three years.

Depreciation and amortization expense was \$232 million, \$182 million and \$154 million for 2020, 2019 and 2018, respectively.

11. Goodwill

Goodwill activity during 2020 and 2019 was as follows:

(in millions)	2020		2019
Beginning of year balance	\$ 14,562	\$	13,526
Acquisition(1)	-		1,044
Goodwill adjustments related to Quellos and other(2)	(11)	(8)
End of year balance	\$ 14.551	\$	14.562

- 1) In 2019, the \$1,044 million increase in goodwill resulted from the eFront Transaction. See Note 3, Acquisition, for information on the eFront Transaction.
- (2) Amounts primarily resulted from a decline related to tax benefits realized from tax-deductible goodwill in excess of book goodwill from the acquisition of the fund-of-funds business of Quellos Group, LLC in October 2007 (the "Quellos Transaction"). Goodwill related to the Quellos Transaction will continue to be reduced in future periods by the amount of tax benefits realized from tax-deductible goodwill in excess of book goodwill from the Quellos Transaction. The balance of the Quellos tax-deductible goodwill in excess of book goodwill was approximately \$74 million and \$106 million at December 31, 2020 and 2019, respectively.

BlackRock assessed its goodwill for impairment as of July 31, 2020, 2019 and 2018 and considered such factors as the book value and the market capitalization of the Company. The impairment assessment indicated no impairment charges were required. The Company continues to monitor its book value per share compared with closing prices of its common stock for potential indicators of impairment. At December 31, 2020, the Company's common stock closed at a market price of \$721.54, which exceeded its book value of approximately \$231.31 per share.

12. Intangible Assets

Intangible assets at December 31, 2020 and 2019 consisted of the following:

(in millions)	Remaining Weighted- Average Estimated Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
At December 31, 2020				
Indefinite-lived intangible assets:				
Management contracts	N/A	\$ 16,169	\$ _	\$ 16,169
Trade names/trademarks	N/A	1,403	-	1,403
License	N/A	66_		6_
Total indefinite-lived intangible assets		17,578		17,578
Finite-lived intangible assets:				
Management contracts	4.0	283	172	111
Investor/customer relationships	8.2	476	88	388
Technology-related	6.4	203	25	178
Trade names/trademarks	2.3	14	6	88
Total finite-lived intangible assets	7.0	976	291	685
Total intangible assets		\$ 18,554	\$ 291	\$ 18,263
At December 31, 2019				
Indefinite-lived intangible assets:				
Management contracts	N/A	\$ 16,169	\$ _	\$ 16,169
Trade names/trademarks	N/A	1,403	_	1,403
License	N/A	6	2 - 2	6
Total indefinite-lived intangible assets		17,578	ş.—ş.	17,578
Finite-lived intangible assets:				
Management contracts	4.8	283	135	148
Investor/customer relationships	9.2	476	39	437
Technology-related	7.4	203	9	194
Trade names/trademarks	3.3	14	2	12
Total finite-lived intangible assets	7.8	976	185	791
Total intangible assets	(313)	\$ 18,554	\$ 185	\$ 18,369

N/A - Not Applicable

The impairment tests performed for intangible assets as of July 31, 2020, 2019 and 2018 indicated no impairment charges were required.

Estimated amortization expense for finite-lived intangible assets for each of the five succeeding years is as follows:

(in millions)	
Year	Amount
2021	\$ 107
2022	103
2023	97
2024	92
2021 2022 2023 2024 2025	87

In 2019, in connection with the eFront Transaction, the Company acquired \$400 million of finite-lived customer relationships, \$203 million of finite-lived technology-related intangible assets and \$14 million of a finite-lived trade name, with weighted-average estimated lives of approximately 10 years, eight years and four years, respectively. See Note 3, Acquisition, for information on the eFront Transaction.

13. Leases

The following table presents components of lease cost included in general and administration expense on the consolidated statements of income:

(in millions)	2020		2019
Lease cost(1):			 500 000
Operating lease cost(2)	\$	147	\$ 141
Variable lease cost(3)		40	 39
Total lease cost	\$	187	\$ 180

- Rent expense and certain office equipment expense under lease agreements amounted to \$135 million in 2018. Amounts include short-term leases, which are immaterial for both 2020 and 2019.
- Amounts include operating lease payments, which may be adjusted based on usage, changes in an index or market rate, as well as common area maintenance charges and other variable costs not included in the measurement of ROU assets and operating lease liabilities.

The following table presents operating leases included on the consolidated statement of financial condition:

(in millions)	Statement of Financial Condition Classification	December 31, 2020		December 31, 2019
Statement of Financial Condition information:	N-92	- Aller	(5-5-6	3040724
Operating lease ROU assets	Other assets	\$ 649	\$	669
Operating lease liabilities	Other liabilities	\$ 755	\$	776

Supplemental information related to operating leases is summarized below:

(in millions)	Decemb	December 31, 2019		
Supplemental cash flow information: Cash paid for amounts included in the measurement of operating lease liabilities	\$	154	\$	142
Supplemental noncash information: ROU assets in exchange for operating lease liabilities				
in connection with the adoption of ASU 2016-02, "Leases"	\$	_	\$	661
ROU assets in exchange for operating lease liabilities	\$	93	\$	117

	December 31, 2020	December 31, 2019
Lease term and discount rate:		50 35
Weighted-average remaining lease term	8 years	9 years
Weighted-average discount rate	3 %	3 %

(in millions) Maturity of operating lease liabilities at December 31, 2020	Amo	ount (1)
2021	\$	162
2022		159
2023		107
2024		74
2025		58
Thereafter		305
Total lease payments	\$	865
Less: imputed interest		110
Present value of lease liabilities	\$	755

Amount excludes \$1.4 billion of legally binding minimum lease payments for leases signed but not yet commenced.

In May 2017, the Company entered into an agreement with 50 HYMC Owner LLC, for the lease of approximately 847,000 square feet of office space located at 50 Hudson Yards, New York, New York. The term of the lease includes 20 years of cash rental payments expected to begin in May 2023, with the option to renew for a specified term. The lease requires annual base rental payments of approximately \$51 million per year during the first five years of the lease term, increasing every five years to \$58 million, \$66 million and \$74 million per year (or approximately \$1.2 billion in base rent over a 20-year period). In November 2019, the Company exercised its initial expansion option with respect to two additional floors aggregating approximately 122,000 square feet of office space. The additional space requires approximately \$185 million in base rent over the 20-year period.

14. Other Assets

PennyMac

On February 13, 2020, BlackRock announced the establishment of The BlackRock Foundation (the "Foundation") and the contribution of its remaining 20% stake in PennyMac Financial Services, Inc. ("PennyMac") to the Foundation and the BlackRock Charitable Fund, which BlackRock established in 2013 (together, the "Charitable Contribution"). The Charitable Contribution resulted in an operating expense of \$589 million, which was offset by a \$122 million noncash, nonoperating pre-tax gain on the contributed shares and a tax benefit of \$241 million in the consolidated statement of income for 2020.

The Company accounted for its interest in PennyMac as an equity method investment. At December 31, 2019, the Company's investment in PennyMac was included in other assets on the consolidated statements of financial condition. The carrying value and market value of the Company's interest (approximately 20% or 16 million shares) was approximately \$451 million and \$530 million, respectively, at December 31, 2019. The market value of the Company's interest reflected the PennyMac stock price at December 31, 2019 (a Level 1 input). As a result of the Charitable Contribution, the Company no longer recorded an investment in PennyMac at December 31, 2020.

iCapital

On March 10, 2020, in connection with a recapitalization of iCapital Network, Inc. ("iCapital"), BlackRock received additional stock in exchange for certain securities it held, which resulted in a nonoperating pre-tax gain of approximately \$240 million in the consolidated statement of income for 2020. Following this transaction, the Company accounts for its interest in iCapital as an equity method investment, which is included in other assets on the consolidated statements of financial condition. At December 31, 2020, the carrying value of the Company's interest in iCapital was approximately \$296 million.

15. Borrowings

Short-Term Borrowings

2020 Revolving Credit Facility. The Company's credit facility has an aggregate commitment amount of \$4 billion and was amended in March 2020 to extend the maturity date to March 2025 (the "2020 credit facility"). The 2020 credit facility permits the Company to request up to an additional \$1 billion of borrowing capacity, subject to lender credit approval, increasing the overall size of the 2020 credit facility to an aggregate principal amount not to exceed \$5 billion. Interest on borrowings outstanding accrues at a rate based on the applicable London Interbank Offered Rate plus a spread. The 2020 credit facility requires the Company not to exceed a maximum leverage ratio (ratio of net debt to earnings before interest, taxes, depreciation and amortization, where net debt equals total debt less unrestricted cash) of 3 to 1, which was satisfied with a ratio of less than 1 to December 31, 2020. The 2020 credit facility provides back-up liquidity to fund ongoing working capital for general corporate purposes and various investment opportunities. At December 31, 2020, the Company had no amount outstanding under the 2020 credit facility.

Commercial Paper Program. The Company can issue unsecured commercial paper notes (the "CP Notes") on a private-placement basis up to a maximum aggregate amount outstanding at any time of \$4 billion. The commercial paper program is currently supported by the 2020 credit facility. At December 31, 2020, BlackRock had no CP Notes outstanding.

Long-Term Borrowings

The carrying value and fair value of long-term borrowings determined using market prices and EUR/USD foreign exchange rate at December 31, 2020 included the following:

Unamortized

(in millions)	Maturity	Fair Value			
4.25% Notes due 2021	\$	750	\$ _	\$ 750	\$ 761
3.375% Notes due 2022		750	(2)	748	782
3.50% Notes due 2024		1,000	(3)	997	1,098
1.25% Notes due 2025		856	(3)	853	911
3.20% Notes due 2027		700	(5)	695	790
3.25% Notes due 2029		1,000	(11)	989	1,146
2.40% Notes due 2030		1,000	(7)	993	1,090
1.90% Notes due 2031		1,250	(11)	1,239	1,305
Total Long-term Borrowings	\$	7,306	\$ (42)	\$ 7,264	\$ 7,883

Long-term borrowings at December 31, 2019 had a carrying value of \$5.0 billion and a fair value of \$5.3 billion determined using market prices at the end of December 2019.

2031 Notes. In April 2020, the Company issued \$1.25 billion in aggregate principal amount of 1.90% senior unsecured and unsubordinated notes maturing on January 28, 2031 (the "2031 Notes"). The net proceeds of the 2031 Notes are being used for general corporate purposes, which may include the future repayment of all or a portion of the \$750 million 4.25% Notes due May 2021. Interest of approximately \$24 million per year is payable semi-annually on January 28 and July 28 of each year, which commenced on July 28, 2020. The 2031 Notes may be redeemed prior to October 28, 2030 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at 100% of the principal amount of the 2031 Notes thereafter. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2031 Notes.

2030 Notes. In January 2020, the Company issued \$1 billion in aggregate principal amount of 2.40% senior unsecured and unsubordinated notes maturing on April 30, 2030 (the "2030 Notes"). The net proceeds of the 2030 Notes were used for general corporate purposes. Interest of approximately \$24 million per year is payable semi-annually on April 30 and October 30 of each year, which commenced on April 30, 2020. The 2030 Notes may be redeemed prior to January 30, 2030 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at 100% of the principal amount of the 2030 Notes thereafter. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2030 Notes.

2029 Notes. In April 2019, the Company issued \$1 billion in aggregate principal amount of 3.25% senior unsecured and unsubordinated notes maturing on April 30, 2029 (the "2029 Notes"). The net proceeds of the 2029 Notes were used for general corporate purposes, which included a portion of the purchase price of the eFront Transaction, repayment of a portion of the \$1 billion 5.00% notes in December 2019 and repayment of borrowings under its commercial paper program. Interest is payable semi-annually on April 30 and October 30 of each year, which commenced on October 30, 2019, and is approximately \$33 million per year. The 2029 Notes may be redeemed prior to January 30, 2029 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at par thereafter. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2029 Notes.

2027 Notes. In March 2017, the Company issued \$700 million in aggregate principal amount of 3.20% senior unsecured and unsubordinated notes maturing on March 15, 2027 (the "2027 Notes"). The net proceeds of the 2027 Notes were used to fully repay \$700 million in aggregate principal amount outstanding of 6.25% notes in April 2017 prior to their maturity in September 2017. Interest is payable semi-annually on March 15 and September 15 of each year, and is approximately \$22 million per year. The 2027 Notes may be redeemed prior to maturity at any time in whole or in part at the option of the Company at a "make-whole" redemption price. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2027 Notes.

2025 Notes. In May 2015, the Company issued €700 million of 1.25% senior unsecured notes maturing on May 6, 2025 (the "2025 Notes"). The notes are listed on the New York Stock Exchange. The net proceeds of the 2025 Notes were used for general corporate purposes, including refinancing of outstanding indebtedness. Interest of approximately \$11 million per year based on current exchange rates is payable annually on May 6 of each year. The 2025 Notes may be redeemed in whole or in part prior to maturity at any time at the option of the Company at a "make-whole" redemption price. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2025 Notes.

Upon conversion to US dollars the Company designated the €700 million debt offering as a net investment hedge to offset its currency exposure relating to its net investment in certain euro functional currency operations. A loss of \$54 million (net of tax benefit of \$17 million), a gain of \$11 million (net of tax expense of \$3 million), and a gain of \$30 million (net of tax expense of \$10 million) were recognized in other comprehensive income for 2020, 2019 and 2018, respectively. No hedge ineffectiveness was recognized during 2020, 2019, and 2018.

2024 Notes. In March 2014, the Company issued \$1 billion in aggregate principal amount of 3.50% senior unsecured and unsubordinated notes maturing on March 18, 2024 (the "2024 Notes"). The net proceeds of the 2024 Notes were used to refinance certain indebtedness which matured in the fourth quarter of 2014. Interest is payable semi-annually in arrears on March 18 and September 18 of each year, or approximately \$35 million per year. The 2024 Notes may be redeemed prior to maturity at any time in whole or in part at the option of the Company at a "make-whole" redemption price. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2024 Notes.

2022 Notes. In May 2012, the Company issued \$1.5 billion in aggregate principal amount of unsecured unsubordinated obligations. These notes were issued as two separate series of senior debt securities, including \$750 million of 1.375% notes, which were repaid in June 2015 at maturity, and \$750 million of 3.375% notes maturing in June 2022 (the "2022 Notes"). Net proceeds were used to fund the repurchase of BlackRock's common stock and Series B Preferred from Barclays and affiliates and for general corporate purposes. Interest on the 2022 Notes of approximately \$25 million per year is payable semi-annually on June 1 and December 1 of each year. The 2022 Notes may be redeemed prior to maturity at any time in whole or in part at the option of the Company at a "make-whole" redemption price. The "make-whole" redemption price represents a price, subject to the specific terms of the 2022 Notes and related indenture, that is the greater of (a) par value and (b) the present value of future payments that will not be paid because of an early redemption, which is discounted at a fixed spread over a comparable Treasury security. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2022 Notes.

2021 Notes. In May 2011, the Company issued \$1.5 billion in aggregate principal amount of unsecured unsubordinated obligations. These notes were issued as two separate series of senior debt securities, including \$750 million of 4.25% notes maturing in May 2021 and \$750 million of floating rate notes, which were repaid in May 2013 at maturity. Net proceeds of this offering were used to fund the repurchase of BlackRock's Series B Preferred from affiliates of Merrill Lynch & Co., Inc. Interest on the 4.25% notes due in 2021 ("2021 Notes") is payable semi-annually on May 24 and November 24 of each year, and is approximately \$32 million per year. The 2021 Notes may be redeemed prior to maturity at any time in whole or in part at the option of the Company at a "make-whole" redemption price. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2021 Notes.

16. Commitments and Contingencies

Investment Commitments. At December 31, 2020, the Company had \$789 million of various capital commitments to fund sponsored investment products, including consolidated sponsored investment products. These products include private equity funds, real assets funds and opportunistic funds. This amount excludes additional commitments made by consolidated funds of funds to underlying third-party funds as third-party noncontrolling interest holders have the legal obligation to fund the respective commitments of such funds of funds. Generally, the timing of these commitments is unknown and the commitments are callable on demand at any time prior to the expiration of the commitment. These unfunded commitments are not recorded on the consolidated statements of financial condition. These commitments do not include potential future commitments approved by the Company that are not yet legally binding. The Company intends to make additional capital commitments from time to time to fund additional investment products for, and with, its clients.

Contingencies

Contingent Payments Related to Business Acquisitions. In connection with certain acquisitions, BlackRock is required to make contingent payments, subject to achieving specified performance targets, which may include revenue related to acquired contracts or new capital commitments for certain products. The fair value of the remaining aggregate contingent payments at December 31, 2020 totaled \$26 million and is included in other liabilities on the consolidated statements of financial condition.

Other Contingent Payments. The Company acts as the portfolio manager in a series of derivative transactions and has a maximum potential exposure of \$17 million between the Company and counterparty. See Note 9, Derivatives and Hedging, for further discussion.

Legal Proceedings. From time to time, BlackRock receives subpoenas or other requests for information from various US federal and state governmental and regulatory authorities and international governmental and regulatory authorities in connection with industry-wide or other investigations or proceedings. It is BlackRock's policy to cooperate fully with such matters. The Company, certain of its subsidiaries and employees have been named as defendants in various legal actions, including arbitrations and other litigation arising in connection with BlackRock's activities. Additionally, BlackRock-advised investment portfolios may be subject to lawsuits, any of which potentially could harm the investment returns of the applicable portfolio or result in the Company being liable to the portfolios for any resulting damages.

On April 5, 2017, BlackRock, Inc., BlackRock Institutional Trust Company, N.A. ("BTC"), the BlackRock, Inc. Retirement Committee and various sub-committees, and a BlackRock employee were named as defendants in a purported class action lawsuit brought in the US District Court for the Northern District of California by a former employee on behalf of all participants and beneficiaries in the BlackRock employee 401(k) Plan (the "Plan") from April 5, 2011 to the present. The lawsuit generally alleges that the defendants breached their duties towards Plan participants in violation of the Employee Retirement Income Security Act of 1974 by, among other things, offering investment options that were overly expensive, underperformed unaffiliated peer funds, focused disproportionately on active versus passive strategies, and were unduly concentrated in investment options managed by BlackRock. On October 18, 2017, the plaintiffs filed an Amended Complaint, which, among other things, added as defendants certain current and former members of the BlackRock Retirement and Investment Committees. The Amended Complaint also included a new purported class claim on behalf of investors in certain CTFs managed by BTC. Specifically, the plaintiffs allege that BTC, as fiduciary to the CTFs, engaged in self-dealing by, most significantly, selecting itself as the securities lending agent on terms that the plaintiffs claim were excessive. The Amended Complaint also alleged that BlackRock took undue risks in its management of securities lending cash reinvestment vehicles during the financial crisis. On August 23, 2018, the court granted permission to the plaintiffs to file a Second Amended Complaint ("SAC") which added as defendants the BlackRock, inc. Management Development and Compensation Committee, the Plan's independent investment consultant and the Plan's Administrative Committee and its members. On October 22, 2018, BlackRock filed a motion to dismiss part of the plaintiffs' claim seeking to recover alleged losses in the securities l

Management, after consultation with legal counsel, currently does not anticipate that the aggregate liability arising out of regulatory matters or lawsuits will have a material effect on BlackRock's results of operations, financial position, or cash flows. However, there is no assurance as to whether any such pending or threatened matters will have a material effect on BlackRock's results of operations, financial position or cash flows in any future reporting period. Due to uncertainties surrounding the outcome of these matters, management cannot reasonably estimate the possible loss or range of loss that may arise from these matters.

Indemnifications. In the ordinary course of business or in connection with certain acquisition agreements, BlackRock enters into contracts pursuant to which it may agree to indemnify third parties in certain circumstances. The terms of these indemnities vary from contract to contract and the amount of indemnification liability, if any, cannot be determined or the likelihood of any liability is considered remote. Consequently, no liability has been recorded on the consolidated statements of financial condition.

In connection with securities lending transactions, BlackRock has agreed to indemnify certain securities lending clients against potential loss resulting from a borrower's failure to fulfill its obligations under the securities lending agreement should the value of the collateral pledged by the borrower at the time of default be insufficient to cover the borrower's obligation under the securities lending agreement. The amount of securities on loan as of December 31, 2020 and subject to this type of indemnification was \$270 billion. In the Company's capacity as lending agent, cash and securities totaling \$289 billion was held as collateral for indemnified securities on loan at December 31, 2020. The fair value of these indemnifications was not material at December 31, 2020.

17. Revenue

The table below presents detail of revenue for 2020, 2019 and 2018 and includes the product mix of investment advisory, administration fees and securities lending revenue and performance fees.

(in millions)	2020	2019		2018
Investment advisory, administration fees and securities lending revenue:				
Equity:				
Active	\$ 1,737 \$	1,554	\$	1,654
/Shares ETFs	3,499	3,495		3,549
Non-ETF index	664	667		685
Equity subtotal	5,900	5,716		5,888
Fixed income:				
Active	1,957	1,918		1,840
iShares ETFs	1,119	963		825
Non-ETF index	463	405		387
Fixed income subtotal	3,539	3,286		3,052
Multi-asset	1,163	1,148		1,176
Alternatives:				
Illiquid alternatives	577	488		348
Liquid alternatives	502	413		384
Currency and commodities(1)	168	108		98
Alternatives subtotal	1,247	1,009		830
Long-term	11,849	11,159		10,946
Cash management	790	618		607
Total investment advisory, administration fees and securities lending revenue	12,639	11,777		11,553
Investment advisory performance fees:				
Equity	91	36		91
Fixed income	35	10		8
Multi-asset	35	19		19
Alternatives:				
Illiquid alternatives	83	136		70
Liquid alternatives	860	249		224
Alternatives subtotal	943	385		294
Total performance fees	1,104	450		412
Technology services revenue	1,139	974		785
Distribution fees:				
Retrocessions	736	658		709
12b-1 fees (US mutual fund distribution fees)	337	358		406
Other	58	53		40
Total distribution fees	1,131	1,069		1,155
Advisory and other revenue:	127.0000	Market 1		15,650
Advisory	68	99		113
Other	124	170		180
Total advisory and other revenue	192	269	741	293
Total revenue	\$ 16,205 \$	14,539	\$	14,198

⁽¹⁾ Amounts include commodity iShares ETFs.

The tables below present the investment advisory, administration fees and securities lending revenue by client type and investment style:

(in millions)	2020		2019		2018
By client type:		2.30H S1	5/25/2007	99	Several severa
Retail	\$ 3	,651 \$	3,411	\$	3,413
iShares ETFs	4	788	4,564		4,468
Institutional:					
Active	2	342	2,172		2,044
Index		,068	1,012		1,021
Total institutional		410	3,184		3,065
Long-term	11	849	11,159		10,946
Cash management		790	618		607
Total	\$ 12	,639 \$	11,777	\$	11,553
By investment style:					
Active	\$ 5	914 \$	5,510	\$	5,391
Index and iShares ETFs		,935	5,649		5,555
Long-term	11	,849	11,159		10,946
Cash management		790	618		607
Total	\$ 12	,639 \$	11,777	\$	11,553

Investment advisory and administration fees - remaining performance obligation

The tables below present estimated investment advisory and administration fees expected to be recognized in the future related to the unsatisfied portion of the performance obligations at December 31, 2020 and 2019:

December 31, 2020

(in millions)	20)21	2022	2023	Thereafter	Total
Investment advisory and administration fees; Alternatives(1)(2)	\$	148	\$ 144	\$ 112	\$ 107	\$ 511
Danambar 24 2040						

December 31, 2019

(in millions)	 2020	2021	2022	Thereafter	Total
Investment advisory and administration fees: Alternatives(1)(2)	\$ 98	\$ 88	\$ 74	\$ 107	\$ 367

⁽¹⁾ Investment advisory and administration fees include management fees related to certain alternative products, which are based on contractual committed capital outstanding at December 31, 2020 and 2019. Actual management fees could be higher to the extent additional committed capital is raised. These fees are generally billed on a quarterly basis in arrears.

Change in deferred carried interest liability

The table below presents changes in the deferred carried interest liability, which is included in other liabilities on the consolidated statements of financial condition, for the year ended December 31, 2020 and 2019:

(in millions)	2020		2019
Beginning balance	\$	483	\$ 293
Net increase (decrease) in unrealized allocations		150	259
Performance fee revenue recognized		(49)	(75)
Other		_	6
Ending balance	\$	584	\$ 483

Technology services revenue - remaining performance obligation

The tables below present estimated technology services revenue expected to be recognized in the future related to the unsatisfied portion of the performance obligations at December 31, 2020 and 2019:

December 31, 2020

(in millions)		2021	- Horaco	2022			2023		 Thereafter			Total	
Technology services revenue(1)(2)	\$		118	\$	58	\$		33	\$	22	\$		231
December 31, 2019													
(in millions)	23	2020		2021			2022		Thereafter			Total	-00
Technology services revenue(1)(2)	S		117	\$	53	S		31	\$ 	20	S		221

⁽¹⁾ Technology services revenue primarily includes upfront payments from customers, which the Company generally recognizes as services are performed.

In addition to amounts disclosed in the table above, certain technology services contracts require fixed minimum fees, which are billed on a monthly or quarterly basis in arrears. The Company recognizes such revenue as services are performed. As of December 31, 2020, the estimated fixed minimum fees for 2021 for outstanding contracts approximated \$730 million. The term for these contracts, which are either in their initial or renewal period, ranges from one to five years.

The table below presents changes in the technology services deferred revenue liability for the year ended December 31, 2020 and 2019, which is included in other liabilities on the consolidated statements of financial condition:

(in millions)	20	20		2019
Beginning balance	\$	116	\$	70
Additions(1)		89		86
Revenue recognized that was included in the beginning balance		(82)	2200	(40)
Ending balance	\$	123	\$	116

(1) Amounts are net of revenue recognized.

Actual management fees could be higher to the extent additional committed capital is raised. These fees are generally billed on a quarterly basis in arrears.

(2) The Company elected the following practical expedients and therefore does not include amounts related to (1) performance obligations with an original duration of one year or less, and (2) variable consideration related to future service periods.

⁽²⁾ The Company elected the following practical expedients and therefore does not include amounts related to (1) performance obligations with an original duration of one year or less, and (2) variable consideration related to future service periods.

18. Stock-Based Compensation

The components of stock-based compensation expense are as follows:

(in millions)		2020	2019	2018
Stock-based compensation:	9			
Restricted stock and RSUs	\$	593	\$ 532	\$ 514
Long-term incentive plans to be funded by PNC(1)		_	<u></u>	14
Stock options		29	35	36
Total stock-based compensation	\$	622	\$ 567	\$ 564

(1) The PNC Financial Services Group, Inc. ("PNC")

Stock Award and Incentive Plan. Pursuant to the BlackRock, Inc. Second Amended and Restated 1999 Stock Award and Incentive Plan (the "Award Plan"), options to purchase shares of the Company's common stock at an exercise price not less than the market value of BlackRock's common stock on the date of grant in the form of stock options, restricted stock or RSUs may be granted to employees and nonemployee directors. A maximum of 41,500,000 shares of common stock were authorized for issuance under the Award Plan. Of this amount, 6,068,624 shares remain available for future awards at December 31, 2020. Upon exercise of employee stock options, the issuance of restricted stock or the vesting of RSUs, the Company issues shares out of treasury to the extent available.

Restricted Stock and RSUs. Pursuant to the Award Plan, restricted stock grants and RSUs may be granted to certain employees. Substantially all restricted stock and RSUs vest over periods ranging from one to three years and are expensed using the straight-line method over the requisite service period for each separately vesting portion of the award as if the award was, in-substance, multiple awards. Restricted stock and RSUs are not considered participating securities for purposes of calculating EPS as the dividend equivalents are subject to forfeiture prior to vesting of the award.

Restricted stock and RSU activity for 2020 is summarized below.

Outstanding at	Restricted Stock and RSUs	Average Grant Date Fair Value
December 31, 2019	2,236,452 \$	444.02
Granted	969,095 \$	533.31
Converted	(981,385) \$	429.48
Forfeited	(84,232) \$	477.29
December 31, 2020	2,139,930 \$	489.81

The Company values restricted stock and RSUs at their grant-date fair value as measured by BlackRock's common stock price. The total fair market value of RSUs/restricted stock granted to employees during 2020, 2019 and 2018 was \$517 million, \$508 million and \$492 million, respectively. The total grant-date fair market value of RSUs/restricted stock converted to common stock during 2020, 2019 and 2018 was \$421 million, \$398 million and \$443 million, respectively.

RSUs/restricted stock granted in connection with annual incentive compensation under the Award Plan primarily related to the following:

	2020	2019	2018
Awards granted that vest ratably over three years from the date of grant	504,403	674,206	527,337
Awards granted that cliff vest 100% on:			
January 31, 2021	-	_	209,201
January 31, 2022	: :	377,291	—
January 31, 2023	393,161	<u></u>	<u> </u>
	897,564	1,051,497	736,538

In addition, the Company also granted RSUs of 71,531, 174,752 and 155,403 during 2020, 2019 and 2018, respectively, with varying vesting periods.

At December 31, 2020, the intrinsic value of outstanding RSUs was \$1.5 billion, reflecting a closing stock price of \$721.54.

At December 31, 2020, total unrecognized stock-based compensation expense related to unvested RSUs was \$379 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 1.1 years.

In January 2021, the Company granted under the Award Plan:

- 470,253 RSUs or shares of restricted stock to employees as part of annual incentive compensation that vest ratably over three years from the date of grant; and
- 247,621 RSUs or shares of restricted stock to employees that cliff vest 100% on January 31, 2024.
- . 55,994 RSUs or shares of restricted stock to employees with various vesting schedules.

Performance-Based RSUs. Pursuant to the Award Plan, performance-based RSUs may be granted to certain employees. Each performance-based award consists of a "base" number of RSUs granted to the employee. The number of shares that an employee ultimately receives at vesting will be equal to the base number of performance-based RSUs granted, multiplied by a predetermined percentage determined in accordance with the level of attainment of Company performance measures during the performance period and could be higher or lower than the original RSU grant. Performance-based RSUs are not considered participating securities as the dividend equivalents are subject to forfeiture prior to vesting of the award.

In the first quarter of 2020, 2019 and 2018, the Company granted 238,478, 283,014, and 199,068, respectively, performance-based RSUs to certain employees that cliff vest 100% on January 31, 2023, 2022, and 2021 respectively. These awards are amortized over a service period of three years. The number of shares distributed at vesting could be higher or lower than the original grant based on the level of attainment of predetermined Company performance measures. In January 2020, the Company granted 30,600 additional RSUs to certain employees based on the attainment of Company performance measures during the performance period.

Performance-based RSU activity for 2020 is summarized below.

Outstanding at	Performance- Based RSUs	Average Grant Date Fair Value
December 31, 2019	742,918	\$ 436.84
Granted	238,478	\$ 533.58
Additional shares granted due to attainment of performance measures	30,600	\$ 375.26
Converted	(311,779)	\$ 375.26
December 31, 2020	700,217	\$ 494.51

Malaband

Waighted

The Company initially values performance-based RSUs at their grant-date fair value as measured by BlackRock's common stock price. The total grant-date fair market value of performance-based RSUs granted to employees during 2020, 2019 and 2018 was \$139 million, \$117 million and \$121 million, respectively.

At December 31, 2020, the intrinsic value of outstanding performance-based RSUs was \$505 million reflecting a closing stock price of \$721.54.

At December 31, 2020, total unrecognized stock-based compensation expense related to unvested performance-based awards was \$132 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 1.2 years.

In January 2021, the Company granted 162,029 performance-based RSUs to certain employees that cliff vest 100% on January 31, 2024. These awards are amortized over a service period of three years. The number of shares distributed at vesting could be higher or lower than the original grant based on the level of attainment of predetermined Company performance measures.

Performance-based Stock Options. Pursuant to the Award Plan, performance-based stock options may be granted to certain employees. Vesting of the performance-based stock options is contingent upon the achievement of obtaining 125% of BlackRock's grant-date stock price within five years from the grant date and the attainment of Company performance measures during the four-year performance period. If both hurdles are achieved, the award will vest in three equal installments at the end of years five, six and seven. Vested options can then be exercised up to nine years following the grant date. At December 31, 2020, the weighted average remaining life of the awards is approximately 5.9 years. The awards are generally forfeited if the employee leaves the Company before the respective vesting date. The expense for each tranche is amortized over the respective requisite service period. The Company assumes the performance condition will be achieved. If such condition is not met, no compensation cost is reversed. Stock option activity for 2020 is summarized below.

Outstanding at	Shares Under Option	Average Exercise Price	
December 31, 2019	1,941,145	\$	513.50
Forfeited	(25,353)	\$	513.50
December 31, 2020	1,915,792	\$	513.50
	1,010,102	7	

The options have a strike price of \$513.50, which was the closing price of the shares on the grant date. The grant-date fair value of the awards issued in 2017 was \$208 million and was estimated using a Monte Carlo simulation with an embedded lattice model using the assumptions included in the following table:

Grant	Expected Term (Years)	Expected Stock	Expected	Risk-Free Interest
Year		Volatility	Dividend Yield	Rate
2017	6.56	22.23%	2.16%	2.33%

The expected term was derived using a Monte Carlo simulation with the embedded lattice model and represents the period of time that options granted are expected to be outstanding. The expected stock volatility was based upon an average of historical stock price fluctuations of BlackRock's common stock and an implied volatility at the grant date. The dividend yield was calculated as the most recent quarterly dividend divided by the average three-month stock price as of the grant date. The risk-free interest rate is based on the US Treasury Constant Maturities yield curve at date of grant.

At December 31, 2020, total unrecognized stock-based compensation expense related to unvested performance-based stock options was \$82 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 2.9 years.

Employee Stock Purchase Plan ("ESPP"). The ESPP allows eligible employees to purchase the Company's common stock at 95% of the fair market value on the last day of each three-month offering period. The Company does not record compensation expense related to employees purchasing shares under the ESPP.

19. Employee Benefit Plans

Deferred Compensation Plans

Voluntary Deferred Compensation Plan. The Company adopted a Voluntary Deferred Compensation Plan ("VDCP") that allows eligible employees in the United States to elect to defer between 1% and 100% of their annual cash incentive compensation. The participants must specify a deferral period of up to 10 years from the year of deferral and additionally, elect to receive distributions in the form of a lump sum or in up to 10 annual installments. The Company may fund the obligation through the rabbi trust on behalf of the plan's participants.

The rabbi trust established for the VDCP, with assets totaling \$6 million and \$23 million at December 31, 2020 and 2019, respectively, is reflected in investments on the consolidated statements of financial condition. Such investments are classified as trading investments. The liability balance of \$82 million and \$80 million at December 31, 2020 and 2019, respectively, is reflected on the consolidated statements of financial condition as accrued compensation and benefits. Earnings in the rabbi trust, including unrealized appreciation or depreciation, are reflected as nonoperating income (expense) and changes in the liability are reflected as employee compensation and benefits expense on the consolidated statements of income.

Leadership Retention Carry Plan. In 2019, the Company adopted a carried interest retention incentive program referred to as the BlackRock Leadership Retention Carry Plan, pursuant to which senior-level employees (but not including the Chief Executive Officer), as may be determined by the Company from time to time, will be eligible to receive a portion of the cash payments, based on their percentage points, in the total carried interest distributions payable to the Company from participating carry funds. Cash payments, if any, with respect to these percentage points will be made following the recipient's termination of employment due to qualified retirement, death or disability, subject to his or her execution of a release of claims and continued compliance with his or her restrictive covenant obligations following termination. There was no impact to the consolidated financial statements.

Other Deferred Compensation Plans. The Company has additional compensation plans for the purpose of providing deferred compensation and retention incentives to certain employees. For these plans, the final value of the deferred amount to be distributed in cash upon vesting is associated with investment returns of certain investment funds. The liabilities for these plans were \$339 million and \$311 million at December 31, 2020 and 2019, respectively, and are reflected in the consolidated statements of financial condition as accrued compensation and benefits. In January 2021, the Company granted approximately \$321 million of additional deferred compensation that will fluctuate with investment returns and will vest ratably over three years from the date of grant.

Defined Contribution Plans

The Company has several defined contribution plans primarily in the United States and United Kingdom.

Certain of the Company's US employees participate in a defined contribution plan. Employee contributions of up to 8% of eligible compensation, as defined by the plan and subject to Internal Revenue Code limitations, are matched by the Company at 50% up to a maximum of \$5,000 annually. In addition, the Company makes an annual retirement contribution to eligible participants equal to 3-5% of eligible compensation. The Company's contribution expense related to this plan was \$93 million in 2020, \$66 million in 2019, and \$63 million in 2018.

Certain United Kingdom ("UK") wholly owned subsidiaries of the Company contribute to defined contribution plans for their employees. The contributions range between 6% and 15% of each employee's eligible compensation. The Company's contribution expense related to these plans was \$45 million in 2020, \$41 million in 2019, and \$35 million in 2018.

In addition, the contribution expense related to defined contribution plans in other regions was \$34 million in 2020, \$29 million in 2019 and \$22 million in 2018.

Defined Benefit Plans. The Company has several defined benefit pension plans with plan assets of approximately \$36 million and \$28 million at December 31, 2020 and 2019, respectively. The underfunded obligations at December 31, 2020 and 2019 were not material. Benefit payments for the next five years and in aggregate for the five years thereafter are not expected to be material.

20. Related Party Transactions

Determination of Related Parties

PNC. The Company considered PNC, along with its affiliates, to be a related party based on its level of capital stock ownership prior to the secondary offering in May 2020 by PNC of shares of the Company's stock. See Note 23, Capital Stock, for more information on PNC secondary offering. At December 31, 2020, PNC did not own any of the Company's capital stock and is no longer considered a related party.

Registered Investment Companies and Equity Method Investments. The Company considers the registered investment companies that it manages, which include mutual funds and exchange-traded funds, to be related parties as a result of the Company's advisory relationship. In addition, equity method investments are considered related parties, due to the Company's influence over the financial and operating policies of the investee.

Revenue from Related Parties

Revenue for services provided by the Company to these and other related parties are as follows:

(in millions)	20	20	2019	2018
Investment advisory, administration fees and securities lending revenue(1)	\$	9,079	\$ 8,323	\$ 8,226
Investment advisory performance fees(1)		301	131	112
Technology services revenue(2)		4	9	9
Advisory and other revenue(3)		19	59	65
Total revenue from related parties	S	9,403	\$ 8.522	\$ 8.412

- Amounts primarily include revenue from registered investment companies/and equity method investees.
- (2) Amounts primarily include revenue from PNC and affiliates.
- (3) Amounts primarily include revenue from equity method investees.

The Company provides investment advisory and administration services to its open- and closed-end funds and other commingled or pooled funds and separate accounts in which related parties invest.

Receivables and Payables with Related Parties. Due from related parties, which is included within other assets on the consolidated statements of financial condition was \$109 million and \$119 million at December 31, 2020 and 2019, respectively, and primarily represented receivables from certain investment products managed by BlackRock. Accounts receivable at December 31, 2020 and 2019 included \$1.1 billion and \$995 million, respectively, related to receivables from BlackRock mutual funds and iShares ETFs, for investment advisory and administration services.

Due to related parties, which is included within other liabilities on the consolidated statements of financial condition, was \$17 million and \$12 million at December 31, 2020 and 2019, respectively, and primarily represented payables to certain investment products managed by BlackRock.

21. Net Capital Requirements

The Company is required to maintain net capital in certain regulated subsidiaries within a number of jurisdictions, which is partially maintained by retaining cash and cash equivalent investments in those subsidiaries or jurisdictions. As a result, such subsidiaries of the Company may be restricted in their ability to transfer cash between different jurisdictions and to their parents. Additionally, transfers of cash between international jurisdictions may have adverse tax consequences that could discourage such transfers.

Banking Regulatory Requirements. BTC, a wholly owned subsidiary of the Company, is chartered as a national bank whose powers are limited to trust and other fiduciary activities and which is subject to regulatory capital requirements administered by the US Office of the Comptroller of the Currency. Federal banking regulators would be required to take certain actions and permitted to take other actions in the event of BTC's failure to meet minimum capital requirements that, if undertaken, could have a direct material effect on the Company's consolidated financial statements.

Quantitative measures established by regulators to ensure capital adequacy require BTC to maintain a minimum Common Equity Tier 1 capital and Tier 1 leverage ratio, as well as Tier 1 and total risk-based capital ratios. Based on BTC's calculations as of December 31, 2020 and 2019, it exceeded the applicable capital adequacy requirements.

To Be Well

		Actua	al		For Capi Adequa Purpos	су		Capitalize Under Pror Corrective A Provision	npt ction
(in millions)	Ar	nount	Ratio	An	nount	Ratio		Amount	Ratio
December 31, 2020					Contractor Contractor				
Total capital (to risk weighted assets)	\$	740	184.6%	\$	32	8.0%	\$	40	10.0%
Common Equity Tier 1 capital (to risk weighted assets)	\$	740	184.6%	\$	18	4.5%	\$	26	6.5%
Tier 1 capital (to risk weighted assets)	\$	740	184.6%	\$	24	6.0%	\$	32	8.0%
Tier 1 capital (to average assets)	\$	740	71.3%	\$	41	4.0%	\$	52	5.0%
December 31, 2019									
Total capital (to risk weighted assets)	\$	686	137.7%	\$	40	8.0%	\$	50	10.0%
Common Equity Tier 1 capital (to risk weighted assets)	\$	686	137.7%	\$	22	4.5%	S	32	6.5%
Tier 1 capital (to risk weighted assets)	\$	686	137.7%	\$	30	6.0%	S	40	8.0%
Tier 1 capital (to average assets)	\$	686	72.8%	\$	38	4.0%	S	47	5.0%

Broker-dealers. BlackRock Investments, LLC and BlackRock Execution Services are registered broker-dealers and wholly owned subsidiaries of BlackRock that are subject to the Uniform Net Capital requirements under the Securities Exchange Act of 1934, which requires maintenance of certain minimum net capital levels.

Capital Requirements. At December 31, 2020 and 2019, the Company was required to maintain approximately \$2.2 billion and \$1.9 billion, respectively, in net capital in certain regulated subsidiaries, including BTC, entities regulated by the Financial Conduct Authority and Prudential Regulation Authority in the United Kingdom, and the Company's broker-dealers. The Company was in compliance with all applicable regulatory net capital requirements.

22. Accumulated Other Comprehensive Income (Loss)

The following table presents changes in AOCI by component for 2020, 2019 and 2018:

(in millions)	2020	2019	2018
Beginning balance	\$ (571)	\$ (691)	\$ (432)
Foreign currency translation adjustments(1)	234	120	(253)
Reclassification as a result of adoption of accounting guidance	_		(6)
Ending balance	\$ (337)	\$ (571)	\$ (691)

⁽¹⁾ Amount for 2020 includes a loss from a net investment hedge of \$54 million (net of tax benefit of \$17 million). Amounts for 2019 and 2018 include gains from a net investment hedge of \$11 million (net of tax expense of \$3 million) and \$30 million (net of tax expense of \$10 million), respectively.

23. Capital Stock

The Company's authorized common stock and nonvoting participating preferred stock, \$0.01 par value, ("Preferred") consisted of the following:

	2020	2019
Common Stock	500,000,000	500,000,000
Nonvoting Participating Preferred Stock		
Series A Preferred	_	20,000,000
Series B Preferred		150,000,000
Series C Preferred	<u> </u>	6,000,000
Series D Preferred	<u> </u>	20,000,000

December 24

May 2020 PNC Secondary Offering and Share Repurchase. On May 15, 2020, a subsidiary of PNC completed the secondary offering of 31,628,573 shares of the Company's common stock at a price of \$420 per share, which included 823,188 shares of common stock issued upon the conversion of the Company's Series B Convertible Participating Preferred Stock and 2,875,325 shares of common stock under the fully exercised underwriters' option to purchase additional shares. Also on May 15, 2020, PNC completed the sale of 2,650,857 shares to the Company at a price of \$414.96 per share. The shares repurchased by the Company were in addition to the share repurchase authorization under the Company's existing share repurchase program. The secondary offering and the Company's share repurchase resulted in PNC's exit of its entire ownership position in the Company.

Elimination of Preferred Stock. As a result of PNC's exit of its entire ownership position in the Company, on October 6, 2020, the Company filed a Certificate of Elimination to its Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") with the Secretary of State for the state of Delaware eliminating each of the Company's Series A, B and C Convertible Participating Preferred Stock and Series D Participating Preferred Stock (collectively, the "Preferred Stock"). As of October 6, 2020 (the date of filing the Certificate of Elimination), there were no outstanding shares of the Preferred Stock.

PNC Capital Contribution. During 2019, PNC surrendered to BlackRock 143,458 shares of BlackRock Series C Preferred to fund certain long-term incentive plans ("LTIP") awards and completed its share delivery obligation in connection with its share surrender agreement.

Cash Dividends for Common and Preferred Shares / RSUs. During 2020, 2019 and 2018, the Company paid cash dividends of \$14.52 per share (or \$2,260 million), \$13.20 per share (or \$2,096 million) and \$12.02 per share (or \$1,968 million), respectively.

Share Repurchases. During 2020, the Company repurchased an aggregate of approximately \$1.5 billion of common shares, including the repurchase from PNC described above and 0.8 million common shares under the Company's existing share repurchase program for \$412 million. At December 31, 2020, there were 5.1 million shares still authorized to be repurchased under the program.

The Company's common and preferred shares issued and outstanding and related activity consist of the following:

		Shares Issued				Shares Outstanding			
	Common Shares	Treasury Common Shares	Series B Preferred	Series C Preferred	Common Shares	Series B Preferred	Series C Preferred		
December 31, 2017	171,252,185	(11,275,070)	823,188	246,522	159,977,115	823,188	246,522		
Shares repurchased		(3,511,603)		_	(3,511,603)	-			
Net issuance of common shares related to employee stock transactions PNC LTIP capital contribution	=	1,087,989	=	(103,064)	1,087,989	_	(103,064)		
December 31, 2018	171,252,185	(13,698,684)	823,188	143,458	157,553,501	823,188	143,458		
Shares repurchased Net issuance of common shares related to	_	(4,018,905)	1777	_	(4,018,905)		= =		
employee stock transactions	_	841,184	-	_	841,184		-		
PNC LTIP capital contribution	_		_	(143,458)	^ -	_	(143,458)		
December 31, 2019	171,252,185	(16,876,405)	823,188		154,375,780	823,188			
Shares repurchased Net issuance of common shares related to	_	(3,445,554)	-	-	(3,445,554)	_	_		
employee stock transactions Exchange of preferred shares	_	779,471	-	-	779,471	_	-		
series B for common shares	823,188	_	(823,188)	_	823,188	(823,188)	_		
December 31, 2020	172,075,373	(19,542,488)			152,532,885	_			

24. Restructuring Charge

A restructuring charge of \$60 million (\$47 million after-tax), comprised of \$53 million of severance and \$7 million of expense related to the accelerated amortization of previously granted equity compensation awards, was recorded in the fourth quarter of 2018 in connection with an initiative to modify the size and shape of the workforce.

The table below presents a rollforward of the Company's restructuring liability for the year ended December 31, 2019, which is included in other liabilities on the consolidated statements of financial condition:

(in millions)	
Liability as of December 31, 2018	\$ 53
Cash payments	 (53)
Liability as of December 31, 2019	\$

25. Income Taxes

The components of income tax expense for 2020, 2019 and 2018, are as follows:

(in millions)	2020		2019		2018
Current income tax expense:		50		(0)	
Federal	\$	720 \$	735	\$	605
State and local		86	109		97
Foreign		589	400		600
Total net current income tax expense		1,395	1,244		1,302
Deferred income tax expense (benefit):					
Federal		(66)	15		(71)
State and local		6	7		(1)
Foreign		(97)	(5)		(154)
Total net deferred income tax expense (benefit)		(157)	17		(226)
Total income tax expense	\$	1,238 \$	1,261	\$	1,076

Income tax expense has been based on the following components of income before taxes, less net income (loss) attributable to NCI:

(in millions)	20	020		2019		2018
Domestic	\$	3,805	\$	3,766	\$	3,536
Foreign		2,365	00	1,971	175	3,536 1,845
Total	\$	6,170	\$	5,737	\$	5,381

The foreign income before taxes includes countries that have statutory tax rates that are different than the US federal statutory tax rate of 21%, such as the United Kingdom, Ireland, Canada and Germany.

A reconciliation of income tax expense with expected federal income tax expense computed at the applicable federal income tax rate of 21% for 2020, 2019 and 2018 is as follows:

(in millions)	2020			2019		2018	
Statutory income tax expense	\$ 1,296	21%	\$	1,205	21% \$	1,130	21%
Increase (decrease) in income taxes resulting from:							
State and local taxes (net of federal benefit)	81	1		96	2	99	2
Impact of federal, foreign, state, and local tax rate							
changes on deferred taxes	78	1		5	322	_	-
Stock-based compensation awards	(36)	-		(23)		(64)	(1)
Charitable Contribution	(128)	(2)			-	· <u>-</u>	-
Effect of foreign tax rates	(100)	(2)		(76)	(1)	(119)	(2)
Other	47	1	07	54	_	30	
Income tax expense	\$ 1,238	20%	\$	1,261	22% \$	1,076	20%

Deferred income taxes are provided for the effects of temporary differences between the tax basis of an asset or liability and its reported amount in the consolidated financial statements. These temporary differences result in taxable or deductible amounts in future years.

The components of deferred income tax assets and liabilities are shown below:

		December 31,						
(in millions)		2020		2019				
Deferred income tax assets:	ii aa a							
Compensation and benefits	\$	295	\$	282				
Unrealized investment losses		20		_				
Loss carryforwards		80		84				
Other		659		481				
Gross deferred tax assets		1,054		847				
Less: deferred tax valuation allowances		(26)		(51)				
Deferred tax assets net of valuation allowances		1,028		796				
Deferred income tax liabilities:		VAC 1 (10 - 11)		0.30.0000				
Goodwill and acquired indefinite-lived intangibles		4,096		3,971				
Acquired finite-lived intangibles		159		179				
Unrealized investment gains		_		63				
Other		142		142				
Gross deferred tax liabilities		4,397	(4)	4,355				
Net deferred tax (liabilities)	\$	(3,369)	\$	(3,559)				

Deferred income tax assets and liabilities are recorded net when related to the same tax jurisdiction. At December 31, 2020, the Company recorded on the consolidated statement of financial condition deferred income tax assets, within other assets, and deferred income tax liabilities of \$304 million and \$3,673 million, respectively. At December 31, 2019, the Company recorded on the consolidated statement of financial condition deferred income tax assets, within other assets, and deferred income tax liabilities of \$175 million and \$3,734 million, respectively.

Income tax expense for 2020 included a discrete tax benefit of \$241 million recognized in connection with the Charitable Contribution, partially offset by a noncash net expense of approximately \$79 million associated with the revaluation of certain deferred income tax assets and liabilities related to the legislation enacted in the United Kingdom increasing its corporate tax rate and state and local income tax changes. Income tax expense for 2020 also included \$139 million of net discrete tax benefits, including benefits related to changes in the Company's organizational entity structure and stock-based compensation awards. Income tax expense for 2019 included \$28 million of discrete tax benefits, primarily related to stock-based compensation awards.

At December 31, 2020 and 2019, the Company had available state net operating loss carryforwards of \$2.0 billion and \$1.9 billion, respectively, which will begin to expire in 2022. At December 31, 2020 and 2019, the Company had foreign net operating loss carryforwards of \$102 million and \$110 million, respectively, of which \$2 million will begin to expire in 2021

At December 31, 2020 and 2019, the Company had \$26 million and \$51 million of valuation allowances for deferred income tax assets, respectively, recorded on the consolidated statements of financial condition.

Goodwill recorded in connection with the Quellos Transaction has been reduced during the period by the amount of tax benefit realized from tax-deductible goodwill. See Note 11, Goodwill, for further discussion.

Current income taxes are recorded net on the consolidated statements of financial condition when related to the same tax jurisdiction. At December 31, 2020, the Company had current income taxes receivable and payable of \$175 million and \$131 million, respectively, recorded in other assets and accounts payable and accrued liabilities, respectively. At December 31, 2019, the Company had current income taxes receivable and payable of \$282 million and \$293 million, respectively, recorded in other assets and accounts payable and accrued liabilities, respectively.

The following tabular reconciliation presents the total amounts of gross unrecognized tax benefits:

(in millions)	20	20	2019		2018
Balance at January 1	\$	900	795	\$	629
Additions for tax positions of prior years		31	99		82
Reductions for tax positions of prior years		(8)	(27)		(15)
Additions based on tax positions related to current year		60	47		102
Lapse of statute of limitations		(3)	(4)		(3)
Settlements		(40)	(10)		
Balance at December 31	S	940	900	S	795

Included in the balance of unrecognized tax benefits at December 31, 2020, 2019 and 2018, respectively, are \$565 million, \$513 million and \$462 million of tax benefits that, if recognized, would affect the effective tax rate.

The Company recognizes interest and penalties related to income tax matters as a component of income tax expense. Related to the unrecognized tax benefits noted above, the Company accrued interest and penalties of \$31 million during 2020 and in total, as of December 31, 2020, had recognized a liability for interest and penalties of \$164 million. The Company accrued interest and penalties of \$27 million during 2019 and in total, as of December 31, 2019, had recognized a liability for interest and penalties of \$133 million. The Company accrued interest and penalties of \$30 million during 2018 and in total, as of December 31, 2018, had recognized a liability for interest and penalties of \$106 million.

BlackRock is subject to US federal income tax, state and local income tax, and foreign income tax in multiple jurisdictions. Tax years after 2011 remain open to US federal income tax examination.

In June 2014, the Internal Revenue Service commenced its examination of BlackRock's 2010 through 2012 tax years of which 2010 – 2011 examination is closed. During 2019 and 2020, the Internal Revenue Service commenced its examination of BlackRock's 2013 through 2015 tax years and 2017 through 2018 tax years, respectively. While the examination impact on the Company's consolidated financial statements is undetermined, it is not expected to be material.

The Company is currently under audit in several state and local jurisdictions. The significant state and local income tax examinations are in New York State for tax years 2012 through 2014, New York City for tax years 2009 through 2011, and California for tax years 2015 through 2016. No state and local income tax audits cover years earlier than 2009. No state and local income tax audits are expected to result in an assessment material to BlackRock's consolidated financial statements.

Upon conclusion of its examination, Her Majesty's Revenue and Customs ("HMRC") issued a closure notice during 2017 for various UK BlackRock subsidiaries for tax years 2009 and years after. At that time, the Company decided to pursue litigation for the tax matters included on such notice. During 2020, the Company received a favorable decision from the First Tier Tribunal, however, HMRC has received permission to appeal to the Upper Tribunal. BlackRock does not expect the ultimate resolution to result in a material impact to the consolidated financial statements.

From time to time, BlackRock may receive or be subject to tax authorities' assessments and challenges related to income taxes. BlackRock does not currently expect the ultimate resolution of any existing matters to be material to the consolidated financial statements.

At December 31, 2020, it is reasonably possible the total amounts of unrecognized tax benefits will change within the next twelve months due to completion of tax authorities' exams or the expiration of statues of limitations. Management estimates that the existing liability for uncertain tax positions could decrease by approximately \$5 million to \$15 million within the next twelve months.

26. Earnings Per Share

The following table sets forth the computation of basic and diluted EPS for 2020, 2019 and 2018:

(in millions, except shares and per share data)	2020	2019		2018
Net income attributable to BlackRock, Inc. Basic weighted-average shares outstanding	\$ 4,932 153,489,422	\$ 4,476 156,014,343	\$	4,305 160,301,116
Dilutive effect of: Nonparticipating RSUs	1,275,733	1,445,203		1,647,616
Stock options	75,427			
Total diluted weighted-average shares outstanding	154,840,582	 157,459,546	1100	161,948,732
Basic earnings per share	\$ 32.13	\$ 28.69	\$	26.86
Diluted earnings per share	\$ 31.85	\$ 28.43	\$	26.58

Anti-dilutive RSUs and stock options for 2020, 2019 and 2018 were immaterial. Certain performance-based RSUs were excluded from diluted EPS calculation because the designated contingency was not met for 2020, 2019 and 2018, respectively. In addition, performance-based stock options were excluded from diluted EPS calculation for 2019 and 2018 because the designated contingency was not met.

27. Segment Information

The Company's management directs BlackRock's operations as one business, the asset management business. The Company utilizes a consolidated approach to assess performance and allocate resources. As such, the Company operates in one business segment.

The following table illustrates total revenue for 2020, 2019 and 2018 by geographic region. These amounts are aggregated on a legal entity basis and do not necessarily reflect where the customer resides or affiliated services are provided.

(in millions)							
Revenue	20	2020		2019		2018	
Americas	\$	10,593	\$	9,703	\$	9,303	
Europe		4,940		4,158		4,217	
Asia-Pacific		672		678		678	
Total revenue	\$	16,205	\$	14,539	\$	14,198	

See Note 17, Revenue, for further information on the Company's sources of revenue.

The following table illustrates long-lived assets that consist of goodwill and property and equipment at December 31, 2020 and 2019 by geographic region. These amounts are aggregated on a legal entity basis and do not necessarily reflect where the asset is physically located.

(in millions)					
Long-lived Assets	2020		2019		
Americas	\$	13,784	\$	13,830	
Europe Asia-Pacific		1,360		1,360	
Asia-Pacific		88		87	
Total long-lived assets	\$	15,232	\$	15,277	

Americas is primarily comprised of the United States, Latin America and Canada, while Europe is primarily comprised of the United Kingdom, the Netherlands, France and Luxembourg. Asia-Pacific is primarily comprised of Hong Kong, Australia, Japan and Singapore.

28. Subsequent Events

On January 21, 2021, the Board of Directors approved BlackRock's quarterly dividend of \$4.13 per share to be paid on March 23, 2021 to stockholders of record at the close of business on March 5, 2021.

On February 1, 2021, the Company completed the acquisition of 100% of the equity interests of Aperio, a pioneer in customizing tax-optimized index equity separately managed accounts ("SMAs") for approximately \$1.1 billion in cash, using existing cash resources. The acquisition of Aperio increased BlackRock's SMA assets and is expected to expand the breadth of the Company's capabilities via tax-managed strategies across factors, broad market indexing, and investor Environmental, Social, and Governance preferences across all asset classes. In connection with the acquisition, the Company recorded an initial estimate of purchase price allocation at the date of the transaction primarily related to goodwill of approximately \$0.8 billion and \$0.3 billion of finite-lived intangible assets (mainly customer relationships), which will be amortized over their estimated lives, which range from 10 to 12 years, with a weighted-average estimated life of approximately 10 years. The goodwill recognized in connection with the acquisition is primarily attributable to anticipated synergies from the transaction. The amount of goodwill expected to be deductible for tax purposes is approximately \$0.5 billion.

The Company conducted a review for additional subsequent events and determined that no subsequent events had occurred that would require accrual or additional disclosures.