UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2019
or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number 001-09718

The PNC Financial Services Group, Inc.
(Exact name of registrant as specified in its charter)

Pennsylvania	**25-1435979**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

The Tower at PNC Plaza , 300 Fifth Avenue, Pittsburgh, Pennsylvania 15222-2401
(Address of principal executive offices, including zip code)

(888) 762-2265
(Registrant's telephone number including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value $5.00	PNC	New York Stock Exchange
Depositary Shares Each Representing a 1/4,000 Interest in a Share of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series P	PNC P	New York Stock Exchange
Depositary Shares Each Representing a 1/4,000 Interest in a Share of 5.375% Non-Cumulative Perpetual Preferred Stock, Series Q	PNC Q	New York Stock Exchange

As of October 17, 2019, there were 438,170,412 shares of the registrant's common stock ($5 par value) outstanding.

Cross-Reference Index to Third Quarter 2019 Form 10-Q

MD&A TABLE REFERENCE

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS TABLE REFERENCE

FINANCIAL REVIEW

THE PNC FINANCIAL SERVICES GROUP, INC.

This Financial Review, including the Consolidated Financial Highlights, should be read together with our unaudited Consolidated Financial Statements and unaudited Statistical Information included elsewhere in this Quarterly Report on Form 10-Q (the Report or Form 10-Q) and with Items 6, 7, 8 and 9A of our 2018 Annual Report on Form 10-K (2018 Form 10-K). We have reclassified certain prior period amounts to conform with the current period presentation, which we believe is more meaningful to readers of our consolidated financial statements. For information regarding certain business, regulatory and legal risks, see the following: the Risk Management section of this Financial Review and of Item 7 in our 2018 Form 10-K; Item 1A Risk Factors included in our 2018 Form 10-K; and the Legal Proceedings and Commitments Notes of the Notes To Consolidated Financial Statements included in Item 1 of this Report and Item 8 of our 2018 Form 10-K. Also, see the Cautionary Statement Regarding Forward-Looking Information section in this Financial Review and the Critical Accounting Estimates And Judgments section in this Financial Review and in our 2018 Form 10-K for certain other factors that could cause actual results or future events to differ, perhaps materially, from historical performance and from those anticipated in the forward-looking statements included in this Report. See Note 14 Segment Reporting in the Notes To Consolidated Financial Statements included in this Report for a reconciliation of total business segment earnings to total PNC consolidated net income as reported on a generally accepted accounting principles (GAAP) basis. In this Report, "PNC", "we" or "us" 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.

Table 1: Consolidated Financial Highlights

Dollars in millions, except per share data Unaudited	Three months ended September 30 2019	 2018	Nine months ended September 30 2019	 2018
Financial Results (a)				
Revenue				
Net interest income	$ 2,504	$ 2,466	$ 7,477	$ 7,240
Noninterest income	1,989	1,891	5,741	5,552
Total revenue	4,493	4,357	13,218	12,792
Provision for credit losses	183	88	552	260
Noninterest expense	2,623	2,608	7,812	7,719
Income before income taxes and noncontrolling interests	$ 1,687	$ 1,661	$ 4,854	$ 4,813
Net income	$ 1,392	$ 1,400	$ 4,037	$ 3,995
Less:				
Net income attributable to noncontrolling interests	13	11	35	31
Preferred stock dividends	63	63	181	181
Preferred stock discount accretion and redemptions	1	1	3	3
Net income attributable to common shareholders	1,315	1,325	3,818	3,780
Less:				
Dividends and undistributed earnings allocated to participating securities	6	6	15	16
Impact of BlackRock earnings per share dilution	2	2	7	7
Net income attributable to diluted common shares	$ 1,307	$ 1,317	$ 3,796	$ 3,757
Diluted earnings per common share	$ 2.94	$ 2.82	$ 8.42	$ 7.96
Cash dividends declared per common share	$ 1.15	$ .95	$ 3.05	$ 2.45
Effective tax rate (b)	17.5%	15.7%	16.8%	17.0%
Performance Ratios				
Net interest margin (c)	2.84%	2.99%	2.91%	2.95%
Noninterest income to total revenue	44%	43%	43%	43%
Efficiency	58%	60%	59%	60%
Return on:				
Average common shareholders' equity	11.56%	12.32%	11.48%	11.83%
Average assets	1.36%	1.47%	1.36%	1.42%

(a) The Executive Summary and Consolidated Income Statement Review portions of this Financial Review section provide information regarding items impacting the comparability of the periods presented.

(b) The effective income 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.

(c) 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) in the Statistical Information (Unaudited) section in Item 1 of this Report.

Table 1: Consolidated Financial Highlights (Continued) (a)

Unaudited	September 30 2019	December 31 2018	September 30 2018
Balance Sheet Data (dollars in millions, except per share data)			
Assets	$ 408,916	$ 382,315	$ 380,080
Loans	$ 237,377	$ 226,245	$ 223,053
Allowance for loan and lease losses	$ 2,738	$ 2,629	$ 2,584
Interest-earning deposits with banks (b)	$ 19,036	$ 10,893	$ 19,800
Investment securities	$ 87,883	$ 82,701	$ 80,804
Loans held for sale	$ 1,872	$ 994	$ 1,108
Equity investments (c)	$ 13,325	$ 12,894	$ 12,446
Mortgage servicing rights	$ 1,483	$ 1,983	$ 2,136
Goodwill	$ 9,233	$ 9,218	$ 9,218
Other assets	$ 35,774	$ 34,408	$ 28,851
Noninterest-bearing deposits	$ 74,077	$ 73,960	$ 74,736
Interest-bearing deposits	$ 211,506	$ 193,879	$ 190,148
Total deposits	$ 285,583	$ 267,839	$ 264,884
Borrowed funds	$ 61,354	$ 57,419	$ 57,955
Total shareholders' equity	$ 49,420	$ 47,728	$ 47,058
Common shareholders' equity	$ 45,428	$ 43,742	$ 43,076
Accumulated other comprehensive income (loss)	$ 837	$ (725)	$ (1,260)
Book value per common share	$ 103.37	$ 95.72	$ 93.22
Period-end common shares outstanding (in millions)	439	457	462
Loans to deposits	83 %	84 %	84 %
Common shareholders' equity to total assets	11.1 %	11.4 %	11.3 %
Client Assets (in billions)			
Discretionary client assets under management	$ 163	$ 148	$ 159
Nondiscretionary client assets under administration	135	124	134
Total client assets under administration	298	272	293
Brokerage account client assets	52	47	51
Total client assets	$ 350	$ 319	$ 344
Basel III Capital Ratios (d)			
Common equity Tier 1	9.6 %	9.6 %	9.3 %
Tier 1 risk-based	10.7 %	10.8 %	10.5 %
Total capital risk-based (e)	12.7 %	13.0 %	12.7 %
Leverage	9.3 %	9.4 %	9.2 %
Supplementary leverage	7.8 %	7.8 %	7.7 %
Asset Quality			
Nonperforming loans to total loans	.73 %	.75 %	.76 %
Nonperforming assets to total loans, OREO and foreclosed assets	.78 %	.80 %	.82 %
Nonperforming assets to total assets	.45 %	.47 %	.48 %
Net charge-offs to average loans (for the three months ended) (annualized)	.26 %	.19 %	.16 %
Allowance for loan and lease losses to total loans	1.15 %	1.16 %	1.16 %
Allowance for loan and lease losses to total nonperforming loans	158 %	155 %	153 %
Accruing loans past due 90 days or more (in millions)	$ 532	$ 629	$ 619

(a) The Executive Summary and Consolidated Balance Sheet Review portions of this Financial Review provide information regarding items impacting the comparability of the periods presented.
(b) Amounts include balances held with the Federal Reserve Bank of Cleveland (Federal Reserve Bank) of $ 18.8 billion, $ 10.5 billion and $ 19.6 billion as of September 30, 2019, December 31, 2018 and September 30, 2018, respectively.
(c) Amounts include our equity interest in BlackRock, Inc..
(d) All ratios are calculated based on the standardized approach. See Basel III Capital discussion in the Capital Management portion of the Risk Management section of this Financial Review and the capital discussion in the Banking Regulation and Supervision section of Item 1 Business and Item 1A Risk Factors in our 2018 Form 10-K.
(e) The 2019 and 2018 Basel III Total risk-based capital ratios include nonqualifying trust preferred capital securities of $60 million and $80 million, respectively, that are subject to a phase-out period that runs through 2021.

Executive Summary

Headquartered in Pittsburgh, Pennsylvania, we are one of the largest diversified financial services companies in the United States. 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 in markets across the Mid-Atlantic, Midwest and Southeast. We also have strategic international offices in four countries outside the U.S.

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 expand and deepen customer 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 client growth 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 Capital Highlights portion of this Executive Summary and the Liquidity and Capital Management portion of the Risk Management section of this Financial Review and the Supervision and Regulation section in Item 1 Business of our 2018 Form 10-K.

Income Statement Highlights

Net income of $1.4 billion, or $2.94 per diluted common share for the third quarter of 2019 decreased $8 million, or 1%, compared to $1.4 billion, or $2.82 per diluted common share, for the third quarter of 2018.
- Total revenue increased $136 million, or 3%, to $4.5 billion.
  - Net interest income of $2.5 billion increased $38 million, or 2%.
  - Net interest margin decreased to 2.84% compared to 2.99% for the third quarter of 2018.
  - Noninterest income of $2.0 billion increased $98 million, or 5%.
- Provision for credit losses increased to $183 million from $88 million for the third quarter of 2018.
- Noninterest expense of $2.6 billion increased $15 million, or 1%.
- We generated positive operating leverage in the third quarter of 2019.
- Earnings per diluted common share increased reflecting lower average common shares outstanding due to share repurchases.

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

Balance Sheet Highlights

Our balance sheet was strong and well positioned at September 30, 2019 and December 31, 2018. In comparison to December 31, 2018:
- Total assets increased $26.6 billion, or 7%, to $408.9 billion.
- Total loans increased $11.1 billion, or 5%, to $237.4 billion.
  - Total commercial lending grew $7.9 billion, or 5%, to $160.2 billion.
  - Total consumer lending increased $3.2 billion, or 4%, to $77.2 billion.
- Investment securities increased $5.2 billion, or 6%, to $87.9 billion.
- Interest-earning deposits with banks, primarily with the Federal Reserve Bank, increased $8.1 billion to $19.0 billion.
- Total deposits increased $17.7 billion, or 7%, to $285.6 billion.
- Borrowed funds increased $3.9 billion, or 7%, to $61.4 billion.

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

Credit Quality Highlights

Overall credit quality remained strong.

- At September 30, 2019 compared to December 31, 2018:
    - Nonperforming assets of $1.8 billion increased $39 million, or 2%.
    - Overall loan delinquencies decreased $137 million, or 9%, to $1.3 billion.
- Net charge-offs were $155 million, or .26% of average loans on annualized basis, in the third quarter of 2019 compared to $91 million, or .16%, for the third quarter of 2018.
- The allowance for loan and lease losses (ALLL) to total loans was 1.15% at September 30, 2019 and 1.16% at December 31, 2018.

For additional detail, see the Credit Risk Management portion of the Risk Management section of this Financial Review.

Capital Highlights

We maintained a strong capital position and continued to return capital to shareholders.

- The Basel III common equity Tier 1 capital ratio was 9.6% at both September 30, 2019 and December 31, 2018.
- Common shareholders' equity increased to $45.4 billion at September 30, 2019 compared to $43.7 billion at December 31, 2018.
- In the third quarter of 2019, we returned $1.5 billion of capital to shareholders through repurchases of 7.5 million common shares for $1.0 billion and dividends on common shares of $.5 billion.
- For the nine months ended September 30, 2019, we returned $3.9 billion of capital to shareholders through repurchases of 19.4 million common shares for $2.5 billion and dividends on common shares of $1.4 billion.

See the Liquidity and Capital Management portion of the Risk Management section of this Financial Review for more detail on our 2019 liquidity and capital actions as well as our capital ratios.

Our ability to take certain capital actions, including plans to pay or increase common stock dividends or to repurchase shares under current or future programs, is subject to the results of the supervisory assessment of capital adequacy undertaken by the Board of Governors of the Federal Reserve System (Federal Reserve) as part of the Comprehensive Capital Analysis and Review (CCAR) process. For additional information, see the Supervision and Regulation section in Item 1 Business of our 2018 Form 10-K.

Business Outlook

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:

- U.S. economic growth, after accelerating a few years ago, has slowed since mid-2018 and is expected to slow further through the rest of this year and into 2020.
- Job growth will continue into 2020, but at a slower pace due to both difficulty in finding workers and slower economic growth. The unemployment rate is expected to increase slightly in the near term, but the labor market will remain tight, pushing wages higher and supporting continued gains in consumer spending.
- Slower global economic growth, trade restrictions and geopolitical concerns are downside risks to the forecast, which have increased in 2019, and risks are weighted to the downside.
- Inflation has slowed in 2019, to below the Federal Open Market Committee's (FOMC's) 2% objective, but is expected to gradually increase over the next two years.
- Our baseline forecast includes the 0.25% federal funds rate cut on October 30, 2019. We expect the funds rate to remain in a range of 1.50% to 1.75% through the rest of 2019.

For the fourth quarter of 2019 compared to the third quarter of 2019, we expect:

- Average loans to be up approximately 1%;
- Net interest income to be down approximately 1%;
- Fee income to be stable to up 1%. Fee income consists of asset management, consumer services, corporate services, residential mortgage and service charges on deposits;
- Other noninterest income to be in the range of $300 million to $350 million, excluding net securities gains (losses) and activity related to Visa Class B common shares;
- Provision for credit losses to be between $175 million and $225 million; and
- Noninterest expense to be up approximately 1%.

For the full year 2019, we expect the effective tax rate to be approximately 17%.

See the Cautionary Statement Regarding Forward-Looking Information section in this Financial Review and Item 1A Risk Factors in our2018 Form 10-K for other factors that could cause future events to differ, perhaps materially, from those anticipated in these forward-looking statements.

Consolidated Income Statement Review

Our Consolidated Income Statement is presented in Part I, Item 1 of this Report.

Net income for the third quarter of 2019 was $1.4 billion, or $2.94 per diluted common share, a decrease of $8 million, or 1%, compared to $1.4 billion, or $2.82 per diluted common share, for the third quarter of 2018. For the first nine months of 2019, net income was $4.0 billion, or $8.42 per diluted common share, an increase of $42 million, or 1%, compared to $4.0 billion, or $7.96 per diluted common share, for the first nine months of 2018.

Net income decreased slightly compared to the third quarter of 2018 as a result of higher provision for credit losses and noninterest expense, partially offset by increases in noninterest income and net interest income. Net income increased compared to the first nine months of 2018 driven by higher net interest income and noninterest income, partially offset by increases in provision for credit losses and noninterest expense.

Net Interest Income

Table 2: Summarized Average Balances and Net Interest Income (a)

Three months ended September 30 Dollars in millions	2019 Average Balances	2019 Average Yields/ Rates	2019 Interest Income/ Expense	2018 Average Balances	2018 Average Yields/ Rates	2018 Interest Income/ Expense
Assets						
Interest-earning assets						
Investment securities	$ 85,166	2.91%	$ 622	$ 80,766	2.92%	$ 591
Loans	237,682	4.47%	2,698	223,342	4.36%	2,474
Interest-earning deposits with banks	15,632	2.17%	85	19,151	1.97%	95
Other	14,094	3.49%	123	7,114	5.19%	92
Total interest-earning assets/interest income	$ 352,574	3.95%	3,528	$ 330,373	3.89%	3,252
Liabilities						
Interest-bearing liabilities						
Interest-bearing deposits	$ 206,942	1.02%	531	$ 186,320	.71%	336
Borrowed funds	63,933	2.87%	468	59,838	2.76%	421
Total interest-bearing liabilities/interest expense	$ 270,875	1.45%	999	$ 246,158	1.21%	757
Net interest margin/income (Non-GAAP)		2.84%	2,529		2.99%	2,495
Taxable-equivalent adjustments			(25)			(29)
Net interest income (GAAP)			$ 2,504			$ 2,466

Nine months ended September 30 Dollars in millions	2019 Average Balances	2019 Average Yields/ Rates	2019 Interest Income/ Expense	2018 Average Balances	2018 Average Yields/ Rates	2018 Interest Income/ Expense
Assets						
Interest-earning assets						
Investment securities	$ 83,719	3.00%	$ 1,884	$ 77,656	2.87%	$ 1,674
Loans	233,724	4.54%	8,013	222,385	4.23%	7,091
Interest-earning deposits with banks	14,708	2.32%	256	21,921	1.74%	286
Other	12,780	3.70%	354	7,305	4.74%	259
Total interest-earning assets/interest income	$ 344,931	4.04%	10,507	$ 329,267	3.75%	9,310
Liabilities						
Interest-bearing liabilities						
Interest-bearing deposits	$ 201,371	1.01%	1,518	$ 184,716	.59%	810
Borrowed funds	62,033	3.05%	1,433	59,481	2.60%	1,173
Total interest-bearing liabilities/interest expense	$ 263,404	1.48%	2,951	$ 244,197	1.08%	1,983
Net interest margin/income (Non-GAAP)		2.91%	7,556		2.95%	7,327
Taxable-equivalent adjustments			(79)			(87)
Net interest income (GAAP)			$ 7,477			$ 7,240

(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 1 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 section of this Report for additional information.

Net interest income increased $38 million, or 2%, and $237 million, or 3%, for the third quarter and first nine months of 2019, respectively, compared to the same periods in 2018. The increase in both comparisons reflected higher loan and securities balances and higher loan yields, partially offset by higher deposit and borrowing costs and balances. Net interest margin in both comparisons decreased as higher loan yields were more than offset by higher deposit costs.

Average investment securities increased $4.4 billion, or 5%, in the quarterly comparison and $6.1 billion, or 8% in the year-to-date comparison. Both increases were due to net purchase activity of agency residential mortgage-backed securities, U.S. Treasury and government agency securities and commercial mortgage-backed securities, partially offset by lower non-agency residential mortgage-backed securities and other securities.

Average investment securities represented 24% of average interest-earning assets for all periods presented.

Average loans grew $14.3 billion, or 6%, and $11.3 billion, or 5%, in the quarterly and year-to-date comparisons, respectively. Loan growth was driven by increases in commercial lending of $11.5 billion, or 8%, and $9.5 billion, or 6%, in the respective comparisons, reflecting broad-based growth primarily in the Corporate Banking and Business Credit businesses in our Corporate & Institutional Banking segment.

Average consumer lending increased $2.8 billion, or 4%, and $1.8 billion, or 2%, in the quarterly and year-to-date comparisons, respectively. Growth in residential mortgage, auto, credit card and unsecured installment loans was partially offset by declines in home equity and education loans. Lower home equity loans reflected paydowns and payoffs exceeding new originated volume. In addition, runoff of brokered home equity and government guaranteed education loans contributed to the declines. Average loans represented 67% of average interest-earning assets for the third quarter of 2019 compared to 68% for the third quarter of 2018 and both year-to-date periods.

Average interest-earning deposits with banks decreased $3.5 billion and $7.2 billion in the respective quarterly and year-to-date comparisons, reflecting lower average balances held with the Federal Reserve Bank as investment of liquidity continued.

Average interest-bearing deposits grew $20.6 billion, or 11%, and $16.7 billion, or 9%, in the respective quarterly and year-to-date comparisons, reflecting overall deposit and customer growth. Additionally, the increases reflected a shift of deposits to interest-bearing from noninterest-bearing deposits, which declined $4.0 billion and $4.9 billion in the respective comparisons. Consumer deposit growth from the retail national expansion strategy also contributed to the deposit increases.

Average borrowed funds increased $4.1 billion, or 7%, compared with the third quarter of 2018 primarily due to higher Federal Home Loan Bank (FHLB) borrowings. Average borrowed funds increased $2.6 billion, or 4%, compared with the first nine months of 2018 primarily due to higher FHLB borrowings and federal funds purchased partially offset by lower bank notes and senior debt.

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

Noninterest Income

Table 3: Noninterest Income

	Three months ended September 30				Nine months ended September 30			
			Change				Change	
Dollars in millions	2019	2018	$	%	2019	2018	$	%
Noninterest income								
Asset management	$ 464	$ 486	$ (22)	(5)%	$ 1,346	$ 1,397	$ (51)	(4)%
Consumer services	402	377	25	7 %	1,165	1,115	50	4 %
Corporate services	469	465	4	1 %	1,415	1,381	34	2 %
Residential mortgage	134	76	58	76 %	281	257	24	9 %
Service charges on deposits	178	186	(8)	(4)%	517	522	(5)	(1)%
Other	342	301	41	14 %	1,017	880	137	16 %
Total noninterest income	$ 1,989	$ 1,891	$ 98	5 %	$ 5,741	$ 5,552	$ 189	3 %

Noninterest income to total revenue was 44% for the third quarter of 2019 and 43% for the third quarter of 2018 and first nine months of both 2019 and 2018.

Asset management revenue declined in both periods due to lower earnings from our equity investment in BlackRock and lower yielding assets under management for both periods. PNC's discretionary client assets under management increased to $163 billion at September 30, 2019 compared to $159 billion at September 30, 2018 as a result of increases in equity markets.

Growth in consumer services revenue in both comparisons resulted from higher debit and credit card fees, net of rewards, and higher brokerage fees, reflecting continued momentum in both transaction activity and customer growth.

Corporate services revenue increased in both comparisons due to higher treasury management product revenue, partially offset by lower merger and acquisition advisory fees. The year-to-date comparison also reflected a decrease in loan syndication fees.

Residential mortgage revenue increased in both comparisons due to a higher benefit from residential mortgage servicing rights, net of economic hedge, and higher loan sales revenue from increased origination volumes.

Other noninterest income for the third quarter of 2019 increased over the third quarter of 2018 primarily attributable to higher capital markets-related revenue, the benefit of lower negative Visa Class B derivative fair value adjustments and higher net gains on commercial mortgage loans held for sale partially offset by lower revenue from private equity investments. Other noninterest income increased in the first nine months of 2019 compared to 2018 primarily due to higher gains on asset sales, including the sale of the retirement recordkeeping business in second quarter 2019 and higher net securities gains, partially offset by larger negative derivative fair value adjustments related to Visa Class B common shares and lower revenue from private equity investments.

Provision For Credit Losses

The provision for credit losses increased $95 million to $183 million in the third quarter of 2019 compared to $88 million in the third quarter of 2018 and increased $292 million to $552 million for the first nine months of 2019 compared to the same period in 2018. The increases reflected growth in both the commercial and consumer lending portfolios and included higher reserves for auto and credit card loans.

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

Noninterest Expense

Table 4: Noninterest Expense

	Three months ended September 30				Nine months ended September 30			
			Change				Change	
Dollars in millions	2019	2018	$	%	2019	2018	$	%
Noninterest expense								
Personnel	$ 1,400	$ 1,413	$ (13)	(1)%	$ 4,179	$ 4,123	$ 56	1 %
Occupancy	206	195	11	6 %	633	616	17	3 %
Equipment	291	264	27	10 %	862	818	44	5 %
Marketing	76	71	5	7 %	224	201	23	11 %
Other	650	665	(15)	(2)%	1,914	1,961	(47)	(2)%
Total noninterest expense	$ 2,623	$ 2,608	$ 15	1 %	$ 7,812	$ 7,719	$ 93	1 %

Noninterest expense increased in both comparisons as investments in support of business growth were reflected in higher equipment and occupancy expense as well as higher marketing expense, which included costs for the retail national expansion strategy. In the third quarter of 2019, personnel expense declined due to lower variable compensation and in both comparisons other expense decreased as a result of lower Federal Deposit Insurance Corporation (FDIC) deposit insurance cost from the elimination of the surcharge assessment.

PNC continued to focus on disciplined expense management, and for full-year2019 we are on track to achieve our goal of $300 million in cost savings through our continuous improvement program, which will contribute to funding a portion of our technology and business investments.

Effective Income Tax Rate

The effective income tax rate was17.5% in the third quarter of 2019 compared to 15.7% in the third quarter of 2018 and 16.8% in the first nine months of 2019 compared to 17.0% in the same period of 2018.

CONSOLIDATED BALANCE SHEET REVIEW

Table 5: Summarized Balance Sheet Data

Dollars in millions	September 30 2019	December 31 2018	Change $	Change %
Assets				
Interest-earning deposits with banks	$ 19,036	$ 10,893	$ 8,143	75 %
Loans held for sale	1,872	994	878	88 %
Investment securities	87,883	82,701	5,182	6 %
Loans	237,377	226,245	11,132	5 %
Allowance for loan and lease losses	(2,738)	(2,629)	(109)	(4)%
Mortgage servicing rights	1,483	1,983	(500)	(25)%
Goodwill	9,233	9,218	15	—
Other	54,770	52,910	1,860	4 %
Total assets	$ 408,916	$ 382,315	$ 26,601	7 %
Liabilities				
Deposits	$ 285,583	$ 267,839	$ 17,744	7 %
Borrowed funds	61,354	57,419	3,935	7 %
Other	12,524	9,287	3,237	35 %
Total liabilities	359,461	334,545	24,916	7 %
Equity				
Total shareholders' equity	49,420	47,728	1,692	4 %
Noncontrolling interests	35	42	(7)	(17)%
Total equity	49,455	47,770	1,685	4 %
Total liabilities and equity	$ 408,916	$ 382,315	$ 26,601	7 %

The summarized balance sheet data in Table 5 is based upon our Consolidated Balance Sheet in Part I, Item 1 of this Report.

Our balance sheet was strong and well positioned at bothSeptember 30, 2019 and December 31, 2018.

- Total assets increased as a result of loan growth, higher interest-earning deposits with banks and higher investment securities;
- Total liabilities increased due to deposit growth and higher borrowed funds;
- Total equity increased due to higher retained earnings driven by net income partially offset by share repurchases and common and preferred dividends and as a result of higher accumulated other comprehensive income (AOCI).

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 in this Financial Review and in Note 18 Regulatory Matters in the Notes To Consolidated Financial Statements included in our 2018 Form 10-K.

Loans

Table 6: Loans

Dollars in millions	September 30 2019	December 31 2018	Change $	Change %
Commercial lending				
Commercial	$ 124,014	$ 116,834	$ 7,180	6 %
Commercial real estate	28,884	28,140	744	3 %
Equipment lease financing	7,290	7,308	(18)	—
Total commercial lending	160,188	152,282	7,906	5 %
Consumer lending				
Home equity	24,971	26,123	(1,152)	(4)%
Residential real estate	21,082	18,657	2,425	13 %
Automobile	16,004	14,419	1,585	11 %
Credit card	6,815	6,357	458	7 %
Education	3,461	3,822	(361)	(9)%
Other consumer	4,856	4,585	271	6 %
Total consumer lending	77,189	73,963	3,226	4 %
Total loans	$ 237,377	$ 226,245	$ 11,132	5 %

Commercial loans increased reflecting broad-based growth across our Corporate Banking and Business Credit businesses within our Corporate & Institutional Banking segment. In Corporate Banking, commercial loan growth was primarily driven by asset-backed finance securitizations as well as increased lending to large and mid-size corporate clients. In Business Credit, commercial loans increased as a result of new originations and higher utilization. Commercial real estate loans increased due to higher commercial mortgage balances, partially offset by project loan payoffs.

For commercial 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 Financial Review.

Consumer lending balances increased as growth in residential real estate, auto, credit card and other consumer loans was partially offset by lower home equity and education loans.

Residential real estate loans increased primarily from originations of nonconforming loans, which are loans that do not meet government agency standards as a result of exceeding agency conforming loan limits. The growth in auto loans reflected higher indirect auto loans from continued new loan originations and expansion into franchised dealers in new markets as well as growth in direct auto loans. Credit card balances increased as we continued to focus on our long-term objective of deepening penetration within our existing customer base as well as new client acquisition. The growth in other consumer balances due to unsecured installment loans was driven by product enhancements, including a new mobile-optimized digital application.

Home equity loans declined as paydowns and payoffs exceeded new originated volume and brokered home equity loans continued to run off. Education loans declined primarily due to continued runoff of the government guaranteed education loan portfolio.

For information on our 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 Financial Review.

For additional information regarding our loan portfolio see the Note3 Asset Quality and Note 4 Allowance for Loan and Lease Losses in our Notes To Consolidated Financial Statements included in this Report, and Note 1 Accounting Policies in our 2018 Form 10-K.

Investment Securities

Investment securities of $87.9 billion at September 30, 2019 increased $5.2 billion, or 6%, compared to December 31, 2018, driven by net purchases and changes in unrealized gains and losses of agency residential mortgage backed securities of $5.4 billion.

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 the Liquidity Coverage Ratio (LCR) and other internal and external guidelines and constraints.

Table 7: Investment Securities

	September 30, 2019		December 31, 2018		Ratings (a) as of September 30, 2019				
Dollars in millions	Amortized Cost	Fair Value	Amortized Cost	Fair Value	AAA/ AA	A	BBB	BB and Lower	No Rating
U.S. Treasury and government agencies	$ 18,369	$ 18,852	$ 18,862	$ 18,863	100%				
Agency residential mortgage-backed	49,657	50,330	45,153	44,407	100%				
Non-agency residential mortgage-backed	1,766	2,078	2,076	2,365	13%	2%	2%	47%	36%
Agency commercial mortgage-backed	2,998	3,031	2,773	2,720	100%				
Non-agency commercial mortgage-backed (b)	3,658	3,701	3,177	3,145	87%	4%			9%
Asset-backed (c)	5,310	5,394	5,115	5,155	89%	2%	1%	7%	1%
Other (d)	4,687	4,881	5,670	5,753	73%	16%	8%	1%	2%
Total investment securities (e)	$ 86,445	$ 88,267	$ 82,826	$ 82,408	96%	1%	1%	1%	1%

(a) Ratings percentages allocated based on amortized cost.
(b) Collateralized primarily by retail properties, office buildings, lodging properties and multifamily housing.
(c) Collateralized primarily by corporate debt, government guaranteed education loans and other consumer credit products.
(d) Includes state and municipal securities.
(e) Includes available for sale and held to maturity securities, which are recorded on our balance sheet at fair value and amortized cost, respectively.

Table 7 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 current 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.

The duration of investment securities was 2.4 years at September 30, 2019. We estimate that at September 30, 2019 the effective duration of investment securities was 2.5 years for an immediate 50 basis points parallel increase in interest rates and 2.2 years for an immediate 50 basis points parallel decrease in interest rates.

Based on expected prepayment speeds, the weighted-average expected maturity of the investment securities portfolio was 3.8 years at September 30, 2019 compared to 5.3 years at December 31, 2018.

Table 8: Weighted-Average Expected Maturities of Mortgage and Asset-Backed Debt Securities

September 30, 2019	Years
Agency residential mortgage-backed	3.6
Non-agency residential mortgage-backed	6.6
Agency commercial mortgage-backed	4.1
Non-agency commercial mortgage-backed	2.6
Asset-backed	2.0

Additional information regarding our investment securities is included in Note 5 Investment Securities and Note 6 Fair Value in the Notes To Consolidated Financial Statements included in this Report.

Funding Sources

Table 9: Details of Funding Sources

	September 30	December 31	Change	
Dollars in millions	2019	2018	$	%
Deposits				
Noninterest-bearing	$ 74,077	$ 73,960	$ 117	—
Interest-bearing				
Money market	55,215	53,368	1,847	3 %
Demand	69,161	65,211	3,950	6 %
Savings	65,195	56,793	8,402	15 %
Time deposits	21,935	18,507	3,428	19 %
Total interest-bearing deposits	211,506	193,879	17,627	9 %
Total deposits	285,583	267,839	17,744	7 %
Borrowed funds				
FHLB borrowings	21,901	21,501	400	2 %
Bank notes and senior debt	27,148	25,018	2,130	9 %
Subordinated debt	5,473	5,895	(422)	(7)%
Other	6,832	5,005	1,827	37 %
Total borrowed funds	61,354	57,419	3,935	7 %
Total funding sources	$ 346,937	$ 325,258	$ 21,679	7 %

Total deposits increased with growth primarily in interest-bearing deposits, including a shift from noninterest-bearing deposits driven by a higher rate environment in the comparison. The increase in deposits reflected both commercial and consumer deposit growth, including from the retail national expansion strategy which contributed to the increase in savings. Interest-bearing demand deposits at September 30, 2019 included $3.9 billion of balances for a new sweep deposit product for asset management clients previously held off-balance sheet primarily in PNC proprietary money market mutual funds.

Borrowed funds increased due to higher bank notes and senior debt as a result of net issuances in the first nine months of 2019. The increase in other borrowed funds included higher federal funds purchased. 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 Financial Review for additional information regarding our 2019 liquidity and capital activities.

Shareholders' Equity

Total shareholders' equity was $49.4 billion at September 30, 2019, an increase of $1.7 billion compared to December 31, 2018. The increase resulted from net income of $4.0 billion and higher AOCI of $1.6 billion primarily related to net unrealized securities gains, partially offset by common share repurchases of $2.5 billion and common and preferred dividends of $1.6 billion.

Common shares outstanding declined to 439 million at September 30, 2019 from 457 million at December 31, 2018 as repurchases of 19.4 million shares during the period were partially offset by stock-based compensation activity.

Business Segments Review

We have four reportable business segments:

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

Business segment results and a description of each business are included in Note 14 Segment Reporting in the Notes To Consolidated Financial Statements in this Report. Certain amounts included in this Business Segments Review differ from those amounts shown in Note 14, primarily due to the presentation in this Financial Review of business net interest income on a taxable-equivalent basis.

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. These differences are reflected in the "Other" category as shown in Table 71 in Note 14 Segment Reporting in Item 1 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, other-than-temporary impairment of 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, gains or losses related to BlackRock transactions, exited businesses, and differences between business segment performance reporting and financial statement reporting (GAAP), including the presentation of net income attributable to noncontrolling interests as the segments' results exclude their portion of net income attributable to noncontrolling interests.

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. In 2018, we launched our national expansion strategy designed to grow customers with digitally-led banking and an ultra-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.

Table 10: Retail Banking Table

(Unaudited) Nine months ended September 30 Dollars in millions, except as noted	2019	2018	Change $	Change %
Income Statement				
Net interest income	$ 4,118	$ 3,800	$ 318	8 %
Noninterest income	1,996	1,935	61	3 %
Total revenue	6,114	5,735	379	7 %
Provision for credit losses	356	254	102	40 %
Noninterest expense	4,531	4,491	40	1 %
Pretax earnings	1,227	990	237	24 %
Income taxes	291	239	52	22 %
Earnings	$ 936	$ 751	$ 185	25 %
Average Balance Sheet				
Loans held for sale	$ 586	$ 662	$ (76)	(11)%
Loans				
Consumer				
Home equity	$ 22,679	$ 24,188	$ (1,509)	(6)%
Automobile	15,201	13,643	1,558	11 %
Education	3,672	4,208	(536)	(13)%
Credit cards	6,403	5,746	657	11 %
Other	2,187	1,794	393	22 %
Total consumer	50,142	49,579	563	1 %
Commercial and commercial real estate	10,440	10,397	43	—
Residential mortgage	15,806	13,767	2,039	15 %
Total loans	$ 76,388	$ 73,743	$ 2,645	4 %
Total assets	$ 92,282	$ 89,259	$ 3,023	3 %
Deposits				
Noninterest-bearing demand	$ 31,338	$ 30,555	$ 783	3 %
Interest-bearing demand	42,207	42,172	35	—
Money market	25,786	30,656	(4,870)	(16)%
Savings	55,659	46,091	9,568	21 %
Certificates of deposit	12,619	11,957	662	6 %
Total deposits	$ 167,609	$ 161,431	$ 6,178	4 %
Performance Ratios				
Return on average assets	1.36%	1.12%		
Noninterest income to total revenue	33%	34%		
Efficiency	74%	78%		

Nine months ended September 30 Dollars in millions, except as noted	2019	2018	Change $	Change %
Supplemental Noninterest Income Information				
Consumer services	$ 881	$ 837	$ 44	5 %
Brokerage	$ 267	$ 260	$ 7	3 %
Residential mortgage	$ 281	$ 257	$ 24	9 %
Service charges on deposits	$ 504	$ 503	$ 1	—
Residential Mortgage Information				
Residential mortgage servicing statistics (in billions, except as noted) (a)				
Serviced portfolio balance (b)	$ 123	$ 127	$ (4)	(3)%
Serviced portfolio acquisitions	$ 9	$ 10	$ (1)	(10)%
MSR asset value (b)	$ 0.9	$ 1.4	$ (.5)	(36)%
MSR capitalization value (in basis points) (b)	72	108	(36)	(33)%
Servicing income: (in millions)				
Servicing fees, net (c)	$ 139	$ 132	$ 7	5 %
Mortgage servicing rights valuation, net of economic hedge	$ 38	$ 22	$ 16	73 %
Residential mortgage loan statistics				
Loan origination volume (in billions)	$ 8.0	$ 5.8	$ 2.2	38 %
Loan sale margin percentage	2.41%	2.39%		
Percentage of originations represented by:				
Purchase volume (d)	50%	67%		
Refinance volume	50%	33%		
Other Information (b)				
Customer-related statistics (average)				
Non-teller deposit transactions (e)	57%	54%		
Digital consumer customers (f)	69%	65%		
Credit-related statistics				
Nonperforming assets (g)	$ 1,056	$ 1,145	$ (89)	(8)%
Net charge-offs	$ 380	$ 308	$ 72	23 %
Other statistics				
ATMs	9,102	9,093	9	—
Branches (h)	2,310	2,388	(78)	(3)%
Brokerage account client assets (in billions) (i)	$ 52	$ 51	$ 1	2 %

(a) Represents mortgage loan servicing balances for third parties and the related income.
(b) Presented as of September 30, except for customer-related statistics, which are averages for the nine months ended, and net charge-offs, which are for the nine months ended.
(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) Primarily nonperforming loans of $ 1.1 billion for both September 30, 2019 and September 30, 2018.
(h) Excludes stand-alone mortgage offices and satellite offices (*e.g.*, drive-ups, electronic branches and retirement centers) that provide limited products and/or services.
(i) Includes cash and money market balances.

Retail Banking earned $936 million in the first nine months of 2019 compared with $751 million for the same period in 2018. The increase in earnings was attributable to higher net interest income and noninterest income partially offset by an increase in provision for credit losses and higher noninterest expense.

Net interest income increased primarily due to wider interest rate spreads on the value of deposits as well as growth in deposit and loan balances.

Noninterest income increased largely due to growth in consumer services, including debit and credit card, brokerage, and merchant service fees, and higher residential mortgage revenue attributable to a higher benefit from residential mortgage servicing rights valuation, net of economic hedge, and increased loan sales revenue from higher origination volumes. These increases were partially offset by negative derivative fair value adjustments related to Visa Class B common shares of $55 million compared with negative adjustments of $7 million in the same period of 2018.

Provision for credit losses increased in the first nine months of 2019 compared to the same period of 2018 primarily as a result of higher auto loan, unsecured installment loan and credit card portfolio reserves attributed in part to loan growth.

Higher noninterest expense primarily resulted from an increase in ATM expense driven by enhanced checking product benefits, higher equipment expense, and increased marketing activity, including expenses related to our national expansion initiative.

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 the first nine months of 2019, average total deposits increased compared to the same period in 2018, as both interest-bearing and noninterest-bearing demand deposits increased. Savings deposits increased due, in part, to a shift from money market deposits to relationship-based savings products as well as growth in consumer deposits, including from our national expansion initiative. Certificates of deposit increased reflecting shifts in consumer preferences to time deposits.

Retail Banking average total loans increased in the first nine months of 2019 compared with the same period in 2018.

- Average residential mortgages increased primarily as a result of growth in nonconforming residential mortgage loans.
- Average auto loans increased primarily due to strong new indirect auto loan volumes, including in our Southeast and expansion markets, as well as growth in direct auto loans.
- Average credit card balances increased as we continued to focus on our long-term objective of deepening penetration within our existing customer base as well as new client acquisition.
- Average home equity loans decreased as paydowns and payoffs on loans exceeded new originated volume.
- Average education loans decreased driven by a decline in the runoff portfolio of government guaranteed education loans.

Our national expansion initiative launched in 2018. Deposit products are led by a digital high yield savings account. Following the first solution center opening in Kansas City in 2018, three additional solution centers have opened in 2019 with a second in Kansas City and two in the Dallas/Fort Worth market. We also offer digital unsecured installment and small business loans in the expansion markets.

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 migration, branch network and home lending transformations and multi-channel engagement and service strategies.

- Approximately 69% of consumer customers used non-teller channels for the majority of their transactions in the first nine months of 2019 compared with 65% for the same period in 2018.
- Deposit transactions via ATM and mobile channels increased to 57% of total deposit transactions in the first nine months of 2019 from 54% for the same period in 2018.

Retail Banking continues to make progress on its multi-year initiative to redesign the home lending process. Technology enhancements supported increased residential mortgage origination volumes in 2019. The home equity origination cycle is the focus in 2019 as we enhance current capabilities in order to improve speed of delivery and convenience for customers.

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 11: Corporate & Institutional Banking Table

(Unaudited) Nine months ended September 30 Dollars in millions	2019	2018	Change $	Change %
Income Statement				
Net interest income	$ 2,745	$ 2,707	$ 38	1 %
Noninterest income	1,891	1,774	117	7 %
Total revenue	4,636	4,481	155	3 %
Provision for credit losses	219	43	176	409 %
Noninterest expense	2,087	2,019	68	3 %
Pretax earnings	2,330	2,419	(89)	(4)%
Income taxes	531	562	(31)	(6)%
Earnings	$ 1,799	$ 1,857	$ (58)	(3)%
Average Balance Sheet				
Loans held for sale	$ 467	$ 763	$ (296)	(39)%
Loans				
Commercial	$ 112,371	$ 102,342	$ 10,029	10 %
Commercial real estate	26,257	26,699	(442)	(2)%
Equipment lease financing	7,273	7,512	(239)	(3)%
Total commercial lending	145,901	136,553	9,348	7 %
Consumer	16	49	(33)	(67)%
Total loans	$ 145,917	$ 136,602	$ 9,315	7 %
Total assets	$ 163,126	$ 153,149	$ 9,977	7 %
Deposits				
Noninterest-bearing demand	$ 39,016	$ 44,577	$ (5,561)	(12)%
Money market	27,358	23,511	3,847	16 %
Other	25,285	19,182	6,103	32 %
Total deposits	$ 91,659	$ 87,270	$ 4,389	5 %
Performance Ratios				
Return on average assets	1.47%	1.62%		
Noninterest income to total revenue	41%	40%		
Efficiency	45%	46%		
Other Information				
Consolidated revenue from: (a)				
Treasury Management (b)	$ 1,372	$ 1,318	$ 54	4 %
Capital Markets (b)	$ 849	$ 816	$ 33	4 %
Commercial mortgage banking activities:				
Commercial mortgage loans held for sale (c)	$ 73	$ 78	$ (5)	(6)%
Commercial mortgage loan servicing income (d)	190	179	11	6 %
Commercial mortgage servicing rights valuation, net of economic hedge (e)	17	26	(9)	(35)%
Total	$ 280	$ 283	$ (3)	(1)%
Commercial mortgage servicing rights asset value (f)	$ 595	$ 766	$ (171)	(22)%
Average Loans by C&IB business (g)				
Corporate Banking	$ 73,460	$ 66,145	$ 7,315	11 %
Real Estate	37,231	37,379	(148)	—
Business Credit	22,480	20,588	1,892	9 %
Commercial Banking	8,048	8,135	(87)	(1)%
Other	4,698	4,355	343	8 %
Total average loans	$ 145,917	$ 136,602	$ 9,315	7 %
Credit-related statistics				
Nonperforming assets (f) (h)	$ 526	$ 355	$ 171	48 %
Net charge-offs	$ 58	$ 8	$ 50	625 %

(a) 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 Banking section.
(b) Amounts are reported in net interest income and noninterest income.
(c) 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 September 30.
(g) As a result of our first quarter 2019 C&IB business realignment, average loans previously reported as Equipment Finance were reclassified to other C&IB businesses for all periods presented.
(h) Primarily nonperforming loans of $ .5 billion and $.3 billion at September 30, 2019 and September 30, 2018, respectively.

Corporate & Institutional Banking earned $1.8 billion in the first nine months of 2019, down $58 million compared to the same period in 2018. Higher revenue was more than offset by an increase in the provision for credit losses and higher noninterest expense.

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

Growth in noninterest income in the comparison was primarily driven by higher treasury management product revenue, capital markets-related revenue and gains on asset sales.

Overall credit quality remained stable. The increase in provision for credit losses was primarily driven by loan growth. Nonperforming assets and net charge-offs in the first nine months of 2019 reflect increases from recent historic lows.

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

Average loans increased compared to the first nine months of 2018 mostly due to strong growth in Corporate Banking and Business Credit:

- Corporate 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. Average loans for this business grew reflecting strong production in asset-backed financing as well as increased lending to large and mid-sized corporate clients.
- PNC Real Estate provides banking, financing and servicing solutions for commercial real estate clients nationwide. Average loans for this business decreased primarily driven by project loan payoffs, partially offset by higher commercial mortgage balances.
- PNC Business Credit provides asset-based lending. The loan portfolio is relatively high yielding, with acceptable risk as the loans are mainly secured by short-term assets. Average loans for this business increased as new originations and higher utilization were partially offset by payoffs.
- Commercial Banking provides lending, treasury management and capital markets-related products and services to smaller corporations and businesses. Average loans for this business were relatively unchanged.

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 driven by growth in interest-bearing deposits including a shift from noninterest-bearing deposits. We continue to monitor and balance the relationship between rates paid and the overall profitability of our deposit balances.

Corporate & Institutional Banking expanded its Corporate Banking business, focused on the middle market and larger sectors, into the Boston and Phoenix markets in 2019. This followed offices opened in Dallas, Kansas City and Minneapolis in 2017, and offices opened in Denver, Houston and Nashville in 2018. 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. We have also formalized plans to expand into the Portland and Seattle markets in 2020.

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 segment 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 11 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 the first nine months of 2018, treasury management revenue increased primarily due to higher product revenue and higher deposit balances.

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. Capital markets-related revenue increased in the comparison primarily due to higher asset-backed finance structuring fees, corporate securities underwriting and customer-related derivatives fees, partially offset by lower loan syndication 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 decreased in the comparison due to a lower benefit from commercial mortgage servicing rights valuation, net of economic hedge and lower revenue from commercial mortgage loans held for sale and related hedges, mostly offset by higher commercial mortgage loan servicing income.

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 12: Asset Management Group Table

(Unaudited) Nine months ended September 30 Dollars in millions, except as noted	2019	2018	Change $	Change %
Income Statement				
Net interest income	$ 208	$ 217	$ (9)	(4)%
Noninterest income	719	676	43	6 %
Total revenue	927	893	34	4 %
Provision for credit losses (benefit)	(2)	2	(4)	*
Noninterest expense	707	681	26	4 %
Pretax earnings	222	210	12	6 %
Income taxes	51	50	1	2 %
Earnings	$ 171	$ 160	$ 11	7 %
Average Balance Sheet				
Loans				
Consumer	$ 4,261	$ 4,702	$ (441)	(9)%
Commercial and commercial real estate	747	734	13	2 %
Residential mortgage	1,833	1,561	272	17 %
Total loans	$ 6,841	$ 6,997	$ (156)	(2)%
Total assets	$ 7,247	$ 7,455	$ (208)	(3)%
Deposits				
Noninterest-bearing demand	$ 1,344	$ 1,455	$ (111)	(8)%
Interest-bearing demand	3,121	3,413	(292)	(9)%
Money market	1,852	2,339	(487)	(21)%
Savings	5,969	4,754	1,215	26 %
Other	797	408	389	95 %
Total deposits	$ 13,083	$ 12,369	$ 714	6 %
Performance Ratios				
Return on average assets	3.15%	2.87%		
Noninterest income to total revenue	78%	76%		
Efficiency	76%	76%		
Supplemental Noninterest Income Information				
Asset management fees	$ 646	$ 669	$ (23)	(3)%
Other Information				
Nonperforming assets (a) (b)	$ 42	$ 51	$ (9)	(18)%
Net charge-offs	$ 1	$ 8	$ (7)	(88)%
Client Assets Under Administration (in billions) (a) (c)				
Discretionary client assets under management	$ 163	$ 159	$ 4	3 %
Nondiscretionary client assets under administration	135	134	1	1 %
Total	$ 298	$ 293	$ 5	2 %
Discretionary client assets under management				
Personal	$ 98	$ 97	$ 1	1 %
Institutional	65	62	3	5 %
Total	$ 163	$ 159	$ 4	3 %

* - Not meaningful

(a) As of September 30.

(b) Primarily nonperforming loans of $ 42 million at September 30, 2019 and $48 million at September 30, 2018.

(c) Excludes brokerage account client assets.

Asset Management Group earned $171 million in the first nine months of 2019 compared to $160 million for the same period in 2018. Earnings increased due to higher revenue partially offset by higher noninterest expense.

Higher revenue in the comparison was driven by a gain on the sale of the retirement recordkeeping business in the second quarter partially offset by lower net interest income due to lower average loan balances and narrower interest rate spreads on loans, as well as lower asset management fees as a result of the retirement recordkeeping sale and lower yielding assets under management.

Noninterest expense increased in the comparison and was primarily attributable to higher personnel expenses and costs associated with the sale transaction, including asset write-offs.

Asset Management Group's discretionary client assets under management increased in the comparison to the prior year, primarily attributable to higher equity markets as of September 30, 2019.

The Asset Management Group entered into a definitive agreement in May 2019 to divest components of its PNC Capital Advisor's investment management business, including its PNC family of proprietary mutual funds of approximately $16 billion in assets under management as of September, 30 2019. The transaction is expected to close in the fourth quarter of 2019.

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 seven 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, wealth 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.

BlackRock

We hold an equity investment in BlackRock, a leading publicly-traded investment management firm. Information related to our equity investment in BlackRock follows:

Table 13: BlackRock Table

(Unaudited) Nine months ended September 30 Dollars in millions	2019	2018
Business segment earnings (a)	$ 597	$ 608
PNC's economic interest in BlackRock (b)	22%	22 %

(a) Represents our share of BlackRock's reported GAAP earnings net of income taxes on those earnings incurred by us.
(b) At September 30.

In billions	September 30, 2019	December 31, 2018
Carrying value of our investment in BlackRock (c)	$ 8.5	$ 8.2
Market value of our investment in BlackRock (d)	$ 15.5	$ 13.7

(c) We account for our investment in BlackRock under the equity method of accounting, exclusive of a related deferred tax liability of $ 1.8 billion and $1.7 billion at September 30, 2019 and December 31, 2018, respectively. Our voting interest in BlackRock common stock was approximately 22% at September 30, 2019.
(d) Does not include liquidity discount.

Our 2018 Form 10-K includes additional information about our investment in BlackRock.

Risk Management

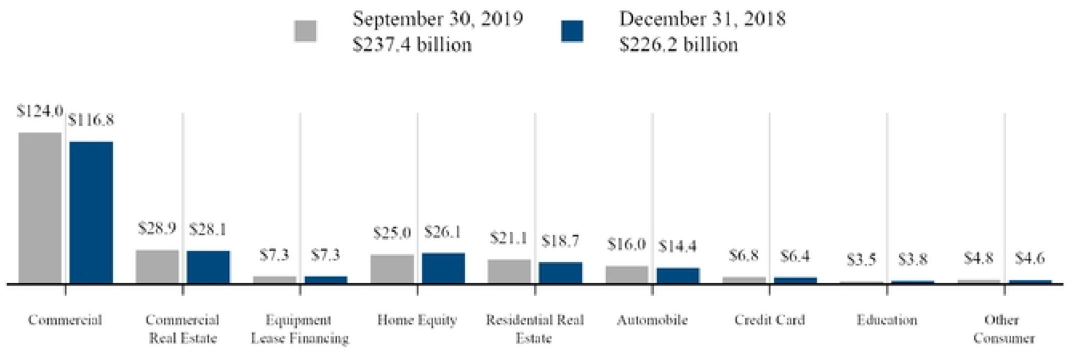
The Risk Management section included in Item 7 of our 2018 Form 10-K describes our enterprise risk management framework including risk culture, enterprise strategy, risk governance and framework, risk identification, risk assessment, risk controls and monitoring, and risk aggregation and reporting. Additionally, our 2018 Form 10-K provides an analysis of our key areas of risk, which include but are not limited to credit, liquidity and capital, market, operational and compliance.

Credit Risk Management

See the Credit Risk Management portion of the Risk Management section in our 2018 Form 10-K for additional discussion regarding credit risk.

Loan Portfolio Characteristics and Analysis

Table 14: Details of Loans
In billions



We use several asset quality indicators, as further detailed in Note 3 Asset Quality, to monitor and measure our exposure to credit risk within our loan portfolio. The following provides additional information about our significant loan classes.

Commercial
Commercial loans comprised 52% of our total loan portfolio at both September 30, 2019 and December 31, 2018. The majority of our commercial 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 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 probability of default (PD) and loss given default (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 portfolio is well-diversified as shown in the following table which provides a breakout of our commercial loans by industry classification (classified based on the North American Industry Classification System (NAICS)).

Table 15: Commercial Loans by Industry

	September 30, 2019		December 31, 2018	
Dollars in millions	Amount	% of Total	Amount	% of Total
Commercial				
Manufacturing	$ 21,846	18%	$ 21,207	18%
Retail/wholesale trade	21,761	18	20,850	18
Service providers	16,189	13	14,869	13
Real estate related (a)	12,294	10	12,312	11
Financial services	10,437	8	9,500	8
Health care	8,137	7	8,886	8
Transportation and warehousing	7,216	6	5,781	5
Other industries	26,134	20	23,429	19
Total commercial loans	$ 124,014	100%	$ 116,834	100%

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

Commercial Real Estate

Commercial real estate loans comprised $6.0 billion of real estate project loans, $6.2 billion of intermediate term financing loans and $16.7 billion related to commercial mortgages as of September 30, 2019. Comparable amounts were $6.6 billion, $7.1 billion and $14.4 billion, respectively, as of December 31, 2018.

We monitor credit risk associated with our commercial real estate loans similar to commercial 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 geographic market and property type.

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

	September 30, 2019		December 31, 2018	
Dollars in millions	Amount	% of Total	Amount	% of Total
Geography				
California	$ 4,383	15%	$ 4,154	15%
Florida	2,425	8	2,157	8
Maryland	1,832	6	1,966	7
Virginia	1,533	5	1,682	6
Texas	1,866	6	1,531	5
Illinois	1,117	4	1,368	5
Pennsylvania	1,235	4	1,214	4
New York	884	3	1,151	4
Ohio	1,151	4	1,053	4
North Carolina	1,035	4	915	3
All other states	11,423	41	10,949	39
Total commercial real estate loans	$ 28,884	100%	$ 28,140	100%
Property Type				
Multifamily	$ 9,099	32%	$ 8,770	31%
Office	7,620	26	7,279	26
Retail	3,811	13	4,065	14
Hotel/Motel	1,801	6	1,686	6
Industrial/Warehouse	1,759	6	1,678	6
Senior Housing	1,195	4	1,092	4
Mixed Use	1,051	4	933	3
Other	2,548	9	2,637	10
Total commercial real estate loans	$ 28,884	100%	$ 28,140	100%

Home Equity

Home equity loans comprised $14.3 billion of primarily variable-rate home equity lines of credit and $10.7 billion of closed-end home equity installment loans at September 30, 2019. Comparable amounts were $15.5 billion and $10.6 billion, respectively, as of December 31, 2018.

We track borrower performance monthly, including obtaining original loan-to-value ratios (LTV), updated FICO scores at least quarterly, updated LTVs at least semi-annually, and other credit metrics at least quarterly, including the historical performance of any related mortgage loans regardless of lien position that we do or do not hold. This information is used for internal reporting and risk management. For internal reporting and risk management 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). 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 home equity portfolio is primarily originated within markets located in the Mid-Atlantic, Midwest, and Southeast, with less than 5% of the portfolio in states outside of those markets at September 30, 2019. The credit quality of newly originated loans over the last twelve months was strong overall with a weighted-average LTV on originations of 68% and a weighted-average FICO score of 769.

The credit performance of the majority of the home equity portfolio where we hold the first lien position is superior to the portion of the portfolio where we hold the second lien position, but do not hold the first lien. Lien position information is generally based upon original LTV at the time of origination. We use an industry-leading third-party service provider to obtain updated loan, lien and collateral data that is aggregated from public and private sources.

The following table presents our home equity loans by geographic market and lien type.

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

	September 30, 2019		December 31, 2018	
Dollars in millions	Amount	% of Total	Amount	% of Total
Geography				
Pennsylvania	$ 5,835	23%	$ 6,160	24%
New Jersey	3,741	15	3,935	15
Ohio	2,913	12	3,095	12
Illinois	1,535	6	1,634	6
Maryland	1,419	6	1,481	6
Michigan	1,325	5	1,340	5
Florida	1,248	5	1,227	5
North Carolina	1,098	4	1,161	4
Kentucky	987	4	1,040	4
Indiana	813	3	845	3
All other states	4,057	17	4,205	16
Total home equity loans	$ 24,971	100%	$ 26,123	100%
Lien type				
1st lien		58%		58%
2nd lien		42		42
Total		100%		100%

Residential Real Estate

Residential real estate loans primarily consisted of residential mortgage loans at both September 30, 2019 and December 31, 2018.

We track borrower performance of this portfolio monthly similarly to home equity loans. This information is used for internal reporting and risk management. For internal reporting and risk management we also segment the mortgage portfolio into pools based on product type (*e.g.*, nonconforming, conforming). 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 over the last twelve months was strong overall as evidenced by a weighted-average LTV on originations of 70% and a weighted-average FICO score of 768.

The following table presents our residential real estate loans by geographic market.

Table 18: Residential Real Estate Loans by Geography

	September 30, 2019		December 31, 2018	
Dollars in millions	Amount	% of Total	Amount	% of Total
Geography				
California	$ 6,249	30%	$ 4,666	25%
New Jersey	1,747	8	1,649	9
Florida	1,574	8	1,544	8
Illinois	1,122	5	1,161	6
Pennsylvania	1,093	5	1,031	6
New York	992	5	956	5
Maryland	927	4	913	5
North Carolina	873	4	854	5
Virginia	858	4	825	4
Ohio	696	3	682	4
All other states	4,951	24	4,376	23
Total residential real estate loans	$ 21,082	100%	$ 18,657	100%

We originate residential mortgage loans nationwide through our national mortgage business as well as within our branch network. Residential mortgage loans underwritten to government 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 government agency standards, which we retain on our balance sheet. The nonconforming residential mortgage portfolio had strong credit quality at September 30, 2019 with an average original LTV of 70% and an average original FICO score of 772. Our portfolio of nonconforming residential mortgage loans totaled $15.1 billion at September 30, 2019 with 36% located in California.

Automobile

Within auto loans, $14.4 billion resided in the indirect auto portfolio while $1.6 billion were in the direct auto portfolio as of September 30, 2019. Comparable amounts as of December 31, 2018 were $12.9 billion and $1.5 billion, respectively. The indirect auto portfolio relates to loan applications originated through franchised dealers. This business is strategically aligned with our core retail banking business.

We continue to focus on borrowers with strong credit profiles as evidenced by a weighted-average loan origination FICO score over the last twelve months of 745 for indirect auto loans and 765 for direct auto loans. The weighted-average term of loan originations over the last twelve months was 74 months for indirect auto loans and 63 months for direct auto loans. We offer both new and used auto financing to customers through our various channels. At both September 30, 2019 and December 31, 2018, the portfolio was composed of 53% new vehicle loans and 47% used vehicle loans.

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 troubled debt restructurings (TDRs), other real estate owned (OREO) and foreclosed assets. Loans held for sale, certain government insured or guaranteed loans, purchased impaired loans and loans accounted for under the fair value option are excluded from nonperforming loans. Additional information regarding our nonperforming loans and nonaccrual policies is included in Note 1 Accounting Policies in the Notes To Consolidated Financial Statements in our 2018 Form 10-K. A summary of the major categories of nonperforming assets are presented in Table 19. See Note 3 Asset Quality in the Notes To Consolidated Financial Statements in this Report for further detail of nonperforming asset categories.

Table 19: Nonperforming Assets by Type

			Change	
Dollars in millions	September 30, 2019	December 31, 2018	$	%
Nonperforming loans				
Commercial lending	$ 576	$ 432	$ 144	33 %
Consumer lending (a)	1,152	1,262	(110)	(9)%
Total nonperforming loans	1,728	1,694	34	2 %
OREO and foreclosed assets	119	114	5	4 %
Total nonperforming assets	$ 1,847	$ 1,808	$ 39	2 %
TDRs included in nonperforming loans	$ 911	$ 863	$ 48	6 %
Percentage of total nonperforming loans	53 %	51 %		
Nonperforming loans to total loans	.73 %	.75 %		
Nonperforming assets to total loans, OREO and foreclosed assets	.78 %	.80 %		
Nonperforming assets to total assets	.45 %	.47 %		
Allowance for loan and lease losses to total nonperforming loans	158 %	155 %		

(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.

Table 20: Change in Nonperforming Assets

In millions		2019		2018
January 1	$	1,808	$	2,035
New nonperforming assets		985		785
Charge-offs and valuation adjustments		(446)		(408)
Principal activity, including paydowns and payoffs		(315)		(379)
Asset sales and transfers to loans held for sale		(74)		(101)
Returned to performing status		(111)		(107)
September 30	$	1,847	$	1,825

As of September 30, 2019, approximately 88% of total nonperforming loans were secured by collateral which lessened reserve requirements and is expected to reduce credit losses in the event of default. As of September 30, 2019, commercial lending nonperforming loans were carried at approximately78% of their unpaid principal balance, due to charge-offs recorded to date, before consideration of the ALLL.

Within consumer lending nonperforming loans, residential real estate TDRs comprised 78% and 81% of total residential real estate nonperforming loans atSeptember 30, 2019 and December 31, 2018, respectively. Home equity TDRs comprised 50% of home equity nonperforming loans atSeptember 30, 2019, up from 47% at December 31, 2018. 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.

At September 30, 2019, our largest nonperforming asset was $33 million in the Information industry and the ten largest individual nonperforming assets represented 13% of total nonperforming assets.

Loan Delinquencies

We regularly monitor the level of loan delinquencies and believe these levels may be a key indicator of loan portfolio asset quality. 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 exclude loans held for sale and purchased impaired loans, but include government insured or guaranteed loans and loans accounted for under the fair value option.

Table 21: Accruing Loans Past Due (a)

	Amount							Percentage of Total Loans Outstanding	
					Change				
Dollars in millions		September 30 2019		December 31 2018		$	%	September 30 2019	December 31 2018
Early stage loan delinquencies									
Accruing loans past due 30 to 59 days	$	547	$	585	$	(38)	(6)%	.23%	.26%
Accruing loans past due 60 to 89 days		269		271		(2)	(1)%	.11%	.12%
Total		816		856		(40)	(5)%	.34%	.38%
Late stage loan delinquencies									
Accruing loans past due 90 days or more		532		629		(97)	(15)%	.22%	.28%
Total	$	1,348	$	1,485	$	(137)	(9)%	.57%	.66%

(a) Past due loan amounts include government insured or guaranteed loans of $.6 billion at September 30, 2019 and $.7 billion at December 31, 2018.

Accruing loans past due 90 days or more are not included in nonperforming loans and continue to accrue interest because they are well secured by collateral and are in the process of collection, or are managed in homogeneous portfolios with specified charge-off timeframes adhering to regulatory guidelines, or are certain government insured or guaranteed 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).

Table 22: Summary of Troubled Debt Restructurings (a)

Dollars in millions	September 30 2019	December 31 2018	Change $	Change %
Total commercial lending	$ 420	$ 409	$ 11	3 %
Total consumer lending	1,343	1,442	(99)	(7)%
Total TDRs	$ 1,763	$ 1,851	$ (88)	(5)%
Nonperforming	$ 911	$ 863	$ 48	6 %
Accruing (b)	852	988	(136)	(14)%
Total TDRs	$ 1,763	$ 1,851	$ (88)	(5)%

(a) Amounts in table represent recorded investment, which includes the unpaid principal balance plus net accounting adjustments, less any charge-offs. Recorded investment does not include any associated valuation allowance.
(b) Accruing loans include consumer credit card loans and loans that have demonstrated a period of at least six months of performance under the restructured terms and are excluded from nonperforming loans.

Excluded from TDRs are $1.0 billion and $1.1 billion of consumer loans held for sale, loans accounted for under the fair value option and pooled purchased impaired loans, as well as certain government insured or guaranteed loans at September 30, 2019 and December 31, 2018, respectively. Nonperforming TDRs represented approximately 53% and 51% of total nonperforming loans at September 30, 2019 and December 31, 2018, respectively, and 52% and 47% of total TDRs at September 30, 2019 and December 31, 2018, 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 3 Asset Quality in the Notes to Consolidated Financial Statements in this Report for additional information on TDRs. See the Credit Risk Management portion of the Risk Management section in our 2018 Form 10-K for information related to loan modifications.

Allowances for Loan and Lease Losses and Unfunded Loan Commitments and Letters of Credit

We maintain an ALLL to absorb losses from the loan and lease portfolio and determine this allowance based on quarterly assessments of the estimated probable credit losses incurred in the loan and lease portfolio. Our total ALLL of $2.7 billion at September 30, 2019 consisted of $1.8 billion and $.9 billion established for the commercial lending and consumer lending categories, respectively. We maintain the ALLL at a level that we believe to be appropriate to absorb estimated probable credit losses incurred in the loan and lease portfolio as of the balance sheet date. The reserve calculation and determination process is dependent on the use of key assumptions. Key reserve assumptions and estimation processes react to and are influenced by observed changes in loan and lease portfolio performance experience, the financial strength of the borrower and economic conditions. Key reserve assumptions and estimation processes are periodically updated.

Reserves are established for non-impaired commercial loan classes based primarily on PD and LGD.

Our commercial pool reserve methodology is sensitive to changes in key risk parameters such as PD and LGD. The results of these parameters are then applied to the loan balance and unfunded loan commitments and letters of credit to determine the amount of the respective reserves. The majority of the commercial portfolio is secured by collateral, including loans to asset-based lending customers, which generally demonstrate lower LGD compared to loans not secured by collateral. Our PDs and LGDs are primarily determined using internal commercial loan loss data. This internal data is supplemented with third-party data and management judgment, as deemed necessary. We continue to evaluate and enhance our use of internal commercial loss data and will periodically update our PDs and LGDs as well as consider third-party data, regulatory guidance and management judgment.

Allowances for non-impaired consumer loan classes are primarily based upon transition matrices, including using a roll-rate model. The roll-rate model uses statistical relationships, calculated from historical data that estimate the movement of loan outstandings through the various stages of delinquency and ultimately charge-off.

We establish specific allowances for loans considered impaired using methods prescribed by GAAP. All impaired loans are subject to individual analysis, except leases and large groups of smaller-balance homogeneous loans which may include, but are not limited to, credit card, residential real estate secured and consumer installment loans. Specific allowances for individual loans (including commercial and consumer TDRs) are determined based on an analysis of the present value of expected future cash flows from the loans discounted at their effective interest rate, observable market price or the fair value of the underlying collateral.

A portion of the ALLL is related to qualitative measurement factors. These factors may include, but are not limited to, the following:

- Industry concentrations and conditions,
- Changes in market conditions,
- Recent credit quality trends,
- Recent loss experience in particular portfolios, including specific and unique events,
- Recent macro-economic factors,
- Model imprecision,
- Changes in lending policies and procedures,
- Timing of available information, including the performance of first lien positions, and
- Limitations of available historical data.

Our determination of the ALLL for non-impaired loans is sensitive to the risk grades assigned to commercial loans and loss rates for consumer loans. There are several other qualitative and quantitative factors considered in determining the ALLL. Periodically, reserve sensitivity analyses are performed. Such analyses provide insight into the impact of adverse changes to risk grades and loss rates. Given the current processes used, we believe the risk grades and loss rates currently assigned are appropriate.

Purchased impaired loans are initially recorded at fair value and applicable accounting guidance prohibits the carryover or creation of valuation allowances at acquisition. Because the initial fair values of these loans already reflect a credit component, additional reserves are established when performance is expected to be worse than our expectations as of the acquisition date. At September 30, 2019, we had established reserves of $.3 billion for purchased impaired loans. In addition, loans (purchased impaired and non-impaired) acquired after January 1, 2009 were recorded at fair value. No allowance for loan losses was carried over and no allowance was created at the date of acquisition.

In determining the appropriateness of the ALLL, we make specific allocations to impaired loans and allocations to portfolios of commercial and consumer loans. We also allocate reserves to provide coverage for probable losses incurred in the portfolio at the balance sheet date based upon current market conditions, which may not be reflected in historical loss data. Commercial lending is the largest category of credits and is sensitive to changes in assumptions and judgments underlying the determination of the ALLL.

In addition to the ALLL, we maintain an allowance for unfunded loan commitments and letters of credit. We report this allowance as a liability on our Consolidated Balance Sheet. We maintain the allowance for unfunded loan commitments and letters of credit at a level we believe is appropriate to absorb estimated probable losses on these unfunded credit facilities. We determine this amount using estimates of the probability of the ultimate funding and losses related to those credit exposures. Other than the estimation of the probability of funding, this methodology is very similar to the one we use for determining our ALLL.

See Note 1 Accounting Policies in our 2018 Form 10-K and Note 3 Asset Quality in the Notes To Consolidated Financial Statements in this Report for further information on certain key asset quality indicators that we use to evaluate our portfolios and establish the allowances.

Table 23: Allowance for Loan and Lease Losses

Dollars in millions	2019	2018
January 1	$ 2,629	$ 2,611
Total net charge-offs	(433)	(313)
Provision for credit losses	552	260
Net (increase) / decrease in allowance for unfunded loan commitments and letters of credit	(19)	9
Other	9	17
September 30	$ 2,738	$ 2,584
Net charge-offs to average loans (for the nine months ended) (annualized)	.25%	.19%
Ratio of ALLL to total loans	1.15%	1.16%
Commercial lending net charge-offs	$ (79)	$ (18)
Consumer lending net charge-offs	(354)	(295)
Total net charge-offs	$ (433)	$ (313)
Net charge-offs to average loans (for the nine months ended) (annualized)		
Commercial lending	.07%	.02%
Consumer lending	.63%	.54%

The ALLL balance increases or decreases across periods in relation to fluctuating risk factors, including asset quality trends, net charge-offs and changes in aggregate portfolio balances. During the first nine months of 2019, overall credit quality remained strong, which resulted in an essentially flat ratio of ALLL to total loans as of September 30, 2019 compared to December 31, 2018.

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

Table 24: Loan Charge-Offs and Recoveries

Nine months ended September 30 Dollars in millions	Gross Charge-offs	Recoveries	Net Charge-offs / (Recoveries)	Percent of Average Loans (Annualized)
2019				
Commercial	$ 116	$ 45	$ 71	.08 %
Commercial real estate	16	8	8	.04 %
Equipment lease financing	6	6	—	— %
Home equity	52	56	(4)	(.02)%
Residential real estate	5	11	(6)	(.04)%
Automobile	183	85	98	.86 %
Credit card	193	21	172	3.58 %
Education	20	6	14	.51 %
Other consumer	92	12	80	2.29 %
Total	$ 683	$ 250	$ 433	.25 %
2018				
Commercial	$ 78	$ 50	$ 28	.03 %
Commercial real estate	8	18	(10)	(.05)%
Equipment lease financing	6	6	—	— %
Home equity	85	67	18	.09 %
Residential real estate	9	18	(9)	(.07)%
Automobile	117	56	61	.60 %
Credit card	161	18	143	3.32 %
Education	24	6	18	.57 %
Other consumer	76	12	64	1.94 %
Total	$ 564	$ 251	$ 313	.19 %

Total net charge-offs increased $120 million, or 38%, for the first nine months of 2019 compared to the same period in 2018. The increase in commercial net charge-offs reflected the impact of certain individual credits, while the increases in automobile, credit card and other consumer loan net charge-offs were due in part to loan portfolio growth. See Note 1 Accounting Policies in our 2018 Form 10-K and Note 4 Allowance for Loan and Lease Losses in the Notes To Consolidated Financial Statements in this Report for additional information on the ALLL.

The Recently Issued Accounting Standards section within Critical Accounting Estimates and Judgments of this Financial Review describes our upcoming implementation of Accounting Standards Update (ASU) 2016-13 - Credit Losses, including our estimated impact upon adoption on its effective date of January 1, 2020.

Liquidity and Capital Management

Liquidity risk, including our liquidity monitoring measures and tools, is described in further detail in the Liquidity and Capital Management section of our 2018 Form 10-K.

One of the ways we monitor our liquidity is by reference to the LCR, a regulatory minimum liquidity requirement designed to ensure that covered banking organizations maintain an adequate level of liquidity to meet net liquidity needs over the course of a hypothetical 30-day stress scenario. The LCR is calculated by dividing the amount of an institution's high quality, unencumbered liquid assets (HQLA), as defined and calculated in accordance with the LCR rules, by its estimated net cash outflows, with net cash outflows determined by applying the assumed outflow factors in the LCR rules. The resulting quotient is expressed as a percentage. The minimum LCR that PNC and PNC Bank are required to maintain is 100%. PNC and PNC Bank calculate the LCR daily, and as of September 30, 2019, the LCR for PNC and PNC Bank exceeded the requirement of 100%.

See the Recent Regulatory Developments section of this Report for information on the Final Tailoring Rules and the impact on LCR requirements.

We provide additional information regarding regulatory liquidity requirements and their potential impact on us in the Supervision and Regulation section of Item 1 Business and Item 1A Risk Factors of our 2018 Form 10-K.

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 $285.6 billion at September 30, 2019 from $267.8 billion at December 31, 2018 driven by growth in both interest-bearing and non-interest bearing deposits. See the Funding Sources portion of the Consolidated Balance Sheet Review section of this Financial Review 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 September 30, 2019, our liquid assets consisted of short-term investments (federal funds sold, resale agreements, trading securities and interest-earning deposits with banks) totaling $26.3 billion and securities available for sale totaling $69.1 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 $4.0 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, $8.7 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 our 2018 Form 10-K and the Funding Sources section of the Consolidated Balance Sheet Review for additional information related to our borrowings.

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

Table 25: Senior and Subordinated Debt

In billions		2019
January 1	$	30.9
Issuances		6.9
Calls and maturities		(6.3)
Other		1.1
September 30	$	32.6

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 September 30, 2019, PNC Bank had $22.9 billion of notes outstanding under this program of which $18.6 billion were senior bank notes and $4.3 billion were subordinated bank notes. The following table details issuances for the three months ended September 30, 2019.

Table 26: PNC Bank Notes Issued

Issuance Date	Amount	Description of Issuance
July 23, 2019	$900 million	Senior floating rate notes with a maturity date of July 22, 2022. Redeemable in whole, but not in part, on July 22, 2021, and in whole or in part on or after June 22, 2022. Interest is payable quarterly, at the 3-month LIBOR rate, reset quarterly, plus 45 basis points, on January 22, April 22, July 22 and October 22 of each year, beginning October 22, 2019.
July 23, 2019	$600 million	Senior fixed-to-floating rate notes with a maturity date of July 22, 2022. Redeemable in whole, but not in part, on July 22, 2021, and in whole or in part on or after June 22, 2022. Interest is initially payable semi-annually at a fixed rate of 2.232% on July 22 and January 22 of each year, beginning January 22, 2020, and ending on July 22, 2021. Beginning on July 22, 2021, interest is payable quarterly, at the 3-month LIBOR rate, reset quarterly, plus 44 basis points, on January 22, April 22, July 22, and October 22, beginning on October 22, 2021.

See Note 17 Subsequent Events for information on the October 2019 issuance of $750 million of subordinated notes by PNC Bank.

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 September 30, 2019, our unused secured borrowing capacity at the FHLB-Pittsburgh and the Federal Reserve Bank totaled $44.3 billion.

PNC Bank has the ability to offer up to $10.0 billion of its commercial paper to provide additional liquidity. As of September 30, 2019, 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 September 30, 2019, available parent company liquidity totaled $6.3 billion. Parent company liquidity is primarily held in intercompany short-term investments, the terms of which provide for the availability of cash in 31 days or less. 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 $3.0 billion at September 30, 2019. See Note 18 Regulatory Matters in the Notes To Consolidated Financial Statements in our 2018 Form 10-K 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. The parent company has the ability to offer up to $5.0 billion of commercial paper to provide additional liquidity. As of September 30, 2019, 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. Under this shelf registration statement, on July 23, 2019, the parent company issued $1.0 billion of senior notes with a maturity date of July 23, 2026. Interest is payable semi-annually at a fixed rate of 2.60% on July 23 and January 23 of each year, beginning on January 23, 2020. See Note 17 Subsequent Events in the Notes To Consolidated Financial Statements of this Report for information on the November 1, 2019 issuance of $650 million of senior fixed rate notes by the parent company utilizing this shelf registration.

Parent company senior and subordinated debt outstanding totaled $9.3 billion and $6.7 billion at September 30, 2019 and December 31, 2018, respectively.

Contractual Obligations and Commitments
We have contractual obligations representing required future payments on borrowed funds, time deposits, leases, pension and postretirement benefits and purchase obligations. See the Liquidity and Capital Management portion of the Risk Management section in our 2018 Form 10-K for more information on these future cash outflows. Additionally, in the normal course of business we have various commitments outstanding, certain of which are not included on our Consolidated Balance Sheet. We provide information on our commitments in Note 13 Commitments in the Notes To Consolidated Financial Statements of this Report.

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.

Table 27: Credit Ratings for PNC and PNC Bank

	September 30, 2019		
	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

Capital Management

Detailed information on our capital management processes and activities, including additional information on our previous CCAR submissions and capital plans, is included in the Capital Management portion of the Risk Management section in our 2018 Form 10-K.

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 connection with the 2019 CCAR process, we submitted our capital plan, as approved by PNC's Board of Directors, to the Federal Reserve in April 2019. The Federal Reserve accepted the capital plan and did not object to our proposed capital actions. As provided in the 2019 capital plan, we announced new share repurchase programs of up to $4.3 billion for the four-quarter period beginning in the third quarter of 2019. In the third quarter of 2019, we repurchased 7.5 million common shares for $1.0 billion.

We paid dividends on common stock of $.5 billion, or $1.15 per common share, during the third quarter of 2019. On October 3, 2019, the PNC Board of Directors declared a quarterly common stock cash dividend of $1.15 per share, with a payment date of November 5, 2019.

We completed our common stock repurchase programs for the four quarter period that ended June 30, 2019, with total repurchases of 21.4 million common shares for $2.8 billion. These repurchases were included in our capital plan accepted by the Federal Reserve as part of our 2018 CCAR submission. Additionally, we paid $1.7 billion in common stock dividends for a total of $4.5 billion of capital returned to shareholders during this four quarter period.

Table 28: Basel III Capital

Dollars in millions		Basel III September 30, 2019
Common equity Tier 1 capital		
Common stock plus related surplus, net of treasury stock	$	3,179
Retained earnings		41,413
Accumulated other comprehensive income (loss) for securities currently, and those transferred from, available for sale		1,119
Accumulated other comprehensive income (loss) for pension and other postretirement plans		(481)
Goodwill, net of associated deferred tax liabilities		(9,030)
Other disallowed intangibles, net of deferred tax liabilities		(238)
Other adjustments/(deductions)		(209)
Total common equity Tier 1 capital before threshold deductions		35,753
Total threshold deductions		(2,952)
Common equity Tier 1 capital	$	32,801
Additional Tier 1 capital		
Preferred stock plus related surplus		3,992
Other adjustments/(deductions)		(162)
Tier 1 capital	$	36,631
Additional Tier 2 capital		
Qualifying subordinated debt		3,481
Trust preferred capital securities		60
Eligible credit reserves includable in Tier 2 capital		3,042
Total Basel III capital	$	43,214
Risk-weighted assets		
Basel III standardized approach risk-weighted assets (a)	$	340,912
Basel III advanced approaches risk-weighted assets (b)	$	319,960
Average quarterly adjusted total assets	$	393,009
Supplementary leverage exposure (c)	$	471,906
Basel III risk-based capital and leverage ratios (d)		
Common equity Tier 1		9.6 %
Tier 1		10.7 %
Total (e)		12.7 %
Leverage (f)		9.3 %
Supplementary leverage ratio (g)		7.8 %

(a) Includes credit and market risk-weighted assets.
(b) Basel III advanced approaches risk-weighted assets are calculated based on the Basel III advanced approaches rules, and include credit, market, and operational risk-weighted assets. During the parallel run qualification phase, PNC has refined the data, models, and internal processes used as part of the advanced approaches for determining risk-weighted assets.
(c) Supplementary leverage exposure is the sum of Average quarterly adjusted total assets and certain off-balance sheet exposures including undrawn credit commitments and derivative potential future exposures.
(d) For comparative purposes only, the advanced approaches Basel III Common equity Tier 1, Tier 1 risk-based and Total risk-based ratios for September 30, 2019 were 10.3%, 11.4% and 12.5%, respectively.
(e) The 2019 Basel III Total risk-based capital ratio includes nonqualifying trust preferred capital securities of $60 million that are subject to a phase-out period that runs through 2021. For comparative purposes only, as of September 30, 2019 the ratio was 12.7%, assuming nonqualifying trust preferred capital securities are phased out.
(f) Leverage ratio is calculated based on Tier 1 capital divided by Average quarterly adjusted total assets.
(g) Supplementary leverage ratio is calculated based on Tier 1 capital divided by Supplementary leverage exposure.

Because PNC remains in the parallel run qualification phase for the advanced approaches, our regulatory risk-based capital ratios in2019 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, past due exposures and equity exposures are generally subject to higher risk weights than other types of exposures. Once we exit parallel run, our regulatory risk-based capital ratios will be the lower of the ratios calculated under the standardized approach and the advanced approaches.

Under the Basel III rules applicable to PNC, significant common stock investments in unconsolidated financial institutions (for PNC, primarily BlackRock), mortgage servicing rights and deferred tax assets must be deducted from capital (net of associated deferred tax liabilities) to the extent they individually exceed 10%, or in the aggregate exceed 15%, of the institution's adjusted common equity

Tier 1 capital. Also, Basel III regulatory capital includes AOCI related to securities currently, and those transferred from, available for sale, as well as pension and other postretirement plans.

Federal banking regulators have stated that they expect the largest U.S. bank holding companies (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 September 30, 2019 capital levels were aligned with them.

At September 30, 2019, 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%.

See the Recent Regulatory Developments section of this Report for information regarding the Final Tailoring Rules and the impact to Basel III capital rules. 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 18 Regulatory Matters in our 2018 Form 10-K.

Market Risk Management

See the Market Risk Management portion of the Risk Management Section in our 2018 Form 10-K for additional discussion regarding market risk.

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 third quarters of 2019 and 2018 follow.

Table 29: Interest Sensitivity Analysis

	Third Quarter 2019	Third Quarter 2018
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	1.9 %	1.8 %
100 basis point decrease	(2.6)%	(2.3)%
Effect on net interest income in second year from gradual interest rate change over the preceding 12 months of:		
100 basis point increase	4.6 %	3.6 %
100 basis point decrease	(7.3)%	(5.9)%
Duration of Equity Model (a)		
Base case duration of equity (in years)	(6.5)	.2
Key Period-End Interest Rates		
One-month LIBOR	2.02 %	2.26 %
Three-month LIBOR	2.09 %	2.40 %
Three-year swap	1.55 %	3.05 %

(a) Given the inherent limitations in certain of these measurement tools and techniques, results become less meaningful as interest rates approach zero.

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 30 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 100 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.

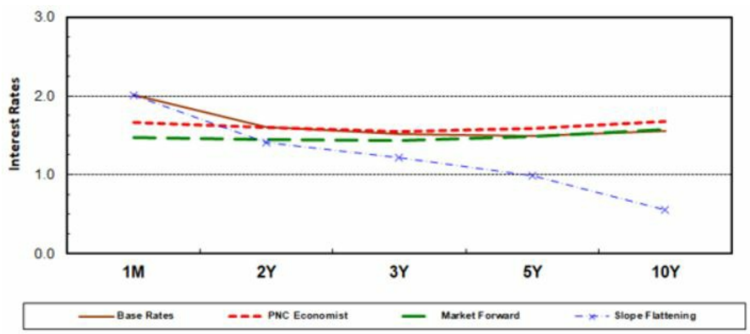
Table 30: Net Interest Income Sensitivity to Alternative Rate Scenarios

	September 30, 2019		
	PNC Economist	Market Forward	Slope Flattening
First year sensitivity	.2 %	.7 %	(1.2)%
Second year sensitivity	1.3 %	.5 %	(4.7)%

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 29 and 30. 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 31: Alternate Interest Rate Scenarios: One Year Forward



The third quarter 2019 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.

The planned discontinuance of the requirement that banks submit rates for the calculation of LIBOR after 2021 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 benchmark rate. PNC is coordinating with regulators and industry groups to identify an appropriate replacement reference rate for contracts expiring after 2021, as well as preparing for this transition as it relates to both new and existing exposures. PNC has established a cross-functional governance structure to oversee the overall strategy for the transition from LIBOR. An initial LIBOR impact and risk assessment has been performed, which identified the associated risks across products, systems, models, and processes.

See the Risk Factors section in Part I, Item IA disclosed in PNC's 2018 Form 10-K for additional information regarding the planned discontinuance of LIBOR as a reference rate.

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 value-at-risk (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 the first nine months of 2019 and 2018 were within our acceptable limits.

See the Market Risk Management – Customer-Related Trading Risk section of our 2018 Form 10-K for more information on our models used to calculate VaR and our backtesting process.

Customer related trading revenue was $212 million for the nine months ended September 30, 2019 compared to $196 million for the same period in 2018. The increase was primarily due to improved derivative clients sales revenue partially offset by a reduction in foreign exchange client revenue. For the quarterly period, customer related trading revenue was $77 million for the third quarter of 2019 compared to $53 million in 2018. The increase was driven by the improved derivative client sales revenue and, to a lesser extent, improved client related trading results and the impact of changes in credit valuations for customer-related derivatives.

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 32: Equity Investments Summary

Dollars in millions	September 30 2019	December 31 2018	Change $	Change %
BlackRock	$ 8,321	$ 8,016	$ 305	4%
Tax credit investments	2,252	2,219	33	1%
Private equity and other	2,752	2,659	93	3%
Total	$ 13,325	$ 12,894	$ 431	3%

BlackRock
We owned approximately 35 million common stock equivalent shares of BlackRock equity at September 30, 2019, accounted for under the equity method. The Business Segments Review section of this Financial Review includes additional information about BlackRock.

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 $.9 billion and $.8 billion at September 30, 2019 and December 31, 2018, respectively. These unfunded commitments are included in Other liabilities on our Consolidated Balance Sheet.

Note 2 Loan Sale and Servicing Activities and Variable Interest Entities in the Notes To Consolidated Financial Statements in our 2018 Form 10-K 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 $1.6 billion and $1.5 billion at September 30, 2019 and December 31, 2018, respectively. As of September 30, 2019, $1.4 billion was invested directly in a variety of companies and $.2 billion was invested indirectly through various private equity funds. See the Supervision and Regulation section in Item 1 of our 2018 Form 10-K for discussion of the potential impacts of the Volcker Rule provisions of Dodd-Frank on our interests in and other relationships with 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 September 30, 2019 per share closing price of $172.01 for a Visa Class A common share, the estimated value of our total investment in the Class B common shares was approximately $981 million at the current conversion rate of Visa B shares to Visa A shares, while our cost basis was not significant. See Note 6 Fair Value and Note 19 Legal Proceedings in the Notes To Consolidated Financial Statements in Item 8 of our 2018 10-K for additional information regarding our Visa agreements. The estimated value does not represent fair value of the Visa B common shares given the share's 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 at September 30, 2019 and September 30, 2018.

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 and Note6 Fair Value in our Notes To Consolidated Financial Statements in our 2018 Form 10-K and in Note6 Fair Value and Note 9 Financial Derivatives in the Notes To Consolidated Financial Statements in 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.

Recent Regulatory Developments

Agency Actions to Better Tailor Regulations to An Institution's Risk Profile
In October 2019, the Federal Reserve, Office of the Comptroller of the Currency (OCC) and Federal Deposit Insurance Corporation (FDIC) adopted final rules to tailor the application of the agencies' capital (including stress testing) and liquidity rules, and the Federal Reserve's enhanced prudential standards adopted under Section 165 of Dodd-Frank, to banking organizations with $100 billion or more in consolidated total assets (the Final Tailoring Rules). The Final Tailoring Rules classify all bank holding companies (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, liquidity and enhanced prudential 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 will generally follow that of its parent BHC. PNC and PNC Bank are considered Category III firms under the Final Tailoring Rules because PNC (i) has more than $250 billion in consolidated total assets, (ii) is not designated as a globally systemically important bank (GSIB), and (iii) has less than $75 billion in cross-jurisdictional activity (as defined in the final rules). The Final Tailoring Rules become effective on December 31, 2019 or allow organizations to begin complying with the new rules beginning December 31, 2019, although certain related changes (such as the changes to the Basel III threshold deductions applicable to PNC and PNC Bank described below) do not become effective until January 1, 2020. As such, we expect the changes to be fully effective for PNC and PNC Bank no later than the first quarter of 2020.
As described below, the Final Tailoring Rules make several important changes to the capital, liquidity and enhanced prudential standards requirements applicable to PNC and PNC Bank.

First, the Final Tailoring Rules significantly modify the threshold deductions for significant common stock investments in unconsolidated financial institutions, as well as mortgage servicing rights and deferred tax assets, from Common equity Tier 1 (CET1) capital (in each case, net of associated deferred tax liabilities) applicable to PNC and PNC Bank. Under the Final Tailoring Rules, PNC and PNC Bank will have to deduct its significant common stock investments in unconsolidated financial institutions, mortgage servicing rights and deferred tax assets from CET1 capital (in each case, net of associated deferred tax liabilities) only to the extent such items individually exceed 25% of the institution's adjusted CET1 capital. PNC's common stock investment in BlackRock is treated as a significant common stock investment in an unconsolidated financial institution for these purposes. As of September 30, 2019, a portion of PNC's common stock investment in BlackRock was required to be deducted from CET1 capital. If the Final Tailoring Rules had been in effect as of September 30, 2019, no portion of PNC's common stock investment in BlackRock would have been deducted from CET1 capital.

As a result, upon effectiveness of the Final Tailoring Rules, PNC may have the ability to return more capital to shareholders, through dividends or buybacks, while still maintaining capital in excess of regulatory and policy minimums. We are evaluating how best to deploy that excess capital in light of the impact of the Final Tailoring Rules and will continue to do so. The timing and amount of any dividends and buybacks will continue to be subject, among other things, to the CCAR process described in the Supervision and Regulation section of Item 1 Business in our 2018 Form 10-K.

Second, under the Final Tailoring Rules, PNC and PNC Bank will have the ability to opt-out of the inclusion of accumulated other comprehensive income (AOCI) related to both available for sale securities and pension and other post-retirement plans in CET1 capital. PNC and PNC Bank must make this election in the organization's relevant regulatory reporting forms for the first period ending after the effective date of the Final Tailoring Rules. We expect to make this election.

Third, the Final Tailoring Rules reduce the LCR requirements for Category III banking organizations that, like PNC and PNC Bank, have less than $75 billion in weighted short-term wholesale funding (as defined by the rules). Under the Final Tailoring Rules, the net cash outflows of PNC and PNC Bank under the LCR rules are scaled by a factor of 85% (rather than the 100% standard under current rules), thereby reducing the amount of HQLA that the organization has to maintain to meet its LCR requirements.

In addition, under the Final Tailoring Rules:

- PNC and PNC Bank will no longer be required to use the model-based advanced approaches to calculate risk-weighted assets for capital purposes;
- PNC will no longer have to conduct a mid-cycle company-run stress test using balance sheet data as of June 30 and publicly disclose the results of such test; and
- PNC and PNC Bank will have to conduct a company-run stress test under the Dodd-Frank Act stress testing regulations of the Federal Reserve and OCC (a "DFAST stress test") biennially (rather than annually) using two scenarios (a baseline and severely adverse scenario), and publicly disclose the results of such tests.

Finally, the Federal Reserve and FDIC in October 2019 adopted modifications to their resolution plan regulations for covered BHCs, including PNC. Under the modifications, which we expect to go into effect in the first quarter of 2020, PNC will generally have to file a resolution plan on a 3-year cycle, with submissions alternating between a full plan and a targeted plan. Pursuant to these modifications and a filing extension received from the Federal Reserve and FDIC in July 2019, PNC's next resolution plan is scheduled to be filed by July 1, 2021. The modifications, however, provide the agencies with 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.

<u>Volcker Rule</u>
In October, the U.S. banking agencies, SEC, and Commodity Futures Trading Commission approved changes to the regulations implementing the Volcker Rule that, among other things, simplify and tailor the compliance program requirements for banking entities, like PNC, that have trading assets and liabilities of more than $1 billion, but less than $20 billion. The final regulations also provide that for institutions subject to the market risk capital rule, like PNC, only certain market risk capital rules and dealer positions are subject to the Volcker Rule's restrictions on proprietary trading. The final regulations also simplify the requirements for underwriting, market-making, and risk-mitigating hedging activities. Banking entities must comply with the final regulations by January 1, 2021, but may elect to comply with the modifications beginning January 1, 2020.

<u>FDIC Recordkeeping Requirements</u>
In July 2019, the FDIC approved amendments to its regulations regarding (i) enhanced deposit insurance recordkeeping requirements for insured depository institutions (IDIs) with at least 2 million deposit accounts, including PNC Bank, and (ii) deposit insurance recordkeeping requirements for joint deposit accounts applicable to all IDIs. Among other things, the amendments revise the attestation requirement under the deposit insurance recordkeeping regulations and allow covered IDIs to elect to extend the April 1, 2020 compliance date for the enhanced deposit insurance recordkeeping requirements by up to one year.

Critical Accounting Estimates and Judgments

Note 1 Accounting Policies of our 2018 Form 10-K describes the most significant accounting policies that we use to prepare our consolidated financial statements. 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.

The following critical accounting policies and judgments are described in more detail in Critical Accounting Estimates and Judgments in Item 7 of our 2018 Form 10-K:

- Fair Value Measurements
- Allowances for Loan and Lease Losses and Unfunded Loan Commitments and Letters of Credit
- Residential and Commercial Mortgage Servicing Rights

Recently Issued Accounting Standards

ASU	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	• Required effective date of January 1, 2020. • Requires the use of an expected credit loss methodology; specifically, current expected credit losses (CECL) for the remaining life of the asset will be recognized at the time of origination or acquisition. • Methodology will apply to loans, net investment in leases, debt securities and certain financial assets not accounted for at fair value through net income. It will also apply to off-balance sheet credit exposures except for unconditionally cancellable commitments. • In-scope assets will be presented at the net amount expected to be collected after deducting the allowance for credit losses (ACL) from the amortized cost basis of the assets. • Requires inclusion of expected recoveries of previously charged-off amounts for in-scope assets. • Requires enhanced credit quality disclosures including disaggregation of credit quality indicators by vintage. • Requires a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption.	• We plan to adopt the CECL standard on its effective date. • We have a company-wide, cross-functional governance structure that we established in the third quarter of 2016 to oversee overall strategy for implementation of the CECL standard. • We have prepared CECL accounting policies and continue to refine and test our models, estimation techniques, data, operational processes and financial controls which will be used to calculate our ACL under the CECL standard. We will continue to refine our interpretations, methodology, data and operational processes based upon our reviews and tests. • The Financial Accounting Standards Board (FASB) recently issued ASU's 2019-04 and 2019-05. ASU 2019-04 clarified treatment of several topics in the CECL standard, including recoveries and accrued interest, which we plan to implement. ASU 2019-05 provided an option to elect fair value option at transition for certain assets in scope for CECL, which we plan to utilize. The FASB is also expected to publish an ASU providing additional guidance on selected topics and we are awaiting final guidance to implement any necessary changes. • The ACL will be developed using various models and estimation techniques utilizing our historical loss experience, current borrower characteristics, current conditions, reasonable and supportable forecasts and other relevant factors. For expected losses in our reasonable and supportable forecast period of three years, we will use four macroeconomic scenarios and their estimated probabilities. These will be produced by our economics team using a combination of structural models and expert judgment and will be designed to reflect a range of plausible economic conditions and emerging business cycles over the next three years. • We will also apply qualitative factors that could be related to idiosyncratic risk factors, changes in current economic conditions that may not be reflected in quantitatively derived results, or other relevant factors to ensure the ACL reflects our best estimate of current expected credit losses. • Based on our analysis of results from the parallel run periods in 2019 thus far, our CECL estimate will be sensitive 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 current conditions and portfolio quality. 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 probabilities and timing of peak business cycles could materially affect our loss estimates. - Methodology changes: Enhancements to our CECL methodologies could materially affect our reserve estimates. • Based on our forecasted economic conditions and portfolio balances at September 30, 2019, the adoption of the CECL standard could result in an overall ACL increase of approximately 20%, as compared to our current aggregate reserve levels. The overall change is primarily due to the difference between current loss reserve periods versus the estimated remaining contractual lives, as required by the CECL standard. We believe that given current conditions, our consumer loss reserves will increase significantly, while our commercial loan reserves will decrease slightly. Additionally, the CECL ACL could produce higher volatility in the quarterly provision for credit losses than our current reserve process. • The estimated impact of the CECL standard implementation is based on the current state of our end-to-end CECL process and is inclusive of quantitative results and qualitative factors. This process is still under development, including refinement and development of certain models, estimation techniques and the build-out of the operational and control structure supporting the end-to-end process. The reserve amount to be recorded at the January 1, 2020 transition date may differ from our estimate due to the factors noted above, further process refinements and other assumptions.
Goodwill - ASU 2017-04 Issued January 2017	• Required effective date of January 1, 2020. • 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 carrying amount exceeds the reporting unit's fair value.	• We plan to adopt the standard on its effective date and we do not expect the adoption of this standard to impact our consolidated results of operations or our consolidated financial position.

Codification Improvements - ASU 2019-04 Topic 3: Codification Improvements to ASU 2017-12 and Other Hedging Items Issued April 2019	• Required effective date of January 1, 2020 with early adoption permitted if ASU 2017-12 was previously adopted. • 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	• We are currently assessing the potential impact to PNC upon adoption of these codification improvements.

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 our 2018 Form 10-K and in Note2 Loan Sale and Servicing Activities and Variable Interest Entities and Note 13 Commitments in the Notes To Consolidated Financial Statements included in this Report.

A summary and further description of variable interest entities (VIEs) is included in Note 1 Accounting Policies and Note2 Loan Sale and Servicing Activities and Variable Interest Entities in our 2018 Form 10-K.

Trust Preferred Securities

See Note 10 Borrowed Funds in the Notes To Consolidated Financial Statements in our2018 Form 10-K 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.

Internal Controls And Disclosure Controls And Procedures

As of September 30, 2019, we performed an evaluation under the supervision of 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 Exchange Act of 1934) were effective as of September 30, 2019, and that there has been no change in PNC’s internal control over financial reporting that occurred during the third quarter of 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Glossary of Terms

For a glossary of terms commonly used in our filings, please see the glossary of terms included in our2018 Form 10-K.

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 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 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.
  - Slowing or reversal of the current U.S. economic expansion.
  - 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:
  - U.S. economic growth, after accelerating a few years ago, has slowed since mid-2018 and is expected to slow further through the rest of this year and into 2020.
  - Job growth will continue into 2020, but at a slower pace due to both difficulty in finding workers and slower economic growth. The unemployment rate is expected to increase slightly in the near term, but the labor market will remain tight, pushing wages higher and supporting continued gains in consumer spending.
  - Slower global economic growth, trade restrictions and geopolitical concerns are downside risks to the forecast, which have increased in 2019, and risks are weighted to the downside.
  - Inflation has slowed in 2019, to below the FOMC's 2% objective, but is expected to gradually increase over the next two years.
  - Our baseline forecast includes the 0.25% federal funds rate cut on October 30, 2019. We expect the funds rate to remain in a range of 1.50% to 1.75% through the rest of 2019.
- Our ability to take certain capital actions, including returning capital to shareholders, is subject to review by the Federal Reserve Board as part of our comprehensive capital plan for the applicable period in connection with the Federal Reserve Board's CCAR process and to the acceptance of such capital plan and non-objection to such capital actions by the Federal Reserve Board.
- Our 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 our balance sheet. In addition, our 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 us.
  – 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.
- Business and operating results also include impacts relating to our equity interest in BlackRock, Inc. and rely to a significant extent on information provided to us by BlackRock. Risks and uncertainties that could affect BlackRock are discussed in more detail by BlackRock in its SEC filings.
- 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 our 2018 Form 10-K and elsewhere in this Report, including in the Risk Factors and Risk Management sections and the Legal Proceedings and Commitments Notes of the Notes To Consolidated Financial Statements in these reports. 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.

CONSOLIDATED INCOME STATEMENT
THE PNC FINANCIAL SERVICES GROUP, INC.

Unaudited In millions, except per share data	Three months ended September 30 2019	 2018	Nine months ended September 30 2019	 2018
Interest Income				
Loans	$ 2,678	$ 2,452	$ 7,952	$ 7,025
Investment securities	617	584	1,866	1,653
Other	208	187	610	545
Total interest income	3,503	3,223	10,428	9,223
Interest Expense				
Deposits	531	336	1,518	810
Borrowed funds	468	421	1,433	1,173
Total interest expense	999	757	2,951	1,983
Net interest income	2,504	2,466	7,477	7,240
Noninterest Income				
Asset management	464	486	1,346	1,397
Consumer services	402	377	1,165	1,115
Corporate services	469	465	1,415	1,381
Residential mortgage	134	76	281	257
Service charges on deposits	178	186	517	522
Other	342	301	1,017	880
Total noninterest income	1,989	1,891	5,741	5,552
Total revenue	4,493	4,357	13,218	12,792
Provision For Credit Losses	183	88	552	260
Noninterest Expense				
Personnel	1,400	1,413	4,179	4,123
Occupancy	206	195	633	616
Equipment	291	264	862	818
Marketing	76	71	224	201
Other	650	665	1,914	1,961
Total noninterest expense	2,623	2,608	7,812	7,719
Income before income taxes and noncontrolling interests	1,687	1,661	4,854	4,813
Income taxes	295	261	817	818
Net income	1,392	1,400	4,037	3,995
Less: Net income attributable to noncontrolling interests	13	11	35	31
Preferred stock dividends	63	63	181	181
Preferred stock discount accretion and redemptions	1	1	3	3
Net income attributable to common shareholders	$ 1,315	$ 1,325	$ 3,818	$ 3,780
Earnings Per Common Share				
Basic	$ 2.95	$ 2.84	$ 8.45	$ 8.03
Diluted	$ 2.94	$ 2.82	$ 8.42	$ 7.96
Average Common Shares Outstanding				
Basic	444	465	450	469
Diluted	445	467	451	472

See accompanying Notes To Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

THE PNC FINANCIAL SERVICES GROUP, INC.

Unaudited In millions	Three months ended September 30 2019	Three months ended September 30 2018	Nine months ended September 30 2019	Nine months ended September 30 2018
Net income	$ 1,392	$ 1,400	$ 4,037	$ 3,995
Other comprehensive income (loss), before tax and net of reclassifications into Net income:				
Net unrealized gains (losses) on non-OTTI securities	196	(324)	1,529	(1,125)
Net unrealized gains (losses) on OTTI securities	18	(1)	27	16
Net unrealized gains (losses) on cash flow hedge derivatives	79	(71)	433	(377)
Pension and other postretirement benefit plan adjustments	2	1	63	70
Other	(19)	(17)	(15)	(25)
Other comprehensive income (loss), before tax and net of reclassifications into Net income	276	(412)	2,037	(1,441)
Income tax benefit (expense) related to items of other comprehensive income	(70)	92	(475)	323
Other comprehensive income (loss), after tax and net of reclassifications into Net income	206	(320)	1,562	(1,118)
Comprehensive income	1,598	1,080	5,599	2,877
Less: Comprehensive income attributable to noncontrolling interests	13	11	35	31
Comprehensive income attributable to PNC	$ 1,585	$ 1,069	$ 5,564	$ 2,846

See accompanying Notes To Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEET
THE PNC FINANCIAL SERVICES GROUP, INC.

Unaudited In millions, except par value	September 30 2019	December 31 2018
Assets		
Cash and due from banks	$ 5,671	$ 5,608
Interest-earning deposits with banks	19,036	10,893
Loans held for sale (a)	1,872	994
Investment securities – available for sale	69,057	63,389
Investment securities – held to maturity	18,826	19,312
Loans (a)	237,377	226,245
Allowance for loan and lease losses	(2,738)	(2,629)
Net loans	234,639	223,616
Equity investments (b)	13,325	12,894
Mortgage servicing rights	1,483	1,983
Goodwill	9,233	9,218
Other (a)	35,774	34,408
Total assets	$ 408,916	$ 382,315
Liabilities		
Deposits		
Noninterest-bearing	$ 74,077	$ 73,960
Interest-bearing	211,506	193,879
Total deposits	285,583	267,839
Borrowed funds		
Federal Home Loan Bank borrowings	21,901	21,501
Bank notes and senior debt	27,148	25,018
Subordinated debt	5,473	5,895
Other (c)	6,832	5,005
Total borrowed funds	61,354	57,419
Allowance for unfunded loan commitments and letters of credit	304	285
Accrued expenses and other liabilities	12,220	9,002
Total liabilities	359,461	334,545
Equity		
Preferred stock (d)		
Common stock ($5 par value, Authorized 800 shares, issued 542 shares)	2,711	2,711
Capital surplus	16,297	16,277
Retained earnings	41,413	38,919
Accumulated other comprehensive income (loss)	837	(725)
Common stock held in treasury at cost: 103 and 85 shares	(11,838)	(9,454)
Total shareholders' equity	49,420	47,728
Noncontrolling interests	35	42
Total equity	49,455	47,770
Total liabilities and equity	$ 408,916	$ 382,315

(a) Our consolidated assets included the following for which we have elected the fair value option: Loans held for sale of $1.5 billion, Loans of $.8 billion and Other assets of $.1 billion at September 30, 2019 and Loans held for sale of $.9 billion, Loans of $.8 billion and Other assets of $.2 billion at December 31, 2018.
(b) Amounts include our equity interest in BlackRock.
(c) Our consolidated liabilities at both September 30, 2019 and December 31, 2018 included Other borrowed funds of $.1 billion for which we have elected the fair value option.
(d) Par value less than $.5 million at each date.

See accompanying Notes To Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

THE PNC FINANCIAL SERVICES GROUP, INC.

Unaudited In millions	Nine months ended September 30 2019	2018
Operating Activities		
Net income	$ 4,037	$ 3,995
Adjustments to reconcile net income to net cash provided (used) by operating activities		
Provision for credit losses	552	260
Depreciation and amortization	904	839
Deferred income taxes	83	(116)
Changes in fair value of mortgage servicing rights	715	(57)
Undistributed earnings of BlackRock	(356)	(421)
Net change in		
Trading securities and other short-term investments	741	293
Loans held for sale	(882)	910
Other assets	(2,086)	(2,194)
Accrued expenses and other liabilities	831	2,195
Other	(291)	(1)
Net cash provided (used) by operating activities	$ 4,248	$ 5,703
Investing Activities		
Sales		
Securities available for sale	$ 5,201	$ 5,422
Loans	1,237	1,180
Repayments/maturities		
Securities available for sale	7,962	6,941
Securities held to maturity	2,193	1,917
Purchases		
Securities available for sale	(17,179)	(17,635)
Securities held to maturity	(1,739)	(3,072)
Loans	(898)	(430)
Net change in		
Federal funds sold and resale agreements	3,192	313
Interest-earning deposits with banks	(8,143)	8,795
Loans	(11,978)	(4,120)
Other	(573)	(965)
Net cash provided (used) by investing activities	$ (20,725)	$ (1,654)

(continued on following page)

CONSOLIDATED STATEMENT OF CASH FLOWS

THE PNC FINANCIAL SERVICES GROUP, INC.
(continued from previous page)

Unaudited In millions	Nine Months Ended September 30 2019	2018
Financing Activities		
Net change in		
Noninterest-bearing deposits	$ 180	$ (5,114)
Interest-bearing deposits	17,627	4,959
Federal funds purchased and repurchase agreements	1,934	1,037
Federal Home Loan Bank borrowings	1,400	
Commercial paper		(100)
Other borrowed funds	(77)	(109)
Sales/issuances		
Federal Home Loan Bank borrowings	12,000	6,500
Bank notes and senior debt	6,930	3,238
Subordinated debt		1,243
Other borrowed funds	929	400
Common and treasury stock	73	61
Repayments/maturities		
Federal Home Loan Bank borrowings	(13,000)	(7,501)
Bank notes and senior debt	(5,600)	(4,175)
Subordinated debt	(700)	(575)
Other borrowed funds	(963)	(429)
Acquisition of treasury stock	(2,626)	(2,145)
Preferred stock cash dividends paid	(181)	(181)
Common stock cash dividends paid	(1,386)	(1,159)
Net cash provided (used) by financing activities	$ 16,540	$ (4,050)
Net Increase (Decrease) In Cash And Due From Banks	63	(1)
Cash and due from banks at beginning of period	5,608	5,249
Cash and due from banks at end of period	$ 5,671	$ 5,248
Supplemental Disclosures		
Interest paid	$ 2,915	$ 1,881
Income taxes paid	$ 321	$ 324
Income taxes refunded	$ 7	$ 463
Leased assets obtained in exchange for new operating lease liabilities	$ 238	
Right-of-use assets recognized at adoption of ASU 2016-02	$ 2,004	
Non-cash Investing and Financing Items		
Transfer from loans to loans held for sale, net	$ 771	$ 359
Transfer from loans to foreclosed assets	$ 131	$ 145
Transfer from trading securities to investment securities	$ 228	

See accompanying Notes To Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

THE PNC FINANCIAL SERVICES GROUP, INC.
Unaudited

BUSINESS

The PNC Financial Services Group, Inc. (PNC) is one of the largest diversified financial services companies in the United States 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 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 accounting principles generally accepted in the United States of America (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.

In our opinion, the unaudited interim consolidated financial statements reflect all normal, recurring adjustments needed to present fairly our results for the interim periods. The results of operations for interim periods are not necessarily indicative of the results that may be expected for the full year or any other interim period.

We have also considered the impact of subsequent events on these consolidated financial statements.

When preparing these unaudited interim consolidated financial statements, we have assumed that you have read the audited consolidated financial statements included in our 2018 Form 10-K. Reference is made to Note 1 Accounting Policies in our2018 Form 10-K for a detailed description of significant accounting policies. There have been no significant changes to our accounting policies as disclosed in our 2018 Form 10-K, except for the adoption of the new leasing standard included in this Note 1 in the first quarter of 2019. These interim consolidated financial statements serve to update our 2018 Form 10-K and may not include all information and Notes necessary to constitute a complete set of 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 allowances for loan and lease losses and unfunded loan commitments and letters of credit. Actual results may differ from the estimates and the differences may be material to the consolidated financial statements.

Leases

We provide financing for various types of equipment, including aircraft, energy and power systems, and vehicles through a variety of lease arrangements. Direct financing leases are carried at the aggregate of lease payments plus estimated residual value of the leased equipment, less unearned income. We recognize income over the term of the lease using the constant effective yield method. Direct financing lease residual values are reviewed for impairment in accordance with the Allowance for Loan and Lease (ALLL) processes. Gains or losses on the sale of leased assets are included in Other noninterest income while impairment on the net investment of leases is included in Provision for credit losses.

We also enter into various lease arrangements, primarily involving real estate, and other equipment, as the lessee. For those classified as operating leases, we recognize a lease liability, representing the present value of the minimum lease payments, and a corresponding right of use (ROU) asset. On the consolidated balance sheet, the ROU asset and lease liability are included in Other assets and Other liabilities, respectively.

When we adopted the Accounting Standards Update (ASU) 2016-02 - Leases as of January 1, 2019, we recognized lease liabilities and right-of-use assets of $2.1 billion and $2.0 billion, respectively. In addition, we recognized a one-time pretax adjustment of $83 million to retained earnings, related primarily to deferred gains on previous sale-leaseback transactions. See Note 16 Leases for additional information related to leases within the scope of ASC 842.

Note 2 Loan Sale and Servicing Activities and Variable Interest Entities

Loan Sale and Servicing Activities

As more fully described in Note 2 Loan Sale and Servicing Activities and Variable Interest Entities in our 2018 Form 10-K, we have transferred residential and commercial mortgage loans in securitization or sales transactions in which we have continuing involvement. Our continuing involvement 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 special purpose entities (SPEs).

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 Fair Value and Note 7 Goodwill and Mortgage Servicing Rights for information on our servicing rights, including the carrying value of servicing assets.

The following table provides cash flows associated with our loan sale and servicing activities:

Table 33: Cash Flows Associated with Loan Sale and Servicing Activities

In millions	Residential Mortgages	Commercial Mortgages (a)
Cash Flows - Three months ended September 30, 2019		
Sales of loans (b)	$ 1,296	$ 1,122
Repurchases of previously transferred loans (c)	$ 81	
Servicing fees (d)	$ 90	$ 34
Servicing advances recovered/(funded), net	$ 5	$ 45
Cash flows on mortgage-backed securities held (e)	$ 1,394	$ 14
Cash Flows - Three months ended September 30, 2018		
Sales of loans (b)	$ 1,242	$ 953
Repurchases of previously transferred loans (c)	$ 90	
Servicing fees (d)	$ 88	$ 34
Servicing advances recovered/(funded), net	$ 2	$ 19
Cash flows on mortgage-backed securities held (e)	$ 574	$ 51
Cash Flows - Nine months ended September 30, 2019		
Sales of loans (b)	$ 2,902	$ 2,212
Repurchases of previously transferred loans (c)	$ 235	$ 4
Servicing fees (d)	$ 264	$ 97
Servicing advances recovered/(funded), net	$ 33	$ 61
Cash flows on mortgage-backed securities held (e)	$ 2,653	$ 43
Cash Flows - Nine months ended September 30, 2018		
Sales of loans (b)	$ 3,486	$ 2,613
Repurchases of previously transferred loans (c)	$ 286	
Servicing fees (d)	$ 269	$ 100
Servicing advances recovered/(funded), net	$ 45	$ 24
Cash flows on mortgage-backed securities held (e)	$ 1,445	$ 100

(a) Represents cash flow information associated with both commercial mortgage loan transfers and servicing activities.
(b) Gains/losses recognized on sales of loans were insignificant for the periods presented.
(c) Includes both residential and commercial mortgage government insured or guaranteed loans eligible for repurchase through the exercise of our removal of account provision option, as well as residential mortgage loans repurchased due to alleged breaches of origination covenants or representations and warranties made to purchasers.
(d) Includes contractually specified servicing fees, late charges and ancillary fees.
(e) 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 $17.7 billion, $ 13.3 billion, and $13.0 billion in residential mortgage-backed securities and $.6 billion, $ .6 billion, and $ .6 billion in commercial mortgage-backed securities at September 30, 2019, December 31, 2018, and September 30, 2018, respectively.

Table 34 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 September 30, 2019.

Table 34: Principal Balance, Delinquent Loans and Net Charge-offs Related to Serviced Loans For Others

In millions	Residential Mortgages	Commercial Mortgages (a)
September 30, 2019		
Total principal balance	$ 50,786	$ 50,723
Delinquent loans (b)	$ 529	$ 64
December 31, 2018		
Total principal balance	$ 54,028	$ 47,969
Delinquent loans (b)	$ 622	$ 234
Three months ended September 30, 2019		
Net charge-offs (c)	$ 8	$ 52
Three months ended September 30, 2018		
Net charge-offs (c)	$ 9	$ 117
Nine months ended September 30, 2019		
Net charge-offs (c)	$ 32	$ 348
Nine months ended September 30, 2018		
Net charge-offs (c)	$ 34	$ 169

(a) Represents information at the securitization level in which we have sold loans and we are the servicer for the securitization.
(b) Serviced delinquent loans are 90 days or more past due or are in process of foreclosure.
(c) 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)

As discussed in Note 2 Loan Sale and Servicing Activities and Variable Interest Entities in our2018 Form 10-K, we are involved with various entities in the normal course of business that are deemed to be VIEs.

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 35 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 35. These loans are included as part of the asset quality disclosures that we make in Note 3 Asset Quality.

Table 35: Non-Consolidated VIEs

In millions	PNC Risk of Loss (a)	Carrying Value of Assets Owned by PNC	Carrying Value of Liabilities Owned by PNC
September 30, 2019			
Mortgage-backed securitizations (b)	$ 19,084	$ 19,084 (c)	
Tax credit investments and other	3,077	3,048 (d)	$ 1,111 (e)
Total	$ 22,161	$ 22,132	$ 1,111
December 31, 2018			
Mortgage-backed securitizations (b)	$ 14,266	$ 14,266 (c)	
Tax credit investments and other	2,949	2,911 (d)	$ 806 (e)
Total	$ 17,215	$ 17,177	$ 806

(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 credits 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.

We make certain equity investments in various tax credit limited partnerships or limited liability companies (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 the nine months ended September 30, 2019, we recognized $152 million of amortization, $165 million of tax credits and $35 million of other tax benefits associated with qualified investments in low income housing tax credits within Income taxes. The amounts for the third quarter of 2019 were $52 million, $54 million and $11 million, respectively.

Note 3 Asset Quality

We closely monitor economic conditions and loan performance trends to manage and evaluate our exposure to credit risk. Trends in delinquency rates may be a key indicator, among other considerations, of credit risk within the loan portfolios. 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.

Nonperforming assets include nonperforming loans and leases, other real estate owned (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 as these loans are accounted for at fair value. 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. Purchased impaired loans are excluded from nonperforming loans as we are currently accreting interest income over the expected life of the loans.

See Note 1 Accounting Policies in our 2018 Form 10-K for additional information on our loan related policies.

The following tables present the delinquency status of our loans and our nonperforming assets atSeptember 30, 2019 and December 31, 2018, respectively.

Table 36: Analysis of Loan Portfolio (a)

	Accruing								
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 (b)	Nonperforming Loans	Fair Value Option Nonaccrual Loans (c)	Purchased Impaired Loans	Total Loans (d)
September 30, 2019									
Commercial Lending									
Commercial	$ 123,328	$ 82	$ 49	$ 64	$ 195	$ 491			$ 124,014
Commercial real estate	28,803	3	3		6	75			28,884
Equipment lease financing	7,270	6	4		10	10			7,290
Total commercial lending	159,401	91	56	64	211	576			160,188
Consumer Lending									
Home equity	23,631	53	24		77	685		$ 578	24,971
Residential real estate	18,867	129	77	302	508 (b)	325	$ 166	1,216	21,082
Automobile	15,684	145	36	11	192	128			16,004
Credit card	6,660	56	33	57	146	9			6,815
Education	3,280	56	35	90	181 (b)				3,461
Other consumer	4,818	17	8	8	33	5			4,856
Total consumer lending	72,940	456	213	468	1,137	1,152	166	1,794	77,189
Total	$ 232,341	$ 547	$ 269	$ 532	$ 1,348	$ 1,728	$ 166	$ 1,794	$ 237,377
Percentage of total loans	97.88%	.23%	.11%	.22%	.56%	.73%	.07%	.76%	100.00%
December 31, 2018									
Commercial Lending									
Commercial	$ 116,300	$ 82	$ 54	$ 52	$ 188	$ 346			$ 116,834
Commercial real estate	28,056	6	3		9	75			28,140
Equipment lease financing	7,229	56	12		68	11			7,308
Total commercial lending	151,585	144	69	52	265	432			152,282
Consumer Lending									
Home equity	24,556	66	25		91	797		$ 679	26,123
Residential real estate	16,216	135	73	363	571 (b)	350	$ 182	1,338	18,657
Automobile	14,165	113	29	12	154	100			14,419
Credit card	6,222	46	29	53	128	7			6,357
Education	3,571	69	41	141	251 (b)				3,822
Other consumer	4,552	12	5	8	25	8			4,585
Total consumer lending	69,282	441	202	577	1,220	1,262	182	2,017	73,963
Total	$ 220,867	$ 585	$ 271	$ 629	$ 1,485	$ 1,694	$ 182	$ 2,017	$ 226,245
Percentage of total loans	97.62%	.26%	.12%	.28%	.66%	.75%	.08%	.89%	100.00%

(a) Amounts in table represent recorded investment and exclude loans held for sale. Recorded investment does not include any associated valuation allowance.
(b) 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 are currently accreting interest income over the expected life of the loans. Past due loan amounts include government insured or guaranteed Residential real estate mortgages totaling $.4 billion and $.5 billion at September 30, 2019 and December 31, 2018, respectively, and Education loans totaling $ .2 billion at both September 30, 2019 and December 31, 2018.
(c) 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.
(d) Net of unearned income, net deferred loan fees, unamortized discounts and premiums, and purchase discounts and premiums totaling $1.2 billion at both September 30, 2019 December 31, 2018.

At September 30, 2019, we pledged $16.2 billion of commercial loans to the Federal Reserve Bank and $66.7 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, 2018 were $17.3 billion and $63.2 billion, respectively. Amounts pledged reflect the unpaid principal balances.

Table 37: Nonperforming Assets

Dollars in millions	September 30 2019	December 31 2018
Nonperforming loans		
Total commercial lending	$ 576	$ 432
Total consumer lending (a)	1,152	1,262
Total nonperforming loans	1,728	1,694
OREO and foreclosed assets	119	114
Total nonperforming assets	$ 1,847	$ 1,808
Nonperforming loans to total loans	.73%	.75%
Nonperforming assets to total loans, OREO and foreclosed assets	.78%	.80%
Nonperforming assets to total assets	.45%	.47%

(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.

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 troubled debt restructurings (TDRs). See Note 1 Accounting Policies in our 2018 Form 10-K and the TDR section of this Note 3 for additional information on TDRs.

Total nonperforming loans in Table 37 include TDRs of $.9 billion at both September 30, 2019 and December 31, 2018. TDRs that are performing, including consumer credit card TDR loans, totaled $.9 billion and $1.0 billion at September 30, 2019 and December 31, 2018, respectively, and are excluded from nonperforming loans.

Additional Asset Quality Indicators

We have two portfolio segments – Commercial Lending and Consumer Lending. Each of these segments comprises multiple loan classes. Classes are characterized by similarities in initial measurement, risk attributes and the manner in which we monitor and assess credit risk. The Commercial Lending segment is composed of the commercial, commercial real estate and equipment lease financing loan classes. The Consumer Lending segment is composed of the home equity, residential real estate, automobile, credit card, education and other consumer loan classes.

Commercial Lending Loan Classes

The following table presents asset quality indicators for the Commercial Lending loan classes. See Note 3 Asset Quality in our 2018 Form 10-K for additional information related to our Commercial Lending loan classes, including discussion around the asset quality indicators that we use to monitor and manage the credit risk associated with each loan class.

Table 38: Commercial Lending Asset Quality Indicators (a)

In millions	Pass Rated	Criticized	Total Loans
September 30, 2019			
Commercial	$ 118,316	$ 5,698	$ 124,014
Commercial real estate	28,050	834	28,884
Equipment lease financing	7,065	225	7,290
Total commercial lending	$ 153,431	$ 6,757	$ 160,188
December 31, 2018			
Commercial	$ 111,276	$ 5,558	$ 116,834
Commercial real estate	27,682	458	28,140
Equipment lease financing	7,180	128	7,308
Total commercial lending	$ 146,138	$ 6,144	$ 152,282

(a) Loans are classified as Pass Rated and Criticized based on the Regulatory classification definitions. The Criticized classification includes loans that were rated special mention, substandard or doubtful as of September 30, 2019 and December 31, 2018. We use probability of default and loss given default to rate loans in the commercial lending portfolio.

Consumer Lending Loan Classes

See Note 3 Asset Quality in our 2018 Form 10-K for additional information related to our Consumer Lending loan classes, including discussion around the asset quality indicators that we use to monitor and manage the credit risk associated with each loan class.

Home Equity and Residential Real Estate Loan Classes
The following table presents asset quality indicators for the home equity and residential real estate loan classes.

Table 39: Asset Quality Indicators for Home Equity and Residential Real Estate Loans

	September 30, 2019		December 31, 2018	
In millions	Home equity	Residential real estate	Home equity	Residential real estate
Current estimated LTV ratios				
Greater than or equal to 125%	$ 382	$ 123	$ 461	$ 116
Greater than or equal to 100% to less than 125%	911	228	1,020	255
Greater than or equal to 90% to less than 100%	1,096	340	1,174	335
Less than 90%	21,821	18,384	22,644	15,922
No LTV ratio available	183	218	145	6
Government insured or guaranteed loans		573		685
Purchased impaired loans	578	1,216	679	1,338
Total loans	$ 24,971	$ 21,082	$ 26,123	$ 18,657
Updated FICO Scores				
Greater than 660	$ 22,066	$ 18,455	$ 22,996	$ 15,956
Less than or equal to 660	2,045	547	2,210	585
No FICO score available	282	291	238	93
Government insured or guaranteed loans		573		685
Purchased impaired loans	578	1,216	679	1,338
Total loans	$ 24,971	$ 21,082	$ 26,123	$ 18,657

Automobile, Credit Card, Education and Other Consumer Loan Classes

The following table presents asset quality indicators for the automobile, credit card, education and other consumer loan classes.

Table 40: Asset Quality Indicators for Automobile, Credit Card, Education and Other Consumer Loans

Dollars in millions	Automobile	Credit Card	Education	Other Consumer
September 30, 2019				
FICO score greater than 719	$ 8,444	$ 3,989	$ 1,184	$ 1,452
650 to 719	4,845	1,955	185	755
620 to 649	1,152	325	22	122
Less than 620	1,240	376	22	107
No FICO score available or required (a)	323	170	42	27
Total loans using FICO credit metric	16,004	6,815	1,455	2,463
Consumer loans using other internal credit metrics			2,006	2,393
Total loans	$ 16,004	$ 6,815	$ 3,461	$ 4,856
Weighted-average updated FICO score (b)	724	731	775	731
December 31, 2018				
FICO score greater than 719	$ 7,740	$ 3,809	$ 1,240	$ 1,280
650 to 719	4,365	1,759	194	641
620 to 649	1,007	280	26	106
Less than 620	1,027	332	24	105
No FICO score available or required (a)	280	177	57	25
Total loans using FICO credit metric	14,419	6,357	1,541	2,157
Consumer loans using other internal credit metrics			2,281	2,428
Total loans	$ 14,419	$ 6,357	$ 3,822	$ 4,585
Weighted-average updated FICO score (b)	726	733	774	732

(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.
(b) Weighted-average updated FICO score excludes accounts with no FICO score available or required.

Troubled Debt Restructurings (TDRs)

Table 41 quantifies the number of loans that were classified as TDRs, as well as the change in the loans' recorded investment as a result of becoming a TDR during the three and nine months ended September 30, 2019 and September 30, 2018. Additionally, the table provides information about the types of TDR concessions. See Note3 Asset Quality in our 2018 Form 10-K for additional discussion of TDRs.

Table 41: Financial Impact and TDRs by Concession Type (a)

During the three months ended September 30, 2019 Dollars in millions	Number of Loans	Pre-TDR Recorded Investment (b)	Post-TDR Recorded Investment (c) Principal Forgiveness	Rate Reduction	Other	Total
Total commercial lending	21	$ 97			$ 72	$ 72
Total consumer lending	3,656	45		$ 24	19	43
Total TDRs	3,677	$ 142		$ 24	$ 91	$ 115
During the three months ended September 30, 2018 Dollars in millions						
Total commercial lending	18	$ 115	$ 2	$ 24	$ 81	$ 107
Total consumer lending	3,147	45		19	23	42
Total TDRs	3,165	$ 160	$ 2	$ 43	$ 104	$ 149

During the nine months ended September 30, 2019 Dollars in millions	Number of Loans	Pre-TDR Recorded Investment (b)	Post-TDR Recorded Investment (c) Principal Forgiveness	Rate Reduction	Other	Total
Total commercial lending	58	$ 233		$ 1	$ 208	$ 209
Total consumer lending	11,009	131		72	51	123
Total TDRs	11,067	$ 364		$ 73	$ 259	$ 332
During the nine months ended September 30, 2018 Dollars in millions						
Total commercial lending	65	$ 145	$ 2	$ 26	$ 105	$ 133
Total consumer lending	9,015	129	1	66	52	119
Total TDRs	9,080	$ 274	$ 3	$ 92	$ 157	$ 252

(a) Impact of partial charge-offs at TDR date are included in this table.
(b) Represents the recorded investment of the loans as of the quarter end prior to TDR designation, and excludes immaterial amounts of accrued interest receivable.
(c) 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. The recorded investment of loans that were both (i) classified as TDRs or were subsequently modified during each 12-month period preceding January 1, 2019 and January 1, 2018, respectively, and (ii) subsequently defaulted during three and nine months ended September 30, 2019 totaled $42 million and $68 million, respectively. The comparable amounts for the three andnine months ended September 30, 2018 totaled $19 million and $44 million, respectively.

Impaired Loans

Impaired loans include commercial and consumer nonperforming loans and TDRs, regardless of nonperforming status. TDRs that were previously recorded at amortized cost and are now classified and accounted for as held for sale are also included. Excluded from impaired loans are nonperforming leases, loans accounted for as held for sale other than the TDRs described in the preceding sentence, loans accounted for under the fair value option, smaller balance homogeneous type loans and purchased impaired loans. We did not recognize any interest income on impaired loans that have not returned to performing status, while they were impaired during the nine months ended September 30, 2019 and September 30, 2018. Table 42 provides further detail on impaired loans individually evaluated for impairment and the associated ALLL. Certain commercial and consumer impaired loans do not have a related ALLL as the valuation of these impaired loans exceeded the recorded investment.

Table 42: Impaired Loans

In millions	Unpaid Principal Balance	Recorded Investment	Associated Allowance	Average Recorded Investment (a)
September 30, 2019				
Impaired loans with an associated allowance				
Total commercial lending	$ 491	$ 375	$ 81	$ 367
Total consumer lending	734	697	95	775
Total impaired loans with an associated allowance	1,225	1,072	176	1,142
Impaired loans without an associated allowance				
Total commercial lending	360	310		297
Total consumer lending	1,045	646		620
Total impaired loans without an associated allowance	1,405	956		917
Total impaired loans	$ 2,630	$ 2,028	$ 176	$ 2,059
December 31, 2018				
Impaired loans with an associated allowance				
Total commercial lending	$ 440	$ 315	$ 73	$ 349
Total consumer lending	863	817	136	904
Total impaired loans with an associated allowance	1,303	1,132	209	1,253
Impaired loans without an associated allowance				
Total commercial lending	413	326		294
Total consumer lending	1,042	625		645
Total impaired loans without an associated allowance	1,455	951		939
Total impaired loans	$ 2,758	$ 2,083	$ 209	$ 2,192

(a) Average recorded investment is for the nine months ended September 30, 2019 and the year ended December 31, 2018, respectively.

NOTE 4 ALLOWANCE FOR LOAN AND LEASE LOSSES

We maintain the ALLL at levels that we believe to be appropriate to absorb estimated probable credit losses incurred in the portfolios as of the balance sheet date. We have two portfolio segments – Commercial Lending and Consumer Lending, and develop and document the ALLL under separate methodologies for each of these portfolio segments. See Note 1 Accounting Policies in our 2018 Form 10-K for a description of the accounting policies for the ALLL. A rollforward of the ALLL and associated loan data follows:

Table 43: Rollforward of Allowance for Loan and Lease Losses and Associated Loan Data

At or for the nine months ended September 30 Dollars in millions	2019 Commercial Lending	2019 Consumer Lending	2019 Total	2018 Commercial Lending	2018 Consumer Lending	2018 Total
Allowance for Loan and Lease Losses						
January 1	$ 1,663	$ 966	$ 2,629	$ 1,582	$ 1,029	$ 2,611
Charge-offs	(138)	(545)	(683)	(92)	(472)	(564)
Recoveries	59	191	250	74	177	251
Net (charge-offs)	(79)	(354)	(433)	(18)	(295)	(313)
Provision for credit losses	247	305	552	48	212	260
Net (increase) / decrease in allowance for unfunded loan commitments and letters of credit	(20)	1	(19)	7	2	9
Other		9	9	(1)	18	17
September 30	$ 1,811	$ 927	$ 2,738	$ 1,618	$ 966	$ 2,584
TDRs individually evaluated for impairment	$ 34	$ 95	$ 129	$ 28	$ 145	$ 173
Other loans individually evaluated for impairment	47		47	37		37
Loans collectively evaluated for impairment	1,730	554	2,284	1,553	547	2,100
Purchased impaired loans		278	278		274	274
September 30	$ 1,811	$ 927	$ 2,738	$ 1,618	$ 966	$ 2,584
Loan Portfolio						
TDRs individually evaluated for impairment	$ 420	$ 1,343	$ 1,763	$ 389	$ 1,497	$ 1,886
Other loans individually evaluated for impairment	265		265	206		206
Loans collectively evaluated for impairment	159,503	73,298	232,801	148,853	69,253	218,106
Fair value option loans (a)		754	754		753	753
Purchased impaired loans		1,794	1,794		2,102	2,102
September 30	$ 160,188	$ 77,189	$ 237,377	$ 149,448	$ 73,605	$ 223,053
Portfolio segment ALLL as a percentage of total ALLL	66%	34%	100%	63%	37%	100%
Ratio of ALLL to total loans	1.13%	1.20%	1.15%	1.08%	1.31%	1.16%

(a) Loans accounted for under the fair value option are not evaluated for impairment as these loans are accounted for at fair value. Accordingly, there is no allowance recorded on these loans.

NOTE 5 INVESTMENT SECURITIES

Table 44: Investment Securities Summary

	September 30, 2019				December 31, 2018			
		Unrealized				Unrealized		
In millions	Amortized Cost	Gains	Losses	Fair Value	Amortized Cost	Gains	Losses	Fair Value
Securities Available for Sale								
U.S. Treasury and government agencies	$ 17,597	$ 420	$ (12)	$ 18,005	$ 18,104	$ 133	$ (137)	$ 18,100
Residential mortgage-backed								
Agency	34,130	506	(56)	34,580	29,413	104	(524)	28,993
Non-agency	1,626	308	(3)	1,931	1,924	300	(13)	2,211
Commercial mortgage-backed								
Agency	2,909	54	(24)	2,939	2,630	13	(66)	2,577
Non-agency	3,209	41	(4)	3,246	2,689	5	(37)	2,657
Asset-backed	5,256	89	(6)	5,339	4,933	59	(20)	4,972
Other	2,892	126	(1)	3,017	3,821	96	(38)	3,879
Total securities available for sale	$ 67,619	$ 1,544	$ (106)	$ 69,057	$ 63,514	$ 710	$ (835)	$ 63,389
Securities Held to Maturity								
U.S. Treasury and government agencies	$ 772	$ 75		$ 847	$ 758	$ 28	$ (23)	$ 763
Residential mortgage-backed								
Agency	15,527	257	$ (34)	15,750	15,740	32	(358)	15,414
Non-agency	140	7		147	152	2		154
Commercial mortgage-backed								
Agency	89	3		92	143	1	(1)	143
Non-agency	449	6		455	488	1	(1)	488
Asset-backed	54	1		55	182	1		183
Other	1,795	85	(16)	1,864	1,849	53	(28)	1,874
Total securities held to maturity	$ 18,826	$ 434	$ (50)	$ 19,210	$ 19,312	$ 118	$ (411)	$ 19,019

The fair value of investment securities is impacted by interest rates, credit spreads, market volatility and liquidity conditions. Net unrealized gains and losses in the securities available for sale portfolio are included in Shareholders' equity as accumulated other comprehensive income (AOCI), unless credit-related. Securities held to maturity are carried at amortized cost. Investment securities at September 30, 2019 included $280 million of net unsettled purchases which represent non-cash investing activity, and accordingly, are not reflected on the Consolidated Statement of Cash Flows.

At September 30, 2019, AOCI included pretax gains of$28 million from derivatives that hedged the purchase of investment securities classified as held to maturity. The gains will be accreted into interest income as an adjustment of yield on the securities.

Table 45 presents gross unrealized losses and fair value of debt securities atSeptember 30, 2019 and December 31, 2018. The securities are segregated between investments that have 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. The table includes debt securities where a portion of other than temporary impairment (OTTI) has been recognized in AOCI.

Table 45: Gross Unrealized Loss and Fair Value of Securities

In millions	Unrealized loss position less than 12 months		Unrealized loss position 12 months or more		Total	
	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value
September 30, 2019						
Securities Available for Sale						
U.S. Treasury and government agencies	$ (11)	$ 2,300	$ (1)	$ 248	$ (12)	$ 2,548
Residential mortgage-backed						
Agency	(5)	1,329	(51)	5,471	(56)	6,800
Non-agency			(3)	242	(3)	242
Commercial mortgage-backed						
Agency			(24)	1,121	(24)	1,121
Non-agency	(1)	413	(3)	217	(4)	630
Asset-backed	(2)	464	(4)	794	(6)	1,258
Other			(1)	503	(1)	503
Total securities available for sale	$ (19)	$ 4,506	$ (87)	$ 8,596	$ (106)	$ 13,102
Securities Held to Maturity						
Residential mortgage-backed - Agency			$ (34)	$ 3,709	$ (34)	$ 3,709
Other	$ (1)	$ 27	(15)	119	(16)	146
Total securities held to maturity	$ (1)	$ 27	$ (49)	$ 3,828	$ (50)	$ 3,855
December 31, 2018						
Securities Available for Sale						
U.S. Treasury and government agencies	$ (21)	$ 4,125	$ (116)	$ 5,423	$ (137)	$ 9,548
Residential mortgage-backed						
Agency	(57)	4,823	(467)	13,830	(524)	18,653
Non-agency	(1)	74	(12)	310	(13)	384
Commercial mortgage-backed						
Agency	(1)	65	(65)	1,516	(66)	1,581
Non-agency	(23)	1,809	(14)	498	(37)	2,307
Asset-backed	(11)	2,149	(9)	1,032	(20)	3,181
Other	(12)	868	(26)	1,293	(38)	2,161
Total securities available for sale	$ (126)	$ 13,913	$ (709)	$ 23,902	$ (835)	$ 37,815
Securities Held to Maturity						
U.S. Treasury and government agencies			$ (23)	$ 446	$ (23)	$ 446
Residential mortgage-backed - Agency	$ (58)	$ 4,191	(300)	7,921	(358)	12,112
Commercial mortgage-backed						
Agency	(1)	88			(1)	88
Non-agency	(1)	152			(1)	152
Other	(2)	75	(26)	123	(28)	198
Total securities held to maturity	$ (62)	$ 4,506	$ (349)	$ 8,490	$ (411)	$ 12,996

Evaluating Investment Securities for OTTI

For the securities in Table 45, as of September 30, 2019 we do not intend to sell and believe we will not be required to sell the securities prior to recovery of the amortized cost basis.

On at least a quarterly basis, we review all debt securities that are in an unrealized loss position for OTTI, as discussed in Note 1 Accounting Policies of our 2018 Form 10-K. For those securities on our Consolidated Balance Sheet at September 30, 2019, where during our quarterly security-level impairment assessments we determined losses represented OTTI, we have recorded cumulative credit losses of $1.1 billion in earnings and accordingly have reduced the amortized cost of our securities.

The majority of these cumulative impairment charges related to non-agency residential mortgage-backed and asset-backed securities rated BB or lower. During the first nine months of 2019 and 2018, the OTTI credit losses recognized in noninterest income and the OTTI noncredit losses recognized in AOCI on securities were not significant.

Information relating to gross realized securities gains and losses from the sales of securities is set forth in the following table.

Table 46: Gains (Losses) on Sales of Securities Available for Sale

Nine months ended September 30 In millions	Gross Gains	Gross Losses	Net Gains (Losses)	Tax Expense (Benefit)
2019	$ 57	$ (21)	$ 36	$ 8
2018	$ 43	$ (48)	$ (5)	$ (1)

The following table presents, by remaining contractual maturity, the amortized cost, fair value and weighted-average yield of debt securities at September 30, 2019.

Table 47: Contractual Maturity of Securities

September 30, 2019 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	$ 2,456	$ 11,133	$ 3,111	$ 897	$ 17,597
Residential mortgage-backed					
Agency		61	1,149	32,920	34,130
Non-agency				1,626	1,626
Commercial mortgage-backed					
Agency	17	610	292	1,990	2,909
Non-agency			331	2,878	3,209
Asset-backed	34	2,350	1,652	1,220	5,256
Other	286	1,421	436	749	2,892
Total securities available for sale at amortized cost	$ 2,793	$ 15,575	$ 6,971	$ 42,280	$ 67,619
Fair value	$ 2,811	$ 15,754	$ 7,163	$ 43,329	$ 69,057
Weighted-average yield, GAAP basis	2.64%	2.27%	2.84%	3.30%	2.98%
Securities Held to Maturity					
U.S. Treasury and government agencies		$ 198	$ 297	$ 277	$ 772
Residential mortgage-backed					
Agency		59	500	14,968	15,527
Non-agency				140	140
Commercial mortgage-backed					
Agency		40		49	89
Non-agency				449	449
Asset-backed		6	20	28	54
Other	$ 37	732	664	362	1,795
Total securities held to maturity at amortized cost	$ 37	$ 1,035	$ 1,481	$ 16,273	$ 18,826
Fair value	$ 37	$ 1,070	$ 1,573	$ 16,530	$ 19,210
Weighted-average yield, GAAP basis	3.92%	3.56%	3.56%	3.33%	3.36%

Weighted-average yields are based on amortized cost with effective yields weighted for the contractual maturity of each security. At September 30, 2019, there were no securities of a single issuer, other than the Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corp (FHLMC), that exceeded 10% of Total shareholders' equity. The FNMA and FHLMC investments had a total amortized cost of $40.4 billion and $6.4 billion and fair value of $41.0 billion and $6.5 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 48: Fair Value of Securities Pledged and Accepted as Collateral

In millions	September 30 2019	December 31 2018
Pledged to others	$ 12,666	$ 7,597
Accepted from others:		
Permitted by contract or custom to sell or repledge (a)	$ 3,980	$ 6,905
Permitted amount repledged to others	$ 702	$ 923

(a) Includes $3.3 billion and $6.0 billion in fair value of securities accepted from others to collateralize short-term investments in resale agreements that were not repledged at September 30, 2019 and December 31, 2018, respectively.

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 6 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, 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. For more information regarding the fair value hierarchy, see Note 6 Fair Value in our 2018 Form 10-K.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

For more information on the valuation methodologies used to measure assets and liabilities at fair value on a recurring basis, see Note 6 Fair Value in our 2018 Form 10-K. 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 49: Fair Value Measurements – Recurring Basis Summary

	September 30, 2019				December 31, 2018			
In millions	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value
Assets								
Residential mortgage loans held for sale		$ 781	$ 4	$ 785		$ 493	$ 2	$ 495
Commercial mortgage loans held for sale		678	72	750		309	87	396
Securities available for sale								
U.S. Treasury and government agencies	$ 17,725	280		18,005	$ 17,753	347		18,100
Residential mortgage-backed								
Agency		34,580		34,580		28,993		28,993
Non-agency		78	1,853	1,931		83	2,128	2,211
Commercial mortgage-backed								
Agency		2,939		2,939		2,577		2,577
Non-agency		3,246		3,246		2,657		2,657
Asset-backed		5,087	252	5,339		4,698	274	4,972
Other		2,940	77	3,017		3,795	84	3,879
Total securities available for sale	17,725	49,150	2,182	69,057	17,753	43,150	2,486	63,389
Loans		425	329	754		510	272	782
Equity investments (a)	590		1,390	2,177	751		1,255	2,209
Residential mortgage servicing rights			888	888			1,257	1,257
Commercial mortgage servicing rights			595	595			726	726
Trading securities (b)	854	2,243		3,097	2,137	1,777	2	3,916
Financial derivatives (b) (c)	2	4,546	90	4,638	3	2,053	25	2,081
Other assets	323	129		452	291	157	45	493
Total assets	$ 19,494	$ 57,952	$ 5,550	$ 83,193	$ 20,935	$ 48,449	$ 6,157	$ 75,744
Liabilities								
Other borrowed funds	$ 723	$ 91	$ 6	$ 820	$ 868	$ 132	$ 7	$ 1,007
Financial derivatives (c) (d)	3	2,123	206	2,332	1	2,021	268	2,290
Other liabilities			105	105			58	58
Total liabilities	$ 726	$ 2,214	$ 317	$ 3,257	$ 869	$ 2,153	$ 333	$ 3,355

(a) Certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.
(b) Included in Other assets on the Consolidated Balance Sheet.
(c) Amounts at September 30, 2019 and December 31, 2018 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 9 Financial Derivatives for additional information related to derivative offsetting.
(d) Included in Other liabilities on the Consolidated Balance Sheet.

Reconciliations of assets and liabilities measured at fair value on a recurring basis using Level 3 inputs for the three and nine months ended September 30, 2019 and 2018 follow:

Table 50: Reconciliation of Level 3 Assets and Liabilities

Three Months Ended September 30, 2019

Level 3 Instruments Only In millions	Fair Value June 30, 2019	Total realized / unrealized gains or losses for the period (a) Included in Earnings	 Included in Other comprehensive income	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Fair Value Sept. 30, 2019	Unrealized gains / losses on assets and liabilities held on Consolidated Balance Sheet at Sept. 30, 2019 (a) (b)
Assets											
Residential mortgage loans held for sale	$ 2			$ 3			$ (1)	$ 8	$ (8)	$ 4	
Commercial mortgage loans held for sale	73						(1)			72	
Securities available for sale											
Residential mortgage-backed non-agency	1,976	$ 23	$ (3)				(143)			1,853	
Asset-backed	261	2		1			(12)			252	
Other	80	1	(3)	5			(6)			77	
Total securities available for sale	2,317	26	(6)	6			(161)			2,182	
Loans	259	5		93	$ (7)	$ 1	(14)	2	(10)	329	$ 4
Equity investments	1,323	48		65	(46)					1,390	50
Residential mortgage servicing rights	997	(100)		22		9	(40)			888	(97)
Commercial mortgage servicing rights	630	(38)		25		13	(35)			595	(38)
Trading securities											
Financial derivatives	86	17		6			(19)			90	16
Other assets											
Total assets	$ 5,687	$ (42)	$ (6)	$ 220	$ (53)	$ 23	$ (271)	$ 10	$ (18)	$ 5,550	$ (65)
Liabilities											
Other borrowed funds	$ 5					$ 13	$ (12)			$ 6	
Financial derivatives	221	$ 8			$ 4		(27)			206	$ 13
Other liabilities	78	14		$ 16		13	(16)			105	8
Total liabilities	$ 304	$ 22		$ 16	$ 4	$ 26	$ (55)			$ 317	$ 21
Net gains (losses)		$ (64) (c)									$ (86) (d)

Three Months Ended September 30, 2018

Level 3 Instruments Only In millions	Fair Value June 30, 2018	Total realized / unrealized gains or losses for the period (a) Included in Earnings	Included in Other comprehensive income	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Fair Value Sept. 30, 2018	Unrealized gains/losses on assets and liabilities held on Consolidated Balance Sheet at Sept. 30, 2018 (a) (b)
Assets											
Residential mortgage loans held for sale	$ 4			$ 2	$ (1)			$ 5	$ (7)	$ 3	
Commercial mortgage loans held for sale	91	$ 1					$ (3)			89	
Securities available for sale											
Residential mortgage-backed non-agency	2,405	18	$ (1)				(154)			2,268	
Asset-backed	308	2	(3)				(14)			293	
Other	91		1	2					(5)	89	
Total securities available for sale	2,804	20	(3)	2			(168)		(5)	2,650	
Loans	282	4		25	(18)		(1)	8	(19)	281	
Equity investments	1,167	81		52	(258)					1,042	$ 18
Residential mortgage servicing rights	1,297	41		66		$ 12	(46)			1,370	41
Commercial mortgage servicing rights	748	23		16		16	(37)			766	23
Trading securities	2									2	
Financial derivatives	16	9					(17)			8	11
Other assets	63	(3)					(2)			58	(3)
Total assets	$ 6,474	$ 176	$ (3)	$ 163	$ (277)	$ 28	$ (274)	$ 13	$ (31)	$ 6,269	$ 90
Liabilities											
Other borrowed funds	$ 7					$ 18	$ (16)			$ 9	
Financial derivatives	384	$ 26			$ 5		(73)			342	$ 32
Other liabilities	47	4				58	(54)			55	
Total liabilities	$ 438	$ 30			$ 5	$ 76	$ (143)			$ 406	$ 32
Net gains (losses)		$ 146 (c)									$ 58 (d)

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Nine Months Ended September 30, 2019

Level 3 Instruments Only In millions	Fair Value Dec. 31, 2018	Total realized / unrealized gains or losses for the period (a) Included in Earnings	 Included in Other comprehensive income	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Fair Value Sept. 30, 2019	Unrealized gains / losses on assets and liabilities held on Consolidated Balance Sheet at Sept. 30, 2019 (a) (b)
Assets											
Residential mortgage loans held for sale	$ 2			$ 5	$ (1)		$ (1)	$ 12	$ (13)	$ 4	
Commercial mortgage loans held for sale	87	$ 2					(17)			72	$ 2
Securities available for sale											
Residential mortgage-backed non-agency	2,128	59	$ 18				(352)			1,853	
Asset-backed	274	4	6	1			(33)			252	
Other	84	1	(4)	8	(3)		(9)			77	
Total securities available for sale	2,486	64	20	9	(3)		(394)			2,182	
Loans	272	10		126	(18)		(39)	5	(27)	329	6
Equity investments	1,255	104		260	(229)					1,390	53
Residential mortgage servicing rights	1,257	(362)		87		$ 23	(117)			888	(353)
Commercial mortgage servicing rights	726	(126)		76		29	(110)			595	(126)
Trading securities	2						(2)				
Financial derivatives	25	104		6			(45)			90	100
Other assets	45						(45)				
Total assets	$ 6,157	$ (204)	$ 20	$ 569	$ (251)	$ 52	$ (770)	$ 17	$ (40)	$ 5,550	$ (318)
Liabilities											
Other borrowed funds	$ 7					$ 39	$ (40)			$ 6	
Financial derivatives	268	$ 58			$ 5		(125)			206	$ 65
Other liabilities	58	34		$ 16	2	66	(71)			105	20
Total liabilities	$ 333	$ 92		$ 16	$ 7	$ 105	$ (236)			$ 317	$ 85
Net gains (losses)		$ (296) (c)									$ (403) (d)

Nine Months Ended September 30, 2018

Level 3 Instruments Only In millions	Fair Value Dec. 31, 2017	Total realized / unrealized gains or losses for the period (a) Included in Earnings	 Included in Other comprehensive income	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Fair Value Sept. 30, 2018	Unrealized gains/losses on assets and liabilities held on Consolidated Balance Sheet at Sept. 30, 2018 (a) (b)
Assets											
Residential mortgage loans held for sale	$ 3			$ 4	$ (2)			$ 10	$ (12)	$ 3	
Commercial mortgage loans held for sale	107						$ (18)			89	
Securities available for sale											
Residential mortgage-backed non-agency	2,661	$ 38	$ 7				(438)			2,268	
Asset-backed	332	2	1				(42)			293	
Other	87	5	8	6			(12)		(5)	89	
Total securities available for sale	3,080	45	16	6			(492)		(5)	2,650	
Loans	298	9		80	(27)		(44)	8	(43)	281	$ 1
Equity investments	1,036	169		213	(376)					1,042	77
Residential mortgage servicing rights	1,164	188		113		$ 35	(130)			1,370	180
Commercial mortgage servicing rights	668	104		60		39	(105)			766	104
Trading securities	2									2	
Financial derivatives	10	33		2			(37)			8	37
Other assets	107	(5)					(44)			58	(5)
Total assets	$ 6,475	$ 543	$ 16	$ 478	$ (405)	$ 74	$ (870)	$ 18	$ (60)	$ 6,269	$ 394
Liabilities											
Other borrowed funds	$ 11					$ 50	$ (52)			$ 9	
Financial derivatives	487	$ 3			$ 10		(158)			342	$ 5
Other liabilities	33	9		$ 12		92	(91)			55	8
Total liabilities	$ 531	$ 12		$ 12	$ 10	$ 142	$ (301)			$ 406	$ 13
Net gains (losses)		$ 531 (c)									$ 381 (d)

(a) Losses for assets are bracketed while losses for liabilities are not.
(b) 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.
(c) Net gains (losses) realized and unrealized included in earnings related to Level 3 assets and liabilities included amortization and accretion. The amortization and accretion amounts were included in Interest income on the Consolidated Income Statement and the remaining net gains (losses) realized and unrealized were included in Noninterest income on the Consolidated Income Statement.
(d) Net unrealized gains (losses) related to assets and liabilities held at the end of the reporting period were included in Noninterest income on the Consolidated Income Statement.

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. Our policy is to recognize transfers in and transfers out as of the end of the reporting period.

Quantitative information about the significant unobservable inputs within Level 3 recurring assets and liabilities follows:

Table 51: Fair Value Measurements – Recurring Quantitative Information

September 30, 2019

Level 3 Instruments Only Dollars in millions	Fair Value	Valuation Techniques	Unobservable Inputs	Range (Weighted-Average)
Commercial mortgage loans held for sale	$ 72	Discounted cash flow	Spread over the benchmark curve (a)	530bps - 2,535bps (1,603bps)
Residential mortgage-backed non-agency securities	1,853	Priced by a third-party vendor using a discounted cash flow pricing model	Constant prepayment rate	1.0% - 36.2% (10.2%)
			Constant default rate	0.0% - 13.4% (4.6%)
			Loss severity	25.0% - 95.7% (52.3%)
			Spread over the benchmark curve (a)	194bps weighted-average
Asset-backed securities	252	Priced by a third-party vendor using a discounted cash flow pricing model	Constant prepayment rate	1.0% - 21.0% (7.5%)
			Constant default rate	1.0% - 7.2% (3.6%)
			Loss severity	20.0% - 100.0% (59.7%)
			Spread over the benchmark curve (a)	214bps weighted-average
Loans	209	Consensus pricing (b)	Cumulative default rate	3.6% - 100.0% (75.9%)
			Loss severity	0.0% - 100.0% (15.1%)
			Discount rate	5.0% - 8.0% (5.2%)
	74	Discounted cash flow	Loss severity	8.0% weighted-average
			Discount rate	4.9% weighted-average
	46	Consensus pricing (b)	Credit and Liquidity discount	0.0% - 99.0% (63.0%)
Equity investments	1,390	Multiple of adjusted earnings	Multiple of earnings	5.0x - 16.5x (8.7x)
Residential mortgage servicing rights	888	Discounted cash flow	Constant prepayment rate	0.0% - 56.9% (17.4%)
			Spread over the benchmark curve (a)	173bps - 1,445bps (773bps)
Commercial mortgage servicing rights	595	Discounted cash flow	Constant prepayment rate	3.5% - 21.8% (4.6%)
			Discount rate	5.2% - 8.1% (7.9%)
Financial derivatives - Swaps related to sales of certain Visa Class B common shares	(186)	Discounted cash flow	Estimated conversion factor of Visa Class B shares into Class A shares	162.3% weighted-average
			Estimated annual growth rate of Visa Class A share price	16.0%
			Estimated length of litigation resolution date	Q4 2020
Insignificant Level 3 assets, net of liabilities (c)	40			
Total Level 3 assets, net of liabilities (d)	$ 5,233			

December 31, 2018

Level 3 Instruments Only Dollars in millions	Fair Value	Valuation Techniques	Unobservable Inputs	Range (Weighted-Average)
Commercial mortgage loans held for sale	$ 87	Discounted cash flow	Spread over the benchmark curve (a)	535bps - 1,900bps (1,217bps)
Residential mortgage-backed non-agency securities	2,128	Priced by a third-party vendor using a discounted cash flow pricing model	Constant prepayment rate	1.0% - 33.0% (11.8%)
			Constant default rate	0.0% - 18.8% (5.1%)
			Loss severity	10.0% - 100.0% (50.8%)
			Spread over the benchmark curve (a)	216bps weighted-average
Asset-backed securities	274	Priced by a third-party vendor using a discounted cash flow pricing model	Constant prepayment rate	1.0% - 19.0% (8.5%)
			Constant default rate	1.0% - 18.5% (4.0%)
			Loss severity	15.0% - 100.0% (63.8%)
			Spread over the benchmark curve (a)	198bps weighted-average
Loans	129	Consensus pricing (b)	Cumulative default rate	11.0% - 100.0% (81.8%)
			Loss severity	0.0% - 100.0% (17.2%)
			Discount rate	5.5% - 8.3% (5.8%)
	90	Discounted cash flow	Loss severity	8.0% weighted-average
			Discount rate	5.8% weighted-average
	53	Consensus pricing (b)	Credit and Liquidity discount	0.0% - 99.0% (61.3%)
Equity investments	1,255	Multiple of adjusted earnings	Multiple of earnings	4.5x - 16.0x (8.4x)
Residential mortgage servicing rights	1,257	Discounted cash flow	Constant prepayment rate	0.0% - 54.5% (8.7%)
			Spread over the benchmark curve (a)	492bps - 1,455bps (806bps)
Commercial mortgage servicing rights	726	Discounted cash flow	Constant prepayment rate	4.6% - 14.7% (5.7%)
			Discount rate	6.9% - 8.5% (8.4%)
Financial derivatives - Swaps related to sales of certain Visa Class B common shares	(210)	Discounted cash flow	Estimated conversion factor of Visa Class B shares into Class A shares	163.0% weighted-average
			Estimated annual growth rate of Visa Class A share price	16.0%
			Estimated length of litigation resolution date	Q4 2020
Insignificant Level 3 assets, net of liabilities (c)	35			
Total Level 3 assets, net of liabilities (d)	$ 5,824			

(a) 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.
(b) 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.
(c) 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 liabilities.
(d) Consisted of total Level 3 assets of $5.5 billion and total Level 3 liabilities of$.3 billion as ofSeptember 30, 2019 and $6.1 billion and $.3 billion as ofDecember 31, 2018, respectively.

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 52. For more information regarding the valuation methodologies of our financial assets measured at fair value on a nonrecurring basis, see Note 6 Fair Value in our 2018 Form 10-K.

Table 52: Fair Value Measurements – Nonrecurring (a) (b) (c)

	Fair Value		Gains (Losses) Three months ended		Gains (Losses) Nine months ended	
In millions	September 30 2019	December 31 2018	September 30 2019	September 30 2018	September 30 2019	September 30 2018
Assets						
Nonaccrual loans	$ 166	$ 128	$ (22)	$ (11)	$ (55)	$ (14)
OREO and foreclosed assets	46	59	(2)	(2)	(6)	(2)
Long-lived assets	3	11	(1)	(1)	—	(1)
Total assets	$ 215	$ 198	$ (25)	$ (14)	$ (61)	$ (17)

(a) All Level 3 for the periods presented.
(b) 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.

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, see Note 6 Fair Value in our 2018 Form 10-K.

Fair values and aggregate unpaid principal balances of certain items for which we elected the fair value option follow:

Table 53: Fair Value Option – Fair Value and Principal Balances

	September 30, 2019			December 31, 2018		
In millions	Fair Value	Aggregate Unpaid Principal Balance	Difference	Fair Value	Aggregate Unpaid Principal Balance	Difference
Assets						
Residential mortgage loans held for sale						
Performing loans	$ 780	$ 759	$ 21	$ 489	$ 472	$ 17
Accruing loans 90 days or more past due	1	1		2	2	
Nonaccrual loans	4	4		4	4	
Total	$ 785	$ 764	$ 21	$ 495	$ 478	$ 17
Commercial mortgage loans held for sale (a)						
Performing loans	$ 749	$ 751	$ (2)	$ 396	$ 411	$ (15)
Nonaccrual loans	1	2	(1)			
Total	$ 750	$ 753	$ (3)	$ 396	$ 411	$ (15)
Residential mortgage loans						
Performing loans	$ 318	$ 333	$ (15)	$ 279	$ 298	$ (19)
Accruing loans 90 days or more past due	270	281	(11)	321	329	(8)
Nonaccrual loans	166	266	(100)	182	292	(110)
Total	$ 754	$ 880	$ (126)	$ 782	$ 919	$ (137)
Other assets	$ 128	$ 121	$ 7	$ 156	$ 176	$ (20)
Liabilities						
Other borrowed funds	$ 54	$ 55	$ (1)	$ 64	$ 65	$ (1)

(a) There were no accruing loans 90 days or more past due within this category at September 30, 2019 or December 31, 2018.

The changes in fair value for items for which we elected the fair value option are as follows:

Table 54: Fair Value Option – Changes in Fair Value (a)

	Gains (Losses) Three months ended		Gains (Losses) Nine months ended	
In millions	September 30 2019	September 30 2018	September 30 2019	September 30 2018
Assets				
Residential mortgage loans held for sale	$ 29	$ 13	$ 63	$ 25
Commercial mortgage loans held for sale	$ 25	$ 16	$ 48	$ 41
Residential mortgage loans	$ 7	$ 7	$ 16	$ 17
Other assets	$ 3	$ (1)	$ 24	$ (11)

(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

The following table presents the carrying amounts and estimated fair values, as well as the level within the fair value hierarchy, of all other financial instruments that are not recorded on our Consolidated Balance Sheet at fair value as of September 30, 2019 and December 31, 2018. For more information regarding the methods and assumptions used to estimate the fair values of financial instruments included in Table 55, see Note 6 Fair Value in our 2018 Form 10-K.

Table 55: Additional Fair Value Information Related to Other Financial Instruments

In millions	Carrying Amount	Fair Value Total	Level 1	Level 2	Level 3
September 30, 2019					
Assets					
Cash and due from banks	$ 5,671	$ 5,671	$ 5,671		
Interest-earning deposits with banks	19,036	19,036		$ 19,036	
Securities held to maturity	18,826	19,210	847	18,201	$ 162
Net loans (excludes leases)	226,595	229,838			229,838
Other assets	8,143	8,143		8,142	1
Total assets	$ 278,271	$ 281,898	$ 6,518	$ 45,379	$ 230,001
Liabilities					
Time deposits	$ 21,935	$ 21,790		$ 21,790	
Borrowed funds	60,534	60,904		59,141	$ 1,763
Unfunded loan commitments and letters of credit	304	304			304
Other liabilities	440	440		440	
Total liabilities	$ 83,213	$ 83,438		$ 81,371	$ 2,067
December 31, 2018					
Assets					
Cash and due from banks	$ 5,608	$ 5,608	$ 5,608		
Interest-earning deposits with banks	10,893	10,893		$ 10,893	
Securities held to maturity	19,312	19,019	763	18,112	$ 144
Net loans (excludes leases)	215,525	216,492			216,492
Other assets	11,065	11,065		11,060	5
Total assets	$ 262,403	$ 263,077	$ 6,371	$ 40,065	$ 216,641
Liabilities					
Time deposits	$ 18,507	$ 18,246		$ 18,246	
Borrowed funds	56,412	56,657		54,872	$ 1,785
Unfunded loan commitments and letters of credit	285	285			285
Other liabilities	393	393		393	
Total liabilities	$ 75,597	$ 75,581		$ 73,511	$ 2,070

The aggregate fair values in Table 55 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 49);
- 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; and
- deposit liabilities with no defined or contractual maturities under ASU 2016-01.

Note 7 Goodwill and Mortgage Servicing Rights

Goodwill

See Note 7 Goodwill and Mortgage Servicing Rights in our 2018 Form 10-K for more information regarding our goodwill.

Mortgage Servicing Rights

We recognize the right to service mortgage loans for others when we recognize it as an intangible asset and the servicing income we receive is more than adequate compensation. MSRs totaled $1.5 billion and $2.0 billion at September 30, 2019 and December 31, 2018, respectively, and consisted of loan servicing contracts for commercial and residential mortgages measured at fair value.

MSRs are subject to declines 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 MSRs with securities and derivative instruments which are expected to increase (or decrease) in value when the value of MSRs decreases (or increases).

See the Sensitivity Analysis section of this Note 7, as well as Note 6 Fair Value in our 2018 Form 10-K for more detail on our fair value measurement of MSRs. Refer to Note 7 Goodwill and Mortgage Servicing Rights in our 2018 Form 10-K for more information on our accounting and measurement of MSRs.

Changes in the commercial and residential MSRs follow:

Table 56: Mortgage Servicing Rights

	Commercial MSRs		Residential MSRs	
In millions	2019	2018	2019	2018
January 1	$ 726	$ 668	$ 1,257	$ 1,164
Additions:				
From loans sold with servicing retained	29	39	23	35
Purchases	76	60	87	113
Changes in fair value due to:				
Time and payoffs (a)	(110)	(105)	(117)	(130)
Other (b)	(126)	104	(362)	188
September 30	$ 595	$ 766	$ 888	$ 1,370
Related unpaid principal balance at September 30	$ 203,808	$ 174,664	$ 122,886	$ 127,099
Servicing advances at September 30	$ 159	$ 193	$ 123	$ 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.
(b) Represents MSR value changes resulting primarily from market-driven changes in interest rates.

Sensitivity Analysis

The fair value of commercial and residential MSRs and significant inputs to the valuation models as of September 30, 2019 are shown in Tables 57 and 58. 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 57 and 58. 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.

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 57: Commercial Mortgage Servicing Rights – Key Valuation Assumptions

Dollars in millions	September 30 2019	December 31 2018
Fair value	$ 595	$ 726
Weighted-average life (years)	4.0	4.1
Weighted-average constant prepayment rate	4.60 %	5.65 %
Decline in fair value from 10% adverse change	$ 8	$ 10
Decline in fair value from 20% adverse change	$ 16	$ 19
Effective discount rate	7.88 %	8.39 %
Decline in fair value from 10% adverse change	$ 15	$ 19
Decline in fair value from 20% adverse change	$ 30	$ 39

Table 58: Residential Mortgage Servicing Rights – Key Valuation Assumptions

Dollars in millions	September 30 2019	December 31 2018
Fair value	$ 888	$ 1,257
Weighted-average life (years)	4.3	6.9
Weighted-average constant prepayment rate	17.44 %	8.69 %
Decline in fair value from 10% adverse change	$ 46	$ 41
Decline in fair value from 20% adverse change	$ 87	$ 79
Weighted-average option adjusted spread	773 bps	806 bps
Decline in fair value from 10% adverse change	$ 22	$ 37
Decline in fair value from 20% adverse change	$ 43	$ 73

Fees from mortgage loan servicing, which includes contractually specified servicing fees, late fees and ancillary fees were$.2 billion for both three months ended September 30, 2019 and 2018 and $.4 billion for the nine months ended September 30, 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 8 EMPLOYEE BENEFIT PLANS

Pension and Postretirement Plans

As described in Note 11 Employee Benefit Plans in our2018 Form 10-K, 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 and are subject to a minimum annual amount. Any pension contributions to the plan are based on an actuarially determined amount necessary to fund total benefits payable to plan participants.

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. We reserve the right to terminate or make changes to these plans at any time.

The components of our net periodic benefit cost for the three and nine months ended September 30, 2019 and 2018, respectively, were as follows:

Table 59: Components of Net Periodic Benefit Cost (a)

Three months ended September 30 In millions	Qualified Pension Plan 2019	Qualified Pension Plan 2018	Nonqualified Pension Plan 2019	Nonqualified Pension Plan 2018	Postretirement Benefits 2019	Postretirement Benefits 2018
Net periodic cost consists of:						
Service cost	$ 29	$ 29	$ 1	$ 1	$ 1	$ 1
Interest cost	46	43	3	2	3	3
Expected return on plan assets	(72)	(76)			(1)	(1)
Amortization of prior service credit	1					
Amortization of actuarial losses			1	1		
Net periodic cost/(benefit)	$ 4	$ (4)	$ 5	$ 4	$ 3	$ 3

Nine months ended September 30 In millions	Qualified Pension Plan 2019	Qualified Pension Plan 2018	Nonqualified Pension Plan 2019	Nonqualified Pension Plan 2018	Postretirement Benefits 2019	Postretirement Benefits 2018
Net periodic cost consists of:						
Service cost	$ 86	$ 87	$ 2	$ 2	$ 3	$ 3
Interest cost	139	128	8	7	10	9
Expected return on plan assets	(215)	(229)			(4)	(4)
Amortization of prior service credit	3	1				
Amortization of actuarial losses	3		3	3		
Net periodic cost/(benefit)	$ 16	$ (13)	$ 13	$ 12	$ 9	$ 8

(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.

Note 9 Financial Derivatives

We use a variety of financial derivatives as part of our 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. 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.

For more information regarding derivatives see Note 1 Accounting Policies and Note 13 Financial Derivatives in our 2018 Form 10-K.

The following table presents the notional amounts and gross fair values of all derivative assets and liabilities held by us.

Table 60: Total Gross Derivatives

	September 30, 2019			December 31, 2018		
In millions	Notional / Contract Amount	Asset Fair Value (a)	Liability Fair Value (b)	Notional / Contract Amount	Asset Fair Value (a)	Liability Fair Value (b)
Derivatives used for hedging under GAAP						
Interest rate contracts (c):						
Fair value hedges	$ 31,474			$ 30,919	$ 7	
Cash flow hedges	23,427	$ 8	$ 4	17,337	1	
Foreign exchange contracts:						
Net investment hedges	1,097	40		1,012		$ 10
Total derivatives designated for hedging under GAAP	$ 55,998	$ 48	$ 4	$ 49,268	$ 8	$ 10
Derivatives not used for hedging under GAAP						
Derivatives used for mortgage banking activities (d):						
Interest rate contracts:						
Swaps	$ 50,776	$ 9	$ 3	$ 43,084		$ 3
Futures (e)	3,697			10,658		
Mortgage-backed commitments	12,046	97	85	5,771	$ 47	39
Other	6,867	54	40	6,509	10	3
Subtotal	73,386	160	128	66,022	57	45
Derivatives used for customer-related activities:						
Interest rate contracts:						
Swaps	243,626	3,553	1,329	218,496	1,352	1,432
Futures (e)	704			914		
Mortgage-backed commitments	5,615	6	6	2,246	7	10
Other	22,062	167	43	20,109	77	33
Subtotal	272,007	3,726	1,378	241,765	1,436	1,475
Commodity contracts:						
Swaps	4,619	242	239	4,813	244	238
Other	4,080	139	138	1,418	67	67
Subtotal	8,699	381	377	6,231	311	305
Foreign exchange contracts and other	25,491	270	253	23,253	194	192
Subtotal	306,197	4,377	2,008	271,249	1,941	1,972
Derivatives used for other risk management activities:						
Foreign exchange contracts and other	11,372	53	192	7,908	75	263
Total derivatives not designated for hedging under GAAP	$ 390,955	$ 4,590	$ 2,328	$ 345,179	$ 2,073	$ 2,280
Total gross derivatives	$ 446,953	$ 4,638	$ 2,332	$ 394,447	$ 2,081	$ 2,290
Less: Impact of legally enforceable master netting agreements		890	890		688	688
Less: Cash collateral received/paid		914	770		341	539
Total derivatives		$ 2,834	$ 672		$ 1,052	$ 1,063

(a) Included in Other assets on our Consolidated Balance Sheet.
(b) Included in Other liabilities on our Consolidated Balance Sheet.
(c) Represents primarily swaps.
(d) Includes both residential and commercial mortgage banking activities.
(e) Futures contracts settle in cash daily and, therefore, no derivative asset or derivative liability is 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 9. Any nonperformance risk, including credit risk, is included in the determination of the estimated net fair value of the derivatives.

Derivatives Designated As Hedging Instruments under GAAP

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 under GAAP. 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 September 30, 2019, we expect to reclassify net derivative gains of $165 million pretax, or $130 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 September 30, 2019. As of September 30, 2019, the maximum length of time over which forecasted transactions are hedged is ten years.

Further detail regarding gains (losses) related to our fair value and cash flow hedge derivatives is presented in the following table.

Table 61: Gains (Losses) Recognized on Fair Value and Cash Flow Hedges in the Consolidated Income Statement (a) (b)

	Location and Amount of Gains (Losses) Recognized in Income			
	Interest Income		Interest Expense	Noninterest Income
In millions	Loans	Investment Securities	Borrowed Funds	Other
For the three months ended September 30, 2019				
Total amounts on the Consolidated Income Statement	$ 2,678	$ 617	$ 468	$ 342
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)		$ 76	$ (271)	
Derivatives		$ (73)	$ 235	
Amounts related to interest settlements on derivatives		$ 4	$ 16	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	$ 2	$ 3		
For the three months ended September 30, 2018				
Total amounts on the Consolidated Income Statement	$ 2,452	$ 584	$ 421	$ 301
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)		$ (31)	$ 107	
Derivatives		$ 30	$ (137)	
Amounts related to interest settlements on derivatives		$ 2	$ 24	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	$ 6	$ 2		$ 1
For the nine months ended September 30, 2019				
Total amounts on the Consolidated Income Statement	$ 7,952	$ 1,866	$ 1,433	$ 1,017
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)		$ 250	$ (1,068)	
Derivatives		$ (241)	$ 948	
Amounts related to interest settlements on derivatives		$ 14	$ 36	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	$ (18)	$ 5		$ 18
For the nine months ended September 30, 2018				
Total amounts on the Consolidated Income Statement	$ 7,025	$ 1,653	$ 1,173	$ 880
Gains (losses) on fair value hedges recognized on:				
Hedged items (c)		$ (145)	$ 577	
Derivatives		$ 149	$ (632)	
Amounts related to interest settlements on derivatives			$ 57	
Gains (losses) on cash flow hedges (d):				
Amount of derivative gains (losses) reclassified from AOCI	$ 43	$ 9		$ 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.
(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 primarily related to discontinued borrowed funds 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.

Detail regarding the impact of fair value hedge accounting on the carrying value of the hedged items is presented in the following table.

Table 62: Hedged Items - Fair Value Hedges

	September 30, 2019		December 31, 2018	
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)	$ 6,787	$ 132	$ 6,216	$ (103)
Borrowed funds	$ 26,873	$ 807	$ 27,121	$ (260)

(a) Includes $(.3) billion and $(.5) billion of fair value hedge adjustments primarily related to discontinued borrowed funds hedge relationships for September 30, 2019 and December 31, 2018, respectively.
(b) Carrying value shown represents amortized cost.

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. Gains on net investment hedge derivatives recognized in OCI were $36 million and $50 million for the three and nine months ended September 30, 2019, respectively, compared with $17 million and $47 million for the three and nine months ended September 30, 2018, respectively.

Derivatives Not Designated As Hedging Instruments under GAAP

We also enter into derivatives that are not designated as accounting hedges under GAAP. For additional information on derivatives not designated as hedging instruments under GAAP, see Note 13 Financial Derivatives in our 2018 Form 10-K.

Further detail regarding the gains (losses) on derivatives not designated in hedging relationships is presented in the following table.

Table 63: Gains (Losses) on Derivatives Not Designated for Hedging under GAAP

	Three months ended September 30		Nine months ended September 30	
In millions	2019	2018	2019	2018
Derivatives used for mortgage banking activities:				
Interest rate contracts (a)	$ 184	$ (34)	$ 530	$ (166)
Derivatives used for customer-related activities:				
Interest rate contracts	45	15	84	96
Foreign exchange contracts and other (b)	11	22	64	79
Gains (losses) from customer-related activities (c)	56	37	148	175
Derivatives used for other risk management activities:				
Foreign exchange contracts and other (c)	103	(19)	39	111
Total gains (losses) from derivatives not designated as hedging instruments	$ 343	$ (16)	$ 717	$ 120

(a) Included in Residential mortgage, Corporate services and Other noninterest income on our Consolidated Income Statement.
(b) Includes an insignificant amount of gains (losses) on commodity contracts for all periods presented.
(c) 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. For additional information on derivative offsetting, counterparty credit risk and contingent features, see Note 13 Financial Derivatives in our 2018 Form 10-K.

Table 64 shows the impact legally enforceable master netting agreements had on our derivative assets and derivative liabilities as of September 30, 2019 and December 31, 2018. 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 64 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 cleared through a central clearing house. The majority of OTC derivatives are governed by the International Swaps and Derivatives Association (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.

Table 64: Derivative Assets and Liabilities Offsetting

In millions	Gross Fair Value	Amounts Offset on the Consolidated Balance Sheet: Fair Value Offset Amount	Amounts Offset on the Consolidated Balance Sheet: Cash Collateral	Net Fair Value		Securities Collateral Held/Pledged Under Master Netting Agreements	Net Amounts
September 30, 2019							
Derivative assets							
Interest rate contracts:							
Over-the-counter cleared	$ 24			$ 24			$ 24
Over-the-counter	3,870	$ 399	$ 848	2,623		$ 297	2,326
Commodity contracts	381	244	58	79			79
Foreign exchange and other contracts	363	247	8	108		1	107
Total derivative assets	$ 4,638	$ 890	$ 914	$ 2,834	(a)	$ 298	$ 2,536
Derivative liabilities							
Interest rate contracts:							
Over-the-counter cleared	$ 26			$ 26			$ 26
Over-the-counter	1,484	$ 648	$ 722	114			114
Commodity contracts	377	163	2	212			212
Foreign exchange and other contracts	445	79	46	320			320
Total derivative liabilities	$ 2,332	$ 890	$ 770	$ 672	(b)		$ 672
December 31, 2018							
Derivative assets							
Interest rate contracts:							
Over-the-counter cleared	$ 29			$ 29			$ 29
Over-the-counter	1,472	$ 450	$ 117	905		$ 25	880
Commodity contracts	311	76	210	25			25
Foreign exchange and other contracts	269	162	14	93			93
Total derivative assets	$ 2,081	$ 688	$ 341	$ 1,052	(a)	$ 25	$ 1,027
Derivative liabilities							
Interest rate contracts:							
Over-the-counter cleared	$ 24			$ 24			$ 24
Over-the-counter	1,496	$ 557	$ 489	450		$ 11	439
Commodity contracts	305	56	17	232			232
Foreign exchange and other contracts	465	75	33	357			357
Total derivative liabilities	$ 2,290	$ 688	$ 539	$ 1,063	(b)	$ 11	$ 1,052

(a) Represents the net amount of derivative assets included in Other assets on our Consolidated Balance Sheet.
(b) 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 September 30, 2019, we held cash, U.S. government securities and mortgage-backed securities totaling$1.4 billion under master netting agreements and other collateral agreements to collateralize net derivative assets due from counterparties, and we pledged cash totaling $1.4 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 September 30, 2019 was $2.0 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 September 30, 2019 would be $.6 billion.

NOTE 10 EARNINGS PER SHARE

Table 65: Basic and Diluted Earnings Per Common Share

	Three months ended September 30		Nine months ended September 30	
In millions, except per share data	2019	2018	2019	2018
Basic				
Net income	$ 1,392	$ 1,400	$ 4,037	$ 3,995
Less:				
Net income attributable to noncontrolling interests	13	11	35	31
Preferred stock dividends	63	63	181	181
Preferred stock discount accretion and redemptions	1	1	3	3
Net income attributable to common shareholders	1,315	1,325	3,818	3,780
Less: Dividends and undistributed earnings allocated to participating securities	6	6	15	16
Net income attributable to basic common shareholders	$ 1,309	$ 1,319	$ 3,803	$ 3,764
Basic weighted-average common shares outstanding	444	465	450	469
Basic earnings per common share (a)	$ 2.95	$ 2.84	$ 8.45	$ 8.03
Diluted				
Net income attributable to basic common shareholders	$ 1,309	$ 1,319	$ 3,803	$ 3,764
Less: Impact of BlackRock earnings per share dilution	2	2	7	7
Net income attributable to diluted common shareholders	$ 1,307	$ 1,317	$ 3,796	$ 3,757
Basic weighted-average common shares outstanding	444	465	450	469
Dilutive potential common shares	1	2	1	3
Diluted weighted-average common shares outstanding	445	467	451	472
Diluted earnings per common share (a)	$ 2.94	$ 2.82	$ 8.42	$ 7.96

(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).

NOTE 11 TOTAL EQUITY AND OTHER COMPREHENSIVE INCOME

Activity in total equity for the three and nine months ended September 30, 2019 and 2018 follows.

Table 66: Rollforward of Total Equity

		Shareholders' Equity							
in millions	Shares Outstanding Common Stock	Common Stock	Capital Surplus - Preferred Stock	Capital Surplus - Common Stock and Other	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Non-controlling Interests	Total Equity
Three months ended									
Balance at June 30, 2018 (a)	465	$ 2,710	$ 3,987	$ 12,263	$ 37,201	$ (940)	$ (8,317)	$ 71	$ 46,975
Net income					1,389			11	1,400
Other comprehensive income (loss), net of tax						(320)			(320)
Cash dividends declared - Common					(446)				(446)
Cash dividends declared - Preferred					(63)				(63)
Preferred stock discount accretion			1		(1)				
Common stock activity				1					1
Treasury stock activity	(3)			(5)			(454)		(459)
Other			(6)	58				(38)	14
Balance at September 30, 2018 (a)	462	$ 2,710	$ 3,982	$ 12,317	$ 38,080	$ (1,260)	$ (8,771)	$ 44	$ 47,102
Balance at June 30, 2019 (a)	447	$ 2,711	$ 3,991	$ 12,257	$ 40,616	$ 631	$ (10,866)	$ 41	$ 49,381
Net income					1,379			13	1,392
Other comprehensive income, net of tax						206			206
Cash dividends declared - Common					(518)				(518)
Cash dividends declared - Preferred					(63)				(63)
Preferred stock discount accretion			1		(1)				
Treasury stock activity	(8)			(5)			(972)		(977)
Other				53				(19)	34
Balance at September 30, 2019 (a)	439	$ 2,711	$ 3,992	$ 12,305	$ 41,413	$ 837	$ (11,838)	$ 35	$ 49,455
Nine months ended									
Balance at December 31, 2017 (a)	473	$ 2,710	$ 3,985	$ 12,389	$ 35,481	$ (148)	$ (6,904)	$ 72	$ 47,585
Cumulative effect of ASU adoptions (b)					(22)	6			(16)
Balance at January 1, 2018 (a)	473	$ 2,710	$ 3,985	$ 12,389	$ 35,459	$ (142)	$ (6,904)	$ 72	$ 47,569
Net income					3,964			31	3,995
Other comprehensive income (loss), net of tax						(1,118)			(1,118)
Cash dividends declared - Common					(1,159)				(1,159)
Cash dividends declared - Preferred					(181)				(181)
Preferred stock discount accretion			3		(3)				
Common stock activity				10					10
Treasury stock activity	(11)			(31)			(1,867)		(1,898)
Other			(6)	(51)				(59)	(116)
Balance at September 30, 2018 (a)	462	$ 2,710	$ 3,982	$ 12,317	$ 38,080	$ (1,260)	$ (8,771)	$ 44	$ 47,102
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 2016-02 adoption (c)					62				62
Balance at January 1, 2019 (a)	457	$ 2,711	$ 3,986	$ 12,291	$ 38,981	$ (725)	$ (9,454)	$ 42	$ 47,832
Net income					4,002			35	4,037
Other comprehensive income, net of tax						1,562			1,562
Cash dividends declared - Common					(1,386)				(1,386)
Cash dividends declared - Preferred					(181)				(181)
Preferred stock discount accretion			3		(3)				
Common stock activity				10					10
Treasury stock activity	(18)			4			(2,384)		(2,380)
Other				3				(42)	(39)
Balance at September 30, 2019 (a)	439	$ 2,711	$ 3,992	$ 12,305	$ 41,413	$ 837	$ (11,838)	$ 35	$ 49,455

(a) The par value of our preferred stock outstanding was less than $.5 million at each date and, therefore, is excluded from this presentation.

(b) Represents the cumulative effect of adopting ASU 2014-09, ASU 2016-01, ASU 2017-12 and ASU 2018-02. See the Recently Adopted Accounting Standards portion of Note 1 Accounting Policies in our 2018 Form 10-K for additional detail on the adoption of these ASUs.

(c) Represents the impact of the adoption of ASU 2016-02 related primarily to deferred gains on previous sale-leaseback transactions. See the Recently Adopted Accounting Standards portion of Note 1 Accounting Policies in the first quarter Form 10-Q for additional detail.

Other Comprehensive Income

Details of other comprehensive income (loss) are as follows:

Table 67: Other Comprehensive Income (Loss)

In millions	Three months ended September 30 2019	Three months ended September 30 2018	Nine months ended September 30 2019	Nine months ended September 30 2018
Net unrealized gains (losses) on non-OTTI securities				
Increase in net unrealized gains (losses) on non-OTTI securities	$ 203	$ (323)	$ 1,556	$ (1,129)
Less: Net gains (losses) realized as a yield adjustment reclassified to investment securities interest income	3	3	9	9
Less: Net gains (losses) realized on sales of securities reclassified to noninterest income	4	(2)	18	(13)
Net increase (decrease), pre-tax	196	(324)	1,529	(1,125)
Effect of income taxes	(45)	73	(351)	259
Net increase (decrease), after-tax	151	(251)	1,178	(866)
Net unrealized gains (losses) on OTTI securities				
Increase in net unrealized gains (losses) on OTTI securities	18	(1)	27	16
Net increase (decrease), pre-tax	18	(1)	27	16
Effect of income taxes	(4)	1	(6)	(4)
Net increase (decrease), after-tax	14	—	21	12
Net unrealized gains (losses) on cash flow hedge derivatives				
Increase in net unrealized gains (losses) on cash flow hedge derivatives	84	(62)	438	(317)
Less: Net gains (losses) realized as a yield adjustment reclassified to loan interest income	2	6	(18)	43
Less: Net gains (losses) realized as a yield adjustment reclassified to investment securities interest income	3	2	5	9
Less: Net gains (losses) realized on sales of securities reclassified to noninterest income		1	18	8
Net increase (decrease), pre-tax	79	(71)	433	(377)
Effect of income taxes	(18)	17	(99)	87
Net increase (decrease), after-tax	61	(54)	334	(290)
Pension and other postretirement benefit plan adjustments				
Net pension and other postretirement benefit activity			54	66
Amortization of actuarial loss (gain) reclassified to other noninterest expense	1	1	6	3
Amortization of prior service cost (credit) reclassified to other noninterest expense	1		3	1
Net increase (decrease), pre-tax	2	1	63	70
Effect of income taxes			(14)	(16)
Net increase (decrease), after-tax	2	1	49	54
Other				
PNC's portion of BlackRock's OCI	(23)	(22)	(29)	(37)
Net investment hedge derivatives	36	17	50	47
Foreign currency translation adjustments and other	(32)	(12)	(36)	(35)
Net increase (decrease), pre-tax	(19)	(17)	(15)	(25)
Effect of income taxes	(3)	1	(5)	(3)
Net increase (decrease), after-tax	(22)	(16)	(20)	(28)
Total other comprehensive income (loss), pre-tax	276	(412)	2,037	(1,441)
Total other comprehensive income (loss), tax effect	(70)	92	(475)	323
Total other comprehensive income (loss), after-tax	$ 206	$ (320)	$ 1,562	$ (1,118)

Table 68: Accumulated Other Comprehensive Income (Loss) Components

In millions, after-tax		Net unrealized gains (losses) on non-OTTI securities		Net unrealized gains (losses) on OTTI securities		Net unrealized gains (losses) on cash flow hedge derivatives		Pension and other postretirement benefit plan adjustments	Other	Total
Balance at June 30, 2018	$	(494)	$	227	$	(52)	$	(489)	$ (132)	$ (940)
Net activity		(251)				(54)		1	(16)	(320)
Balance at September 30, 2018	$	(745)	$	227	$	(106)	$	(488)	$ (148)	$ (1,260)
Balance at June 30, 2019	$	743	$	211	$	320	$	(483)	$ (160)	$ 631
Net activity		151		14		61		2	(22)	206
Balance at September 30, 2019	$	894	$	225	$	381	$	(481)	$ (182)	$ 837
Balance at December 31, 2017	$	62	$	215	$	151	$	(446)	$ (130)	$ (148)
Cumulative effect of adopting ASU 2018-02 (a)		59				33		(96)	10	6
Balance at January 1, 2018		121		215		184		(542)	(120)	(142)
Net activity		(866)		12		(290)		54	(28)	(1,118)
Balance at September 30, 2018	$	(745)	$	227	$	(106)	$	(488)	$ (148)	$ (1,260)
Balance at December 31, 2018	$	(284)	$	204	$	47	$	(530)	$ (162)	$ (725)
Net activity		1,178		21		334		49	(20)	1,562
Balance at September 30, 2019	$	894	$	225	$	381	$	(481)	$ (182)	$ 837

(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. See the Recently Adopted Accounting Standards portion of Note 1 Accounting Policies in our 2018 Form 10-K for additional detail on this adoption.

The following table provides the dividends per share for PNC's common and preferred stock.

Table 69: Dividends Per Share (a)

	Three months ended September 30		Nine months ended September 30	
	2019	2018	2019	2018
Common Stock	$ 1.15	$ .95	$ 3.05	$ 2.45
Preferred Stock				
Series B	$ .45	$ .45	$ 1.35	$ 1.35
Series O	$ 3,375	$ 3,375	$ 6,750	$ 6,750
Series P	$ 1,531	$ 1,531	$ 4,594	$ 4,594
Series Q	$ 1,343	$ 1,343	$ 4,031	$ 4,031
Series R			$ 2,425	$ 2,425
Series S			$ 2,500	$ 2,500

(a) Dividends are payable quarterly other than Series O, Series R, and Series S preferred stock, which are payable semiannually, with the Series O payable in different quarters than the Series R and Series S preferred stock

On October 3, 2019, we declared a quarterly common stock cash dividend of$1.15 per share payable on November 5, 2019.

Note 12 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 Note 19 Legal Proceedings in Part II, Item 8 of our 2018 Form 10-K and in Note 12 Legal Proceedings in Part I, Item 1 of our first and second quarter 2019 Form 10-Q (such prior disclosure referred to as “Prior Disclosure”)). For Disclosed Matters where we are able to estimate such possible losses or ranges of possible losses, as of September 30, 2019, we estimate that it is reasonably possible that we could incur losses in excess of related accrual 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.

As a result of the types of factors described in Note 19 in our 2018 Form 10-K, 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 include all of the Disclosed Matters, the 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.

Other Regulatory and Governmental Inquiries

We are the subject of investigations, audits 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. These inquiries, including those described in Prior Disclosure, may lead to administrative, civil or criminal proceedings, and possibly result in remedies including fines, penalties, restitution, or alterations in our business practices, and in additional expenses and collateral costs and other consequences. These inquiries may result in significant reputational harm or other adverse collateral consequences even if direct resulting remedies are not material to us.

Our practice is to cooperate fully with regulatory and governmental investigations, audits and other inquiries, including those described in Prior Disclosure.

Other

In addition to the proceedings or other matters described in Prior Disclosure, 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.

Note 13 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 significant other commitments as of September 30, 2019 and December 31, 2018, respectively.

Table 70: Commitments to Extend Credit and Other Commitments

In millions		September 30 2019		December 31 2018
Commitments to extend credit				
Total commercial lending	$	129,787	$	120,165
Home equity lines of credit		16,881		16,944
Credit card		29,886		27,100
Other		6,527		5,069
Total commitments to extend credit		183,081		169,278
Net outstanding standby letters of credit (a)		9,763		8,655
Reinsurance agreements (b)		1,431		1,549
Standby bond purchase agreements (c)		1,302		1,000
Other commitments (d)		2,291		1,130
Total commitments to extend credit and other commitments	$	197,868	$	181,612

(a) Net outstanding standby letters of credit include $4.1 billion and $3.7 billion at September 30, 2019 and December 31, 2018, respectively, 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 September 30, 2019, the aggregate maximum exposure amount comprised $1.3 billion for accidental death and dismemberment contracts, and $.1 billion for credit life, accident and health contracts. Comparable amounts at December 31, 2018 were $1.3 billion and $.2 billion, respectively.
(c) We enter into standby bond purchase agreements to support municipal bond obligations.
(d) Includes $.5 billion related to investments in qualified affordable housing projects at both September 30, 2019 and December 31, 2018.

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 98% of our net outstanding standby letters of credit were rated as Pass as of September 30, 2019, 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 September 30, 2019 had terms ranging from less than one year to six years.

As of September 30, 2019, assets of $1.0 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 $.2 billion at September 30, 2019 and is included in Other liabilities on our Consolidated Balance Sheet.

Note 14 Segment Reporting

We have four reportable business segments:

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

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.

Total business segment financial results differ from total consolidated net income. These differences are reflected in the “Other” category in the business segment tables. “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, other-than-temporary impairment of 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, gains or losses related to BlackRock transactions, exited businesses and differences between business segment performance reporting and financial statement reporting (GAAP), including the presentation of net income attributable to noncontrolling interests as the segments’ results exclude their portion of net income attributable to noncontrolling interests.

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.

A portion of capital is intended to cover unexpected losses and is assigned to our business segments using our risk-based economic capital model, including consideration of the goodwill at those business segments, as well as the diversification of risk among the business segments, ultimately reflecting our portfolio risk adjusted capital allocation.

We have allocated the allowances for loan and lease losses and for unfunded loan commitments and letters of credit 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.

Business Segment Results

Table 71: Results of Businesses

Three months ended September 30 In millions	Retail Banking	Corporate & Institutional Banking	Asset Management Group	BlackRock	Other	Consolidated (a)
2019						
Income Statement						
Net interest income	$ 1,393	$ 911	$ 70		$ 130	$ 2,504
Noninterest income	744	654	216	$ 251	124	1,989
Total revenue	2,137	1,565	286	251	254	4,493
Provision for credit losses (benefit)	147	48	(1)		(11)	183
Depreciation and amortization	60	51	11		125	247
Other noninterest expense	1,476	652	217		31	2,376
Income before income taxes and noncontrolling interests	454	814	59	251	109	1,687
Income taxes (benefit)	107	169	13	40	(34)	295
Net income	$ 347	$ 645	$ 46	$ 211	$ 143	$ 1,392
Average Assets (b)	$ 93,222	$ 168,193	$ 7,331	$ 8,321	$ 129,642	$ 406,709
2018						
Income Statement						
Net interest income	$ 1,305	$ 903	$ 71		$ 187	$ 2,466
Noninterest income	622	592	228	$ 265	184	1,891
Total revenue	1,927	1,495	299	265	371	4,357
Provision for credit losses (benefit)	113	(13)	2		(14)	88
Depreciation and amortization	52	47	13		112	224
Other noninterest expense	1,462	651	212		59	2,384
Income before income taxes and noncontrolling interests	300	810	72	265	214	1,661
Income taxes (benefit)	73	168	17	49	(46)	261
Net income	$ 227	$ 642	$ 55	$ 216	$ 260	$ 1,400
Average Assets (b)	$ 89,963	$ 153,897	$ 7,397	$ 7,964	$ 118,656	$ 377,877

Nine months ended September 30 In millions	Retail Banking	Corporate & Institutional Banking	Asset Management Group	BlackRock	Other	Consolidated (a)
2019						
Income Statement						
Net interest income	$ 4,118	$ 2,685	$ 208		$ 466	$ 7,477
Noninterest income	1,996	1,891	719	$ 708	427	5,741
Total revenue	6,114	4,576	927	708	893	13,218
Provision for credit losses (benefit)	356	219	(2)		(21)	552
Depreciation and amortization	170	151	51		366	738
Other noninterest expense	4,361	1,936	656		121	7,074
Income before income taxes and noncontrolling interests	1,227	2,270	222	708	427	4,854
Income taxes (benefit)	291	471	51	111	(107)	817
Net income	$ 936	$ 1,799	$ 171	$ 597	$ 534	$ 4,037
Average Assets (b)	$ 92,282	$ 163,126	$ 7,247	$ 8,321	$ 125,623	$ 396,599
2018						
Income Statement						
Net interest income	$ 3,800	$ 2,641	$ 217		$ 582	$ 7,240
Noninterest income	1,935	1,774	676	$ 732	435	5,552
Total revenue	5,735	4,415	893	732	1,017	12,792
Provision for credit losses (benefit)	254	43	2		(39)	260
Depreciation and amortization	144	140	38		372	694
Other noninterest expense	4,347	1,879	643		156	7,025
Income before income taxes and noncontrolling interests	990	2,353	210	732	528	4,813
Income taxes (benefit)	239	496	50	124	(91)	818
Net income	$ 751	$ 1,857	$ 160	$ 608	$ 619	$ 3,995
Average Assets (b)	$ 89,259	$ 153,149	$ 7,455	$ 7,964	$ 118,772	$ 376,599

(a) There were no material intersegment revenues for the three and nine months ended September 30, 2019 and 2018.
(b) Period-end balances for BlackRock.

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 in markets across the Mid-Atlantic, Midwest and Southeast. In 2018, Retail Banking launched its national retail digital strategy designed to grow customers with digitally-led banking and an ultra-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 government 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.

BlackRock, in which we hold an equity investment, is a leading publicly-traded investment management firm providing a broad range of investment and technology services to institutional and retail clients worldwide. Using a diverse platform of alpha-seeking active, index and cash management investment strategies across asset classes, BlackRock tailors investment outcomes and asset allocation solutions for clients. Product offerings include single- and multi-asset class portfolios investing in equities, fixed income, alternatives and money market instruments. BlackRock also offers technology services, including an investment and risk management technology platform, as well as advisory services and solutions to a broad base of institutional and wealth management clients.

Our equity investment in BlackRock provides us with an additional source of noninterest income and increases our overall revenue diversification. At September 30, 2019, our economic interest in BlackRock was 22%. We received cash dividends from BlackRock of $344 million and $310 million during the first nine months of 2019 and 2018, respectively. BlackRock is a publicly-traded company, and additional information regarding its business is available in its filings with the Securities and Exchange Commission (SEC).

NOTE 15 FEE-BASED REVENUE FROM CONTRACTS WITH CUSTOMERS

As more fully described in Note 23 Fee-based Revenue from Contracts with Customers in our 2018 Form 10-K, 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).

Fee-based revenue within the scope of Topic 606 is recognized within three of our reportable business segments, Retail Banking, Corporate & Institutional Banking and Asset Management Group. Income recognized from our investment in BlackRock, also a reportable segment, is outside of the scope of the standard. Topic 606 also excludes 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.

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 72: Retail Banking Noninterest Income Disaggregation

In millions	Three months ended September 30 2019	Three months ended September 30 2018	Nine months ended September 30 2019	Nine months ended September 30 2018
Product				
Deposit account fees	$ 166	$ 162	$ 468	$ 451
Debit card fees	139	130	399	374
Brokerage fees	92	86	267	260
Merchant services	55	54	159	156
Net credit card fees (a)	50	45	149	139
Other	65	71	193	214
Total in-scope noninterest income by product	$ 567	$ 548	$ 1,635	$ 1,594
Reconciliation to total Retail Banking noninterest income				
Total in-scope noninterest income	$ 567	$ 548	$ 1,635	$ 1,594
Total out-of-scope noninterest income (b)	177	74	361	341
Total Retail Banking noninterest income	$ 744	$ 622	$ 1,996	$ 1,935

(a) Net credit card fees consists of interchange fees of $ 128 million and $115 million and credit card reward costs of $ 78 million and $70 million for the three months ended September 30, 2019 and 2018, respectively. Net credit card fees consists of interchange fees of $366 million and $332 million and credit card reward costs of $ 217 million and $193 million for the nine months ended September 30, 2019 and 2018, respectively.

(b) Out-of-scope noninterest income includes revenue streams that fall under the scope of other accounting and disclosure requirements outside of Topic 606.

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.

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 net of credit card reward costs.

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. 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.

Corporate & Institutional Banking

Table 73: Corporate & Institutional Banking Noninterest Income Disaggregation

In millions	Three months ended September 30 2019	Three months ended September 30 2018	Nine months ended September 30 2019	Nine months ended September 30 2018
Product				
Treasury management fees	$ 210	$ 196	$ 621	$ 578
Capital markets fees	131	147	407	397
Commercial mortgage banking activities	26	23	75	65
Other	17	16	53	51
Total in-scope noninterest income by product	$ 384	$ 382	$ 1,156	$ 1,091
Reconciliation to total Corporate & Institutional Banking noninterest income				
Total in-scope noninterest income	$ 384	$ 382	$ 1,156	$ 1,091
Total out-of-scope noninterest income (a)	270	210	735	683
Total Corporate & Institutional Banking noninterest income	$ 654	$ 592	$ 1,891	$ 1,774

(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 fees from collateral management and asset management services. We earn these fees over time as we perform these services.

Asset Management Group

Table 74: Asset Management Group Noninterest Income Disaggregation

In millions	Three months ended September 30 2019	Three months ended September 30 2018	Nine months ended September 30 2019	Nine months ended September 30 2018
Customer Type				
Personal	$ 155	$ 156	$ 459	$ 462
Institutional	58	70	187	206
Total in-scope noninterest income by customer type	$ 213	$ 226	$ 646	$ 668
Reconciliation to Asset Management Group noninterest income				
Total in-scope noninterest income	$ 213	$ 226	$ 646	$ 668
Total out-of-scope noninterest income (a)	3	2	73	8
Total Asset Management Group noninterest income	$ 216	$ 228	$ 719	$ 676

(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.

NOTE 16 LEASES

We lease retail branches, datacenters, office space, land and equipment under operating and finance leases. Our leases have remaining lease terms of one year to sixty-two years, some of which may include options to renew the leases for up to ninety-nine 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.

At adoption of ASU 2016-02 on January 1, 2019, we elected 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 include fixed payments including rent, real estate taxes and insurance costs and nonlease components include common-area maintenance costs. 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 ROU asset and lease liability. Leases with an initial term of 12 months or less are not recorded on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term.

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 September 30, 2019.

Operating lease assets and liabilities totaled $2.0 billion and $2.2 billion at September 30, 2019, respectively. Finance lease assets and liabilities at September 30, 2019 were not material.

Future undiscounted cash flows on our operating leases are as follows:

Table 75: Maturity of Operating Lease Liabilities

In millions	September 30, 2019
Remainder of 2019	$ 85
2020	352
2021	331
2022	297
2023	264
After 2023	1,098
Total operating lease payments	$ 2,427
Less: Interest	263
Present value of operating lease liabilities	$ 2,164

At December 31, 2018, operating lease commitments under lessee arrangements were $374 million, $346 million, $308 million, $258 million, $228 million for 2019 through 2023, respectively, and $941 million in the aggregate for all years thereafter.

Operating lease term and discount rates at September 30, 2019 were as follows:

Table 76: Operating Lease Term and Discount Rates

	September 30, 2019
Weighted-average remaining lease term (years)	9
Weighted-average discount rate	2.46 %

NOTE 17 SUBSEQUENT EVENTS

On October 22, 2019, PNC Bank issued $750 million of subordinated notes with a maturity date of October 22, 2029. Interest is payable semi-annually at a fixed rate of 2.70% per annum, on April 22 and October 22 of each year, beginning on April 22, 2020.

On November 1, 2019, the parent company issued $650 million of senior notes with a maturity date of November 1, 2024. Interest is payable semi-annually at a fixed rate of 2.20% per annum, on May 1 and November 1 of each year, beginning on May 1, 2020.

STATISTICAL INFORMATION (UNAUDITED)

THE PNC FINANCIAL SERVICES GROUP, INC.

Average Consolidated Balance Sheet And Net Interest Analysis (a) (b) (c)

	Nine months ended September 30					
	2019			2018		
Taxable-equivalent basis Dollars in millions	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	$ 30,714	$ 657	2.85%	$ 26,746	$ 537	2.68%
Non-agency	1,802	109	8.04%	2,265	111	6.54%
Commercial mortgage-backed	5,549	127	3.05%	4,449	92	2.75%
Asset-backed	5,247	131	3.33%	5,260	123	3.12%
U.S. Treasury and government agencies	18,207	341	2.47%	15,603	260	2.20%
Other	3,316	83	3.36%	4,113	109	3.50%
Total securities available for sale	64,835	1,448	2.97%	58,436	1,232	2.80%
Securities held to maturity						
Residential mortgage-backed	15,582	340	2.91%	15,578	337	2.88%
Commercial mortgage-backed	571	15	3.59%	807	23	3.73%
Asset-backed	143	4	4.18%	194	5	3.34%
U.S. Treasury and government agencies	765	16	2.84%	747	16	2.83%
Other	1,823	61	4.41%	1,894	61	4.42%
Total securities held to maturity	18,884	436	3.08%	19,220	442	3.07%
Total investment securities	83,719	1,884	3.00%	77,656	1,674	2.87%
Loans						
Commercial	123,069	3,919	4.20%	112,907	3,363	3.93%
Commercial real estate	28,477	950	4.40%	28,883	873	3.98%
Equipment lease financing	7,273	215	3.94%	7,512	199	3.54%
Consumer	55,303	2,304	5.57%	55,474	2,075	5.00%
Residential real estate	19,602	625	4.25%	17,609	581	4.40%
Total loans	233,724	8,013	4.54%	222,385	7,091	4.23%
Interest-earning deposits with banks	14,708	256	2.32%	21,921	286	1.74%
Other interest-earning assets	12,780	354	3.70%	7,305	259	4.74%
Total interest-earning assets/interest income	344,931	10,507	4.04%	329,267	9,310	3.75%
Noninterest-earning assets	51,668			47,332		
Total assets	$ 396,599			$ 376,599		
Liabilities and Equity						
Interest-bearing liabilities:						
Interest-bearing deposits						
Money market	$ 55,268	477	1.15%	$ 56,732	$ 279	.66%
Demand	64,459	265	.55%	60,058	117	.26%
Savings	61,627	532	1.15%	50,845	284	.75%
Time deposits	20,017	244	1.63%	17,081	130	1.02%
Total interest-bearing deposits	201,371	1,518	1.01%	184,716	810	.59%
Borrowed funds						
Federal Home Loan Bank borrowings	23,368	467	2.63%	21,067	342	2.14%
Bank notes and senior debt	26,571	675	3.35%	28,352	594	2.76%
Subordinated debt	5,530	169	4.09%	5,096	159	4.16%
Other	6,564	122	2.44%	4,966	78	2.04%
Total borrowed funds	62,033	1,433	3.05%	59,481	1,173	2.60%
Total interest-bearing liabilities/interest expense	263,404	2,951	1.48%	244,197	1,983	1.08%
Noninterest-bearing liabilities and equity:						
Noninterest-bearing deposits	71,736			76,666		
Accrued expenses and other liabilities	12,975			8,971		
Equity	48,484			46,765		
Total liabilities and equity	$ 396,599			$ 376,599		
Interest rate spread			2.56%			2.67%
Impact of noninterest-bearing sources			.35			.28
Net interest income/margin		$ 7,556	2.91%		$ 7,327	2.95%

(continued on following page)

Average Consolidated Balance Sheet And Net Interest Analysis (a) (b) (c) (Continued)

Taxable-equivalent basis Dollars in millions	Three months ended September 30 2019 Average Balances	Interest Income/Expense	Average Yields/Rates	2018 Average Balances	Interest Income/ Expense	Average Yields/ Rates
Assets						
Interest-earning assets:						
Investment securities						
Securities available for sale						
Residential mortgage-backed						
Agency	$ 32,926	$ 223	2.70%	$ 28,241	$ 194	2.76%
Non-agency	1,716	38	8.89%	2,128	38	7.18%
Commercial mortgage-backed	5,728	43	2.97%	4,366	30	2.72%
Asset-backed	5,208	43	3.31%	5,459	46	3.37%
U.S. Treasury and government agencies	17,573	109	2.44%	16,757	96	2.25%
Other	3,053	26	3.41%	3,996	34	3.28%
Total securities available for sale	66,204	482	2.90%	60,947	438	2.86%
Securities held to maturity						
Residential mortgage-backed	15,768	110	2.78%	16,292	119	2.92%
Commercial mortgage-backed	544	5	3.68%	715	7	3.71%
Asset-backed	79	1	5.48%	189	2	3.65%
U.S. Treasury and government agencies	769	5	2.86%	752	6	2.85%
Other	1,802	19	4.40%	1,871	19	4.42%
Total securities held to maturity	18,962	140	2.98%	19,819	153	3.10%
Total investment securities	85,166	622	2.91%	80,766	591	2.92%
Loans						
Commercial	125,356	1,300	4.06%	113,883	1,183	4.06%
Commercial real estate	28,855	325	4.40%	28,860	302	4.10%
Equipment lease financing	7,272	70	3.82%	7,202	68	3.78%
Consumer	55,702	787	5.61%	55,449	722	5.17%
Residential real estate	20,497	216	4.21%	17,948	199	4.45%
Total loans	237,682	2,698	4.47%	223,342	2,474	4.36%
Interest-earning deposits with banks	15,632	85	2.17%	19,151	95	1.97%
Other interest-earning assets	14,094	123	3.49%	7,114	92	5.19%
Total interest-earning assets/interest income	352,574	3,528	3.95%	330,373	3,252	3.89%
Noninterest-earning assets	54,135			47,504		
Total assets	$ 406,709			$ 377,877		
Liabilities and Equity						
Interest-bearing liabilities:						
Interest-bearing deposits						
Money market	$ 56,271	162	1.14%	$ 55,507	$ 112	.80%
Demand	65,444	95	.58%	60,138	49	.32%
Savings	64,054	185	1.14%	52,919	122	.92%
Time deposits	21,173	89	1.66%	17,756	53	1.18%
Total interest-bearing deposits	206,942	531	1.02%	186,320	336	.71%
Borrowed funds						
Federal Home Loan Bank borrowings	25,883	164	2.48%	21,516	133	2.42%
Bank notes and senior debt	27,409	224	3.21%	27,301	204	2.92%
Subordinated debt	5,189	45	3.53%	5,253	54	4.10%
Other	5,452	35	2.43%	5,768	30	2.11%
Total borrowed funds	63,933	468	2.87%	59,838	421	2.76%
Total interest-bearing liabilities/interest expense	270,875	999	1.45%	246,158	757	1.21%
Noninterest-bearing liabilities and equity:						
Noninterest-bearing deposits	72,149			76,155		
Accrued expenses and other liabilities	14,529			8,853		
Equity	49,156			46,711		
Total liabilities and equity	$ 406,709			$ 377,877		
Interest rate spread			2.50%			2.68%
Impact of noninterest-bearing sources			.34			.31
Net interest income/margin		$ 2,529	2.84%		$ 2,495	2.99%

(a) Nonaccrual loans are included in loans, net of unearned 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-earning assets and noninterest-bearing liabilities, with changes in fair value recorded in Noninterest income.

(b) Loan fees for the three months ended September 30, 2019 and September 30, 2018 were $49 million and $34 million, respectively. Loan fees for the nine months ended September 30, 2019 and September 30, 2018 were $120 million and $99 million, respectfully.

(c) 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.

Reconciliation Of Taxable-Equivalent Net Interest Income (Non-GAAP) (a)

	Nine months ended		Three months ended	
In millions	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net interest income (GAAP)	$ 7,477	$ 7,240	$ 2,504	$ 2,466
Taxable-equivalent adjustments	79	87	25	29
Net interest income (Non-GAAP)	$ 7,556	$ 7,327	$ 2,529	$ 2,495

(a) The interest income earned on certain interest-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.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See the information set forth in Note 12 Legal Proceedings in the Notes To Consolidated Financial Statements under Part I, Item 1 of this Report, which is incorporated by reference in response to this item.

ITEM 1A. RISK FACTORS

There are no material changes in our risk factors from those previously disclosed in PNC's 2018 Form 10-K in response to Part I, Item 1A.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Details of our repurchases of PNC common stock during thethird quarter of 2019 are included in the following table.

2019 period In thousands, except per share data	Total shares purchased (a)	Average price paid per share	Total shares purchased as part of publicly announced programs (b)	Maximum number of shares that may yet be purchased under the programs (b)
July 1 - 31	2,364	$ 140.77	2,358	97,642
August 1 – 31	3,588	$ 129.28	3,588	94,054
September 1 – 30	1,512	$ 135.09	1,512	92,542
Total	7,464	$ 134.10		

(a) Includes PNC common stock purchased in connection with our various employee benefit plans generally related to shares used to cover employee payroll tax withholding requirements. Note 11 Employee Benefit Plans and Note 12 Stock Based Compensation Plans in the Notes To Consolidated Financial Statements of our 2018 Annual Report on Form 10-K 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. The previous 2015 authorization was terminated as of end of day on June 30, 2019. Repurchases are made in open market or privately negotiated transactions and the timing and exact amount of common stock repurchases will depend 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 the third quarter of 2019, we repurchased 7.5 million shares of common stock on the open market, with an average price of $134.09 per share and an aggregate repurchase price of $1.0 billion.

ITEM 6. EXHIBITS

The following exhibit index lists Exhibits filed, or in the case of Exhibits 32.1 and 32.2 furnished, with this Quarterly Report on Form 10-Q:

EXHIBIT INDEX

10.45	2019 Form of Performance Share Units Award Agreement
10.46	2019 Form of Restricted Share Units Award Agreement
10.47	2019 Form of Restricted Share Units Award Agreement - Senior Leader Program
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification by Chief Executive Officer pursuant to 18 U.S.C. Section 1350
32.2	Certification by Chief Financial Officer pursuant to 18 U.S.C. Section 1350
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

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-Q 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.

CORPORATE INFORMATION

The PNC Financial Services Group, Inc.

Corporate Headquarters

The PNC Financial Services Group, Inc.
The Tower at PNC Plaza
300 Fifth Avenue
Pittsburgh, Pennsylvania 15222-2401
888-762-2265

Internet Information

Our financial reports and information about our 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.

We may on occasion use our corporate 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 and certain public disclosures regarding our liquidity position and liquidity risk management, under rules adopted by the Federal banking agencies. 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, as well as our corporate social responsibility activities under "About Us – Corporate Responsibility."

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

Financial Information

We are subject to the informational requirements of the Securities Exchange Act of 1934 (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. You can obtain copies of these and other filings, including exhibits, electronically at the SEC's internet website at www.sec.gov or on our corporate internet website at www.pnc.com/secfilings. Shareholders and bond holders may also 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 email 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.

Corporate Governance at PNC

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 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.

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 the PNC corporate website) may do so by sending their requests to our Corporate Secretary at corporate headquarters at the above address. Copies will be provided without charge to shareholders.

Inquiries

For financial services call 888-762-2265.

Registered shareholders should contact Shareholder Services at 800-982-7652.

Analysts and institutional investors should contact Bryan Gill, Executive Vice President, Director of Investor Relations, at 412-768-4143 or via email at investor.relations@pnc.com.

News media representatives should contact PNC Media Relations at 412-762-4550 or via email at media.relations@pnc.com.

Dividend Policy

Holders of PNC common stock are entitled to receive dividends when declared by the 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 have been paid or declared and set apart for payment. The Board 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). The amount of our dividend is also currently subject to the results of the supervisory assessment of capital adequacy and capital planning processes undertaken by the Federal Reserve as part of the CCAR process as described in the Capital Management portion of the Risk Management section of the Financial Review of this Report and in the Supervision and Regulation section in Item 1 of our 2018 Form 10-K.

Dividend Reinvestment and Stock Purchase Plan

The PNC Financial Services Group, Inc. Dividend Reinvestment and Stock Purchase Plan enables holders of our common stock to conveniently purchase additional shares of common stock. You can obtain a prospectus and enrollment form by contacting Shareholder Services at 800-982-7652. Registered shareholders may also contact this phone number regarding dividends and other shareholder services.

Stock Transfer Agent and Registrar

Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202
800-982-7652
www.computershare.com/pnc

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on November 4, 2019 on its behalf by the undersigned thereunto duly authorized.

/s/ Robert Q. Reilly

Robert Q. Reilly
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 10.45

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN
*** * ***
PERFORMANCE SHARE UNITS AWARD AGREEMENT

This Agreement, which includes the attached appendices (this "Agreement") sets forth the terms and conditions of your performance share unit award made pursuant to The PNC Financial Services Group, Inc. 2016 Incentive Award Plan and any sub-plans thereto.

Appendix A to this Agreement sets forth additional terms and conditions of the Award, including restrictive covenant provisions. Appendix B to this Agreement sets forth certain definitions applicable to this Agreement generally. Appendix C to this Agreement sets forth the performance-based vesting conditions applicable to the Award and certain related definitions. Capitalized terms not otherwise defined in the body of this Agreement have the meaning ascribed to such terms in the Plan or Appendices A, B or C.

The Corporation and the Grantee named below (referenced in this Agreement as "you" or "your") agree as follows:

Subject to your timely acceptance of this Agreement (as described in Section A below), the Corporation grants to you the Award set forth below, subject to the terms and conditions of the Plan and this Agreement.

A.	**GRANT AND ACCEPTANCE OF PSUs**
GRANTEE	[Name]
GRANT DATE	[Date]
AWARD	Performance share units ("PSUs"), each representing a right to receive one Share, and related Dividend Equivalents, payable in cash.
TARGET	[# Shares] PSUs and related Dividend Equivalents
PERFORMANCE PERIOD	January 1, 2019 - December 31, 2021 (other than limited exceptions in the event of death or a Change of Control, as described in Appendix C).

AWARD ACCEPTANCE; AWARD EFFECTIVE DATE	You must accept this Award by delivering an executed unaltered copy of this Agreement to the Corporation within 30 days of your receipt of this Agreement. Upon such execution and delivery of this Agreement by both you and the Corporation, this Agreement is effective as of the Grant Date (the "Award Effective Date"). If you do not properly accept this Award, the Corporation may, in its sole discretion, cancel the Award at any time thereafter.

B. VESTING REQUIREMENTS

B.1 ***An Award becomes vested only upon satisfaction of both the service-based vesting requirements and the performance-based vesting requirements set forth below.***

SERVICE-BASED VESTING REQUIREMENTS	Except as otherwise provided in this Agreement, you must remain continuously employed through and including the Committee-determined Final Award Date (as defined in Appendix B) or such earlier date as prescribed by Section B.2 below.
PERFORMANCE-BASED VESTING REQUIREMENTS	Provided the service-based vesting requirements have been met, the Award will vest and become payable on the applicable Final Award Date upon the achievement of the performance goals set forth in Appendix C to this Agreement.

B.2 EFFECT OF TERMINATION OF EMPLOYMENT PRIOR TO THE FINAL AWARD DATE ON VESTING REQUIREMENTS

RETIREMENT	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC is terminated due to your Retirement, and not for Cause, then the service-based vesting requirements of the Award will be satisfied as of your Termination Date, but the Award will not vest and become payable until the Final Award Date, subject to satisfaction of the performance-based vesting requirements and your continued compliance with the terms and conditions of this Agreement.
DISABILITY	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC is terminated by PNC due to your Disability, and not for Cause, then the service-based vesting requirements of the Award will be satisfied as of your Termination Date, but the Award will not vest and become payable until the Final Award Date, subject to satisfaction of the performance-based vesting requirements and your continued compliance with the terms and conditions of this Agreement.

DEATH	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC ceases by reason of your death, or if you die after a termination of employment with PNC due to Disability or Retirement or following an Anticipatory Termination, but prior to the Final Award Date, then the service-based requirements of the Award will be satisfied as of your date of death, and the performance-based vesting requirements will be satisfied as further described in Appendix C.
ANTICIPATORY TERMINATION	Notwithstanding anything to the contrary in this Agreement, if your termination of employment with PNC is an Anticipatory Termination, then the service-based vesting requirements of the Award will be satisfied as of the Termination Date, but the Award will not vest and become payable until the Final Award Date, subject to satisfaction of the performance-based vesting requirements and your continued compliance with the terms of this Agreement.
TERMINATION FOLLOWING A CHANGE OF CONTROL	Notwithstanding anything to the contrary in this Agreement, if you have been continuously employed by PNC, including any successor entity, through the date of a Change of Control, and your employment with PNC is terminated following such Change of Control (but prior to the Final Award Date): (a) by PNC other than for Misconduct, (b) by you for Good Reason, or (c) for any reason (other than for Misconduct) on or after the first business day of the calendar year following the end of the Performance Period, (each, a "Qualifying Termination"), then the service-based requirements of the Award will be satisfied as of your Termination Date, and the performance-based vesting requirements will be satisfied as further described in Appendix C. For the avoidance of doubt, upon the occurrence of a Change of Control, the Award will not become vested until the service-based vesting requirements are satisfied, either as set forth in Section B.1. or as a result of your Retirement, your termination of employment by reason of death or Disability, or the occurrence of a Qualifying Termination.

C.	FORFEITURE	
C.1	**FORFEITURE UPON FAILURE TO MEET SERVICE-BASED VESTING REQUIREMENTS**	Except as otherwise provided in Section B.2 above, if you cease to be an employee of PNC prior to an applicable Final Award Date, you will not have satisfied the service-based vesting requirements and the Award will be automatically forfeited and cancelled as of your Termination Date. Upon such forfeiture or cancellation, neither you nor your successors, heirs, assigns or legal representatives will have any further rights or interest in the Award under this Agreement.
C.2	**FORFEITURE IN CONNECTION WITH DETRIMENTAL CONDUCT**	At any time prior to the Final Award Date, to the extent that PNC (acting through a PNC Designated Person) determines in its sole discretion (a) that you have engaged in Detrimental Conduct and (b) to forfeit and cancel all or a specified portion of the outstanding Award as a result of such determination, then such portion will be forfeited and cancelled effective as of the date of such determination.
C.3	**FORFEITURE UPON FAILURE TO SATISFY PERFORMANCE CONDITIONS**	If the final Corporate Performance Factor (as defined in Appendix C) is determined by the Committee to be 0.00%, the Award will be eligible forfeited and cancelled without payment of any consideration by PNC as of the date of such determination.
D.	**DIVIDEND EQUIVALENTS**	
D.1	**GENERALLY**	As of the Award Effective Date, you will be entitled to earn accrued cash Dividend Equivalents on the vested Payout Share Units (defined in Appendix C), in an amount equal to the cash dividends that would have been paid (without interest or reinvestment) between the Grant Date and the Final Award Date, as though you were the record holder of such Payout Share Units, and such Payout Share Units had been issued and outstanding shares on the Grant Date through the Final Award Date.

D.2	**ACCRUED DIVIDEND EQUIVALENT PAYMENTS**	(a) Generally. Accrued Dividend Equivalents will vest and be paid out in cash, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A, if and when the Award vests and pays out (at which point such Dividend Equivalents will terminate). Dividend Equivalents are subject to the same vesting requirements and payout size adjustments as the Award. If the PSUs to which such Dividend Equivalents relate are forfeited and cancelled, such related Dividend Equivalents will also be forfeited and cancelled. (b) Payment Upon a Change of Control. Accrual of Dividend Equivalents will cease as of the Change of Control. Upon a Change of Control, Dividend Equivalents accrued (without reinvestment or interest) between the Grant Date and the Change of Control will vest and be paid out in cash, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A, if and when the Award vests and pays out, as if you were the record holder of the number of Shares equal to the number of vested Payout Share Units underlying the Award from the Grant Date through the date of the Change of Control.

E.		**PAYMENT OF THE AWARD**
E.1	**PAYMENT TIMING**	Except as otherwise provided below, vested Payout Share Units that remain outstanding will be settled as soon as practicable following the applicable Final Award Date (and no later than (x) December 31st following the year of death, in the event of your death, or (y) March 15th following the year the Award vests).

E.2	**FORM OF PAYMENT; AMOUNT**	(a) Payment Generally. Except as provided in subsection (b) below, your Final Award will be settled at the time set forth in Section E.1 by delivery to you of that number of whole Shares equal to the number of Payout Share Units under your Final Award, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A. (b) Payment On or After a Change of Control. Upon vesting on or after a Change of Control, vested Payout Share Units will be settled at the time set forth in Section E.1 by payment to you of cash in an amount equal to that number of whole Shares equal to the number of vested Payout Share Units, multiplied by the then current Fair Market Value of a share of Common Stock on the date of the Change of Control (subject to any applicable adjustment pursuant to Section 2 of Appendix A), less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A. Related accrued Dividend Equivalent payments will be paid to you in cash as described in Section D.2(b). No interest will be paid with respect to any such payments made pursuant to this Section E.
F.	**RESTRICTIVE COVENANTS**	Upon your acceptance of this Award, you shall become subject to the restrictive covenant provisions set forth in Section 1 of Appendix A.
G.	**CLAWBACK**	The Award, and any right to receive and retain any Shares (if applicable), cash or other value pursuant to the Award, is subject to rescission, cancellation or recoupment, in whole or in part, if and to the extent so provided under the Corporation's Incentive Compensation Adjustment and Clawback Policy, as in effect from time to time with respect to the Award, or any other applicable clawback, adjustment or similar policy in effect on or established after the Grant Date and to any clawback or recoupment that may be required by applicable law or regulation. By accepting this Award, you agree that you are obligated to provide all assistance necessary to the Corporation to recover or recoup the Shares, cash or other value pursuant to the Award which are subject to recovery or recoupment pursuant to applicable law, government regulation, stock exchange listing requirement or PNC policy. Such assistance shall include completing any documentation necessary to recover or recoup the Shares, cash or other value pursuant to the Award from any accounts you maintain with PNC or any pending or future compensation. A copy of the Incentive Compensation Adjustment and Clawback Policy is included in the materials distributed to you with this Agreement.

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

PERFORMANCE SHARE UNITS AWARD AGREEMENT

APPENDIX A

ADDITIONAL PROVISIONS

1. Restrictive Covenants. You and PNC acknowledge and agree that you have received adequate consideration with respect to enforcement of the provisions of this Section 1 by virtue of accepting this Award (regardless of whether the Award or any portion thereof is ultimately settled and paid to you); that such provisions are reasonable and properly required for the adequate protection of the business of PNC and its subsidiaries; and that enforcement of such provisions will not prevent you from earning a living.

(a) Non-Solicitation; No-Hire. You agree to comply with the provisions of this Section 1(a) during the period of your employment with PNC and the 12-month period following your Termination Date, regardless of the reason for such termination of employment, as follows:

i. *Non-Solicitation*. You will not, directly or indirectly, either for your own benefit or purpose or for the benefit or purpose of any Person other than PNC, solicit, call on, do business with, or actively interfere with PNC's relationship with, or attempt to divert or entice away, any Person that you should reasonably know (A) is a customer of PNC for which PNC provides any services as of your Termination Date, or (B) was a customer of PNC for which PNC provided any services at any time during the 12 months preceding your Termination Date, or (C) was, as of your Termination Date, considering retention of PNC to provide any services.

ii. *No-Hire*. You will not, directly or indirectly, either for your own benefit or purpose or for the benefit or purpose of any Person other than PNC, employ or offer to employ, call on, or actively interfere with PNC's relationship with, or attempt to divert or entice away, any employee of PNC. You also will not assist any other Person in such activities.

Notwithstanding Section 1(a)(i) and Section 1(a)(ii) above, if your termination of employment with PNC is an Anticipatory Termination, then commencing immediately after your Termination Date, the provisions of Section 1(a)(i) and Section 1(a)(ii) will no longer apply and will be replaced with the following provision:

"No-Hire. You agree that you will not, for a period of one year after your Termination Date, employ or offer to employ, solicit, actively interfere with PNC or any PNC affiliate's relationship with, or attempt to divert or entice away, any officer of PNC or any affiliate of PNC."

(b) Confidentiality. During your employment with PNC and thereafter regardless of the reason for termination of such employment, you will not disclose or use in any way any confidential business or technical information or trade secret acquired in the course of such employment, all of which is the exclusive and valuable property of PNC whether or not conceived of or prepared by you, other than (i) information generally known in PNC's industry or acquired from public sources, (ii) as required in the course of employment by PNC, (iii) as required by any court, supervisory authority, administrative agency or applicable law, or (iv) with the prior written consent of PNC. Nothing in this Agreement, including this Section 1(b), is intended to limit you from reporting possible violations of law or regulation to any governmental entity or any self-regulatory organization or making other disclosures that are protected under the whistleblower provisions of federal, state or local law or regulation. You further understand and agree that you are not required to contact or receive consent from PNC before engaging in such communications with any such authorities.

(c) Ownership of Inventions. You will promptly and fully disclose to PNC any and all inventions, discoveries, improvements, ideas or other works of inventorship or authorship, whether or not patentable, that have been or will be conceived and/or reduced to practice by you during the term of your employment with PNC, whether alone or with others, and that are (i) related directly or indirectly to the business or activities of PNC or (ii) developed with the use of any time, material, facilities or other resources of PNC ("Developments"). You agree to assign and hereby do assign to PNC or its designee all of your right, title and interest, including copyrights and patent rights, in and to all Developments. You will perform all actions and execute all instruments that PNC or any subsidiary will deem necessary to protect or record PNC's or its designee's interests in the Developments. The obligations of this Section 1(c) will be performed by you without further compensation and will continue beyond your Termination Date.

(d) Enforcement Provisions. You understand and agree to the following provisions regarding enforcement of Section 1 of this Agreement:

i. *Equitable Remedies*. A breach of the provisions of Sections 1(a) – 1(c) will cause PNC irreparable harm, and PNC will therefore be entitled to seek issuance of immediate, as well as permanent, injunctive relief restraining you, and each and every person and entity acting in concert or participating with you, from initiation and/or continuation of such breach.

ii. *Tolling Period*. If it becomes necessary or desirable for PNC to seek compliance with the provisions of Section 1(a) by legal proceedings, the period during which you will comply with said provisions will extend for a period of 12 months from the date PNC institutes legal proceedings for injunctive or other relief.

iii. *Reform*. If any of Sections 1(a) – 1(c) are determined by a court of competent jurisdiction to be unenforceable because unreasonable either as to length of time or area to which the restriction applies, it is the intent of both parties that the court reduce and reform the restriction so as to apply the greatest limitations considered enforceable by the court.

iv. *Waiver of Jury Trial.* Each of you and PNC hereby waives any right to trial by jury with regard to any suit, action or proceeding under or in connection with any of Sections 1(a) – 1(c).

v. *Application of Defend Trade Secrets Act.* Regardless of any other provision in this Agreement, you may be entitled to immunity and protection from retaliation under the Defend Trade Secrets Act of 2016 for disclosing trade secrets under certain limited circumstances, as set forth in PNC's Defend Trade Secrets Act policy. The policy is available for viewing on PNC's intranet under the "PNC Ethics" page.

2. Capital Adjustments upon a Change of Control. Upon the occurrence of a Change of Control, (a) the number, class and kind of PSUs then outstanding under the Award will automatically be adjusted to reflect the same changes as are made to outstanding shares of Common Stock generally, (b) the value per share unit of any share-denominated award amount will be measured by reference to the per share value of the consideration payable to a holder of Common Stock in connection with such Corporate Transaction or Transactions if applicable, and (c) with respect to stock-payable PSUs only, if the effect of the Corporate Transaction or Transactions on a holder of Common Stock is to convert that shareholder's holdings into consideration that does not consist solely (other than as to a minimal amount) of shares of Common Stock, then the entire value of any payment to be made to you will be made solely in cash at the applicable time specified in this Agreement.

3. Fractional Shares. No fractional Shares will be delivered to you. If the outstanding vested PSUs being settled in Shares include a fractional interest, such fractional interest will be eliminated by rounding down to the nearest whole share unit.

4. No Rights as a Shareholder. You will have no rights as a shareholder of the Corporation by virtue of this Award unless and until Shares are issued and delivered in settlement of the Award pursuant to and in accordance with this Agreement.

5. Transfer Restrictions.

(a) The Award may not be sold, assigned, transferred, exchanged, pledged, or otherwise alienated or hypothecated.

(b) If you are deceased at the time any outstanding vested PSUs are settled and paid out in accordance with the terms of this Agreement, such delivery of Shares, cash payment or other payment (as applicable) shall be made to the executor or administrator of your estate or to your other legal representative or, as permitted under the election procedures of the Plan's third-party administrator, to your designated beneficiary, in each case, as determined in good faith by the Corporation. Any delivery of Shares, cash payment or other payment made in good faith by the Corporation to your executor, other legal representative or permissible designated beneficiary, or retained by the Corporation for taxes pursuant to Section 6 of this Appendix A, shall extinguish all right to payment hereunder.

6. Withholding Taxes.

(a) You shall be solely responsible for any applicable taxes (including, without limitation, income and excise taxes), penalties and interest that you incur in connection hereunder. The Corporation will, at the time any withholding tax obligation arises in connection herewith, retain an amount sufficient to satisfy the minimum amount of taxes then required to be withheld by the Corporation in connection therewith from amounts then payable hereunder to you.

(b) If any such withholding is required prior to the time amounts are payable to you hereunder or if such amounts are not sufficient to satisfy such obligation in full, the withholding will be taken from other compensation then payable to you or as otherwise determined by PNC.

(c) The Corporation will withhold cash from any amounts then payable to you hereunder that are settled in cash. Unless the Committee or PNC Designated Person determines otherwise, with respect to stock-payable PSUs only, the Corporation will retain whole Shares from any amounts then payable to you hereunder (or pursuant to any other PSUs previously awarded to you under the Plan) in the form of Shares. For purposes of this Section 6(c), Shares retained to satisfy applicable withholding tax requirements will be valued at their Fair Market Value on the date the tax withholding obligation arises (as such date is determined by the Corporation).

7. Employment. Neither the granting of the Award nor any payment with respect to such Award authorized hereunder nor any term or provision of this Agreement shall constitute or be evidence of any understanding, expressed or implied, on the part of PNC to employ you for any period or in any way alter your status as an employee at will.

8. Miscellaneous.

(a) Subject to the Plan and Interpretations. In all respects the Award and this Agreement are subject to the terms and conditions of the Plan, which has been made available to you and is incorporated herein by reference. The terms of the Plan will not be considered an enlargement of any benefits under this Agreement. If the Plan and this Agreement conflict, the provisions of the Plan will govern. Interpretations of the Plan and this Agreement by the Committee are binding on you and PNC.

(b) Governing Law and Jurisdiction. This Agreement is governed by and construed under the laws of the Commonwealth of Pennsylvania, without reference to its conflict of laws provisions. Any dispute or claim arising out of or relating to this Agreement or claim of breach hereof will be brought exclusively in the Federal court for the Western District of Pennsylvania or in the Court of Common Pleas of Allegheny County, Pennsylvania. By execution of this Agreement, you and PNC hereby consent to the exclusive jurisdiction of such courts, and waive any right to challenge jurisdiction or venue in such courts with regard to any suit, action, or proceeding under or in connection with this Agreement.

(c) Headings; Entire Agreement. Headings used in this Agreement are provided for reference and convenience only, are not considered part of this Agreement, and will not be employed in the construction of this Agreement. This Agreement, including any appendices or exhibits attached hereto, constitutes the entire agreement between you and PNC with respect to the subject matters addressed herein, and supersedes all other discussions, negotiations, correspondence, representations, understandings and agreements between the parties concerning the subject matters hereof.

(d) Modification. Modifications or adjustments to the terms of this Agreement may be made by the Corporation as permitted in accordance with the Plan or as provided for in this Agreement. No other modification of the terms of this Agreement will be effective unless embodied in a separate, subsequent writing signed by you and by an authorized representative of the Corporation.

(e) No Waiver. Failure of PNC to demand strict compliance with any of the terms, covenants or conditions of this Agreement will not be deemed a waiver of such term, covenant or condition, nor will any waiver or relinquishment of any such term, covenant or condition on any occasion or on multiple occasions be deemed a waiver or relinquishment of such term, covenant or condition.

(f) Severability. The restrictions and obligations imposed by this Agreement are separate and severable, and it is the intent of both parties that if any restriction or obligation imposed by any of these provisions is deemed by a court of competent jurisdiction to be void for any reason whatsoever, the remaining provisions, restrictions and obligations will remain valid and binding upon you.

(g) Applicable Laws. Notwithstanding anything in this Agreement, PNC will not be required to comply with any term, covenant or condition of this Agreement if and to the extent prohibited by law, including but not limited to Federal banking and securities regulations, or as otherwise directed by one or more regulatory agencies having jurisdiction over PNC.

(h) Compliance with Section 409A of the Internal Revenue Code. It is the intention of the parties that the Award and this Agreement comply with the provisions of Section 409A of the Internal Revenue Code to the extent, if any, that such provisions are applicable. This Agreement will be administered in a manner consistent with this intent, including as set forth in Section 20 of the Plan. If the Award includes a “series of installment payments” (within the meaning of Section 1.409A-2(b)(2)(iii) of the Treasury Regulations), your right to the series of installment payments will be treated as a right to a series of separate payments and not as a right to a single payment.

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THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

PERFORMANCE SHARE UNITS AWARD AGREEMENT

APPENDIX B

DEFINITIONS

Certain Definitions. Except as otherwise provided, the following definitions apply for purposes of this Agreement.

"**Anticipatory Termination**" means a termination of employment where PNC terminates your employment with PNC (other than for Misconduct or Disability) prior to the date on which a Change of Control occurs, and you reasonably demonstrated that such termination of employment (i) was at the request of a third party that has taken steps reasonably calculated to effect a Change of Control or (ii) otherwise arose in connection with or in anticipation of a Change of Control.

"**Award Effective Date**" has the meaning set forth in Section A of this Agreement.

"Change of Control" means:

(a) Any Person becomes the beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 20% or more of either (x) the then-outstanding shares of Common Stock (the "Outstanding PNC Common Stock") or (y) the combined voting power of the then-outstanding voting securities of the Corporation entitled to vote generally in the election of directors (the "Outstanding PNC Voting Securities"). The following acquisitions will not constitute a Change of Control for purposes of this definition: (1) any acquisition directly from the Corporation, (2) any acquisition by the Corporation, (3) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Corporation or any company controlled by, controlling or under common control with the Corporation (an "Affiliated Company"), (4) any acquisition pursuant to an Excluded Combination (as defined below) or (5) an acquisition of beneficial ownership representing between 20% and 40%, inclusive, of the Outstanding PNC Voting Securities or Outstanding PNC Common Stock if the Incumbent Board (as defined below) as of immediately prior to any such acquisition approves such acquisition either prior to or immediately after its occurrence;

(b) Individuals who, as of the date hereof, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board (excluding any Board seat that is vacant or otherwise unoccupied). For purposes of this definition, any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the shareholders of the Corporation, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board will be considered as though such individual was a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board;

(c) Consummation of a reorganization, merger, statutory share exchange or consolidation or similar transaction involving the Corporation or any of its subsidiaries, a sale or other disposition of all or substantially all of the assets of the Corporation, or the acquisition of assets or stock of another entity by the Corporation or any of its subsidiaries (each, a "Business Combination"). A transaction otherwise meeting the definition of Business Combination will not be treated as a Change of Control if following completion of the transaction all or substantially all of the beneficial owners of the Outstanding PNC Common Stock and the Outstanding PNC Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 60% of the then-outstanding shares of Common Stock (or, for a non-corporate entity, equivalent securities) and the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors (or, for a non-corporate entity, equivalent governing body), as the case may be, of the entity resulting from such Business Combination (including, without limitation, an entity that, as a result of such transaction, owns the Corporation or all or substantially all of the Corporation's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership immediately prior to such Business Combination of the Outstanding PNC Common Stock and the Outstanding PNC Voting Securities, as the case may be (such a Business Combination, an "Excluded Combination"); or

(d) Approval by the shareholders of the Corporation of a complete liquidation or dissolution of the Corporation.

"Competitive Activity" means any participation in, employment by, ownership of any equity interest exceeding one percent in, or promotion or organization of, any Person other than PNC (1) engaged in business activities similar to some or all of the business activities of PNC during your employment or (2) engaged in business activities that you know PNC intends to enter within the next 12 months (or, if after your Termination Date, within the first 12 months after your Termination Date), in either case whether you are acting as agent, consultant, independent contractor, employee, officer, director, investor, partner, shareholder, proprietor or in any other individual or representative capacity therein. For purposes of Competitive Activity as defined herein (and as such similar term is defined in any equity-based award agreement held by you), the term "subsidiary" will not include any company in which PNC holds an interest pursuant to its merchant banking authority.

"**Detrimental Conduct**" means:

(a) You have engaged in, without the prior written consent of PNC (with consent to be given or withheld at PNC's sole discretion), in any Competitive Activity in the Restricted Territory at any time during the period of your employment with PNC and the 12-month period following your Termination Date;

(b) any act of fraud, misappropriation, or embezzlement by you against PNC or one of its subsidiaries or any client or customer of PNC or one of its subsidiaries; or

(c) you are convicted (including a plea of guilty or of nolo contendere) of, or you enter into a pre-trial disposition with respect to, the commission of a felony that relates to or arises out of your employment or other service relationship with PNC.

You will be deemed to have engaged in Detrimental Conduct for purposes of this Agreement only if and when the Committee or other PNC Designated Person determines that you have engaged in conduct described in clause (a) or clause (b) above or that an event described in clause (c) above has occurred with respect to you. Detrimental Conduct will not apply to conduct by or activities of successors to the Award by will or the laws of descent and distribution in the event of your death.

No determination that you have engaged in Detrimental Conduct may be made (x) on or after your Termination Date if your termination of employment was an Anticipatory Termination or (y) between the time PNC enters into an agreement providing for a Change of Control and the time such agreement either terminates or results in a Change of Control.

"**<u>Final Award Date</u>**" means (a) the date on which the Committee makes its determination as to the size of the payout to be paid out to you in accordance with this Agreement (such payout amount, the "**<u>Final Award</u>**"), if any, following the end of the Performance Period, (b) in the event of your death prior to the last calendar year of the Performance Period, the date on which the Committee makes its determination of a Final Award, if any, following the calendar year of your death, or (c) if a Change of Control has occurred prior to the date described in (a) and a Final Award has been authorized, the date upon which the service requirements are satisfied.

"<u>Good Reason</u>" means the definition of Good Reason contained in the Change of Control Employment Agreement between you and PNC or any substitute employment agreement entered into between you and PNC then in effect or, if none, the occurrence of any of the following events without your consent:

(a) the assignment to of any duties to you inconsistent in any material respect with your position (including status, offices, titles and reporting requirements), or any other material diminution in such position, authority, duties or responsibilities;

(b) any material reduction in your rate of base salary or the amount of your annual bonus opportunity (or, if less, the bonus opportunity established for the PNC's similarly situated employees for any year), or a material reduction in the level of any other employee benefits for which you are eligible receive below those offered to the PNC's similarly situated employees;

(c) PNC's requiring you to be based at any office or location outside of a fifty (50)-mile radius from the office where you were employed on the Grant Date;

(d) any action or inaction that constitutes a material breach by the PNC of any agreement entered into between you and PNC; or

(e) the failure by PNC to require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of PNC to assume expressly and agree to perform this Agreement in the same manner and to the same extent that PNC would be required to perform it if no such succession had taken place.

Notwithstanding the foregoing, none of the events described above shall constitute Good Reason unless and until (i) you first notify PNC in writing describing in reasonable detail the condition which constitutes Good Reason within 90 days of its initial occurrence, (ii) PNC fails to cure such condition within 30 days after receipt of such written notice, and (iii) you terminate employment within two years of its initial occurrence.

Your mental or physical incapacity following the occurrence of an event described above in clauses (a) through (e) shall not affect your ability to terminate employment for Good Reason, and your death following delivery of a notice of termination for Good Reason shall not affect your estate's entitlement to severance payments benefits provided hereunder upon a termination of employment for Good Reason.

"**Misconduct**" means, as it relates to an Anticipatory Termination or following a Change of Control, (a) your willful and continued failure to substantially perform your duties with PNC (other than any such failure resulting from incapacity due to physical or mental illness), after a written demand for substantial performance is delivered to you by the Board or the CEO that specifically identifies the manner in which the Board or the CEO believes that you have not substantially performed your duties; or (b) your willful engagement in illegal conduct or gross misconduct that is materially and demonstrably injurious to PNC or any of its subsidiaries. For purposes of clauses (a) and (b), no act or failure to act, on your part, shall be considered willful unless it is done, or omitted to be done, by you in bad faith and without reasonable belief that your action or omission was in the best interests of PNC. Any act, or failure to act, based upon the instructions or prior approval of the Board, the CEO or your superior or based upon the advice of counsel for PNC, will be conclusively presumed to be done, or omitted to be done, by you in good faith and in the best interests of PNC.

Your cessation of employment will be deemed to be a termination of your employment with PNC for Misconduct only if and when there shall have been delivered to you, as part of the notice of your termination, a copy of a resolution duly adopted by the affirmative vote of not less than a majority of the entire membership of the Board, at a Board meeting called and held for the purpose of considering such termination, finding on the basis of clear and convincing evidence that, in the good faith opinion of the Board, you are guilty of conduct described in clause (a) or clause (b) above and, in either case, specifying the particulars thereof in detail. Such resolution shall be adopted only after (i) reasonable notice of such Board meeting is provided to you, together with written notice that PNC believes that you are guilty of conduct described in clause (a) or clause (b) above and, in either case, specifying the particulars thereof in detail, and (ii) you are given an opportunity, together with counsel, to be heard before the Board.

"**Payout Share Units**" refers to the performance-adjusted number of units that are eligible to vest.

"**Person**" means any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act.

"**PNC Designated Person**" means (a) the Committee or its delegate if you are (or were when you ceased to be an employee of PNC) either a member of the Corporate Executive Group (or equivalent successor classification) or subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to PNC securities (or both); or (b) the Committee, the CEO, or the Chief Human Resources Officer of PNC, or any other individual or group as may be designated by one of the foregoing to act as PNC Designated Person for purposes of this Agreement.

"**Qualifying Termination**" has the meaning set forth in Section B of this Agreement.

"**Restricted Territory**" means (a) if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in the United States or Canada as of the Termination Date, the United States and Canada, (b) if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in the United Kingdom as of the Termination Date, the United Kingdom or (c) if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in Germany as of the Termination Date, Germany or the United Kingdom.

"**Retirement"** means your termination of employment with PNC at any time for any reason (other than termination of employment by reason of your death, by PNC for Cause or by reason of termination of employment in connection with a divestiture of assets or a divestiture of one or more subsidiaries of PNC if the Committee or the CEO or his or her designee so determines prior to such divestiture) on or after the first date on which you have both attained at least age 55 and completed five years of service, where a year of service is determined in the same manner as the determination of a year of vesting service calculated under the provisions of The PNC Financial Services Group, Inc. Pension Plan.

"**Termination Date**" means the last day of your employment with PNC. If you are employed by a Subsidiary that ceases to be a Subsidiary or ceases to be a consolidated subsidiary of the Corporation under U.S. generally accepted accounting principles and you do not continue to be employed by or otherwise have a Service Relationship with PNC, then for purposes of this Agreement, your employment with PNC terminates effective at the time this occurs.

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

PERFORMANCE SHARE UNITS AWARD AGREEMENT

APPENDIX C

PERFORMANCE-BASED VESTING CONDITIONS

The following table sets forth the performance-based vesting conditions of the Award:

1.	*General Overview and Definitions*	Performance-based vesting and payout of your Award is determined based on the level of satisfaction of three performance metrics during the Performance Period – two corporate performance metrics and one risk-related performance metric. These metrics are described in more detail in the paragraphs below. "PNC" for purposes of this Appendix C as it refers to performance-based vesting conditions means the Corporation and its consolidated subsidiaries for financial reporting purposes. Each performance metric will be measured or reviewed on an annual basis for each calendar year (i.e., calendar year 2019, calendar year 2020 and calendar year 2021) during the Performance Period (each, a "Performance Year"). A Performance Year may refer to a partial calendar year in certain limited circumstances (e.g., in connection with death or a Change of Control) as further described in this Appendix C. The three performance metrics are: 1. *Relative Average EPS Growth* - Annual growth in earnings per share, measured for each Performance Year and then averaged for the Performance Period and compared to similar performance of other members of PNC's Peer Group based on PNC's percentile rank using a continuous percentile rank calculation ("Relative Average EPS Growth"), where for purposes of this definition: a. "EPS" means the publicly-reported diluted earnings per share of PNC or other Peer Group members for the Performance Year, in each case as adjusted, on an after-tax basis, for the impact of the items set forth in paragraph 3 below (rounded to the nearest cent), and b. "EPS Growth," with respect to a given Performance Year, means the growth or decline in EPS achieved by PNC or other Peer Group members for that Performance Year as compared to EPS for the comparable period of the prior calendar year, expressed as a percentage (rounded to the nearest one-hundredth). c. "Peer Group" refers to the Committee-determined peer group as of the Grant Date. Performance will be measured based on the Peer Group on the last day of the Performance Period, taking into account name changes and the elimination from the Peer Group of any members since the beginning of the Performance Period (e.g., due to consolidation or merger). In the event of a merger of two members of the Peer Group during the Performance Period, the resulting new company will be compared to the financial information of the acquiring member of the Peer Group (as determined on a corporate accounting basis.) The Peer Group for this Award consists of the following members: PNC, Bank of America Corporation, BB&T Corporation, Capital One Financial Corporation, Citizens Financial Group, Inc., Fifth Third Bancorp, JPMorgan Chase & Co., KeyCorp, M&T Bank Corporation, Regions Financial Corporation, SunTrust Banks, Inc., U.S. Bancorp, and Wells Fargo & Company 2. *Average ROE* - Annual return on equity ("ROE"), with specified adjustments as described in paragraph 3, measured for each Performance Year and then averaged for the Performance Period ("Average ROE") and compared to specified performance targets established by the Committee. 3. *CET1 Ratio* - Whether PNC has met or exceeded the common equity Tier 1 capital spot ratio limit as then in effect and applicable to The PNC Financial Services Group, Inc. ("CET1 Ratio") (which may be on a pro forma fully phased-in basis, if applicable) as set forth in PNC's Enterprise Capital Management Policy (or any successor policy) and monitored at least quarterly. All performance metrics, including any adjustments, will be determined on the basis of: (x) with respect to PNC's absolute performance, PNC's internal financial information; (y) with respect to PNC's relative performance to other members of the Peer Group, either publicly-disclosed financial information or, in the case of PNC, internal financial information that is anticipated to be publicly disclosed in an upcoming filing with the SEC; and (z) with respect to other members of the Peer Group, publicly-disclosed financial information,

		in each case, only where such amounts can be reasonably determined as of the date immediately prior to the date the Committee makes its determination as to the size of the payout.

2.	*Calculating Corporate Performance Metrics*	*(a) Calculating Average ROE*. For each Performance Year, annual ROE (expressed as a percentage, rounded to the nearest one-hundredth) is calculated and adjusted for the items set forth in paragraph 3. At the end of the Performance Period, Average ROE is determined by calculating the average of PNC's annual ROE for each Performance Year, then rounding to the nearest one-hundredth. *(b) Calculating Relative Average EPS Growth*. Annual EPS Growth for PNC and each other member of the Peer Group is calculated for each Performance Year, adjusted for the items set forth in paragraph 3, expressed as a percentage and rounded to the nearest one-hundredth. At the end of the Performance Period, the annual EPS Growth percentages for each Performance Year are averaged. PNC's average EPS Growth is compared to the average of each other member of the Peer Group to determine PNC's percentile rank, based on a continuous percentile rank calculation and expressed as a percentage (rounded to the nearest one-hundredth). *(c) Calculating the Corporate Performance Factor.* (i) Once the Average ROE and Relative Average EPS Growth are determined, a corporate performance factor, expressed as a percentage, is calculated using the table attached as Exhibit 1, applying bilinear interpolation and rounding to the nearest one-hundredth (such percentage, the "Corporate Performance Factor"). The Corporate Performance Factor will range from 0.00% to 150.00%. The Corporate Performance Factor may be adjusted by the Committee as described in paragraph 7. (ii) In the event of your death or a Change of Control, the provisions of paragraph 8 will govern the calculation of the Corporate Performance Factor.

<table>
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<td>3.</td>
<td>Adjustments to Corporate Performance Metrics</td>
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For purposes of measuring (a) EPS Growth performance for PNC and other members of the Peer Group or (b) ROE for PNC, earnings or EPS performance results, as applicable, will be adjusted, on an after-tax basis, for the impact of any of the following where such impact occurs during a given Performance Year (or, if applicable, during the prior year comparison period for a given year):

discontinued operations (as such term is used under GAAP);
acquisition costs and merger integration costs;
in PNC’s case, the net impact on PNC of significant gains or losses related to BlackRock transactions; and
items resulting from a change in U.S. federal tax law, which includes one-time adjustments to U.S. federal tax law (i.e., benefits or losses associated with the revaluation of assets or liabilities due to a change in tax law), but does not include (i) any going-forward changes to run rate income as a result of a change in U.S. federal tax law, to the extent such going-forward changes are reasonably determinable, or (ii) benefits or losses realized from the resolution of certain outstanding tax matters (e.g., court decision that reverses an earlier tax position) or changes in a company’s organizational tax structure.

In the case of the EPS growth metric and the ROE performance metric, there will be an additional adjustment to add the amount disclosed as provision for credit losses (or the equivalent) and subtract the amount disclosed as total net charge-offs.
In the case of the EPS growth metric, the impact of any stock splits (whether in the form of a stock split or a stock dividend) may result in an additional adjustment.
Adjustments will be made if the impact of such events occurs during a Performance Year (or partial year, if applicable), or, for purposes of determining EPS Growth, during the prior year comparison period for a Performance Year.
The Committee may also take into account other unusual or nonrecurring adjustments (applied on a consistent basis) in determining the Final Award.
After-tax adjustments for PNC and, where applicable, other members of the Peer Group, will be calculated using the same methodology for making such adjustments on an after-tax basis.
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4.	*Applying the Risk Performance Metric*	*(a) CET1 Ratio Generally*. The Award is subject to one risk performance factor based on whether PNC has met or exceeded the CET1 Ratio as of the last day of each Performance Year. The current CET1 Ratio is 7.0%. *(b) Determination of Annual CET1 Ratio*. As soon as practicable following the end of the Performance Period, PNC will present information to the Committee relating to (i) the CET1 Ratio compared to (ii) the actual CET1 Ratio achieved by PNC with respect to each Performance Year, based on PNC's publicly reported financial results for the period ending on the applicable end date. • If PNC meets or exceeds the CET1 Ratio for each Performance Year, the risk performance metric is satisfied. • If PNC does not meet the CET1 Ratio for a Performance Year, 1/3 of the target number of PSUs are eligible for forfeiture on the Final Award Date. The Committee will conduct a final review and adjust the target number of PSUs accordingly as of the Final Award Date.
5.	*Risk Performance Review Adjustment*	In addition, and independent from the CET1 Ratio performance metric described in paragraph 4 above, on or prior to the Final Award Date, the Committee has the discretion to conduct a risk performance review relating to a risk-related action of potentially material consequence to PNC. If the Committee exercises its discretion to conduct a risk performance review, the Committee will review and determine if a downward adjustment for risk performance is appropriate. If so, the Committee will determine the size of the risk adjustment to the Corporate Performance Factor (including reducing such Corporate Performance Factor to zero.) Any determination to conduct a risk performance review will be made shortly after the close of the Performance Period, but no later than the 45th day following the close of the Performance Period, and any required review will be conducted no later than the end of the first quarter following the close of the Performance Period.

6.	*Committee Discretion*	Notwithstanding the levels of corporate and risk performance achieved by PNC, the Committee may use its discretion to reduce or increase the number of Payout Share Units (including a reduction to zero) as it deems equitable to maintain the intended economics of the Award in light of changed circumstances. Such circumstances are limited to external events affecting PNC, its financial statements or members of its Peer Group that are substantially outside of PNC's control and could not reasonably be planned for as of the Grant Date. *Discretion in Connection with a Change of Control.* The Committee will have no discretion to adjust the calculated maximum Payout Share Units following a Change of Control or during a Change of Control Coverage Period. In the event (a) your termination of employment with PNC is an Anticipatory Termination, (b) a Change of Control is pending, and (c) the Committee-determined Final Award Date occurs prior to the Change of Control, the Committee will have no discretion to adjust your calculated maximum Payout Share Units under these circumstances.

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<td>7.</td>
<td>Calculation of Payout Share Units and Determination of Final Award</td>
<td>Following the end of the Performance Period, the Committee reviews performance against the performance metrics and makes its determination as to the Final Award, as follows:

(1) Application of Risk Performance Metric - The Committee first determines whether or not to reduce the target number of PSUs under the Award, based on the application of the risk performance metric, as follows:

(a) If PNC has met or exceeded the CET1 Ratio for each Performance Year, there is no reduction in the number of target PSUs under the Award.

(b) If PNC has not met the CET1 Ratio for any Performance Year, then for each Performance Year the CET1 Ratio was not met, the Committee can elect to reduce the target number of PSUs by one-third.

(2) Committee Review of Performance Factor - Next, the Committee determines whether to approve the calculated Corporate Performance Factor, a lower percentage or a higher percentage based on application of any risk-related adjustment (described in paragraph 5) or other Committee discretion consistent with paragraph 6.

(3) Final Award Determination - Once the Committee approves the final Corporate Performance Factor, it applies this percentage to (x) the target number of PSUs (as reduced for any failure to meet the CET1 Ratio during the Performance Period), and rounds down to the nearest whole share unit. The resulting amount is the number of Payout Share Units that are eligible to vest and be settled on the Final Award Date (i.e., the Final Award). In no event can the size of the Final Award be greater than 150.00% of the target number of PSUs.

(4) Special Rules Regarding the Final Award Date – The Final Award will become vested and payable as of the Final Award Date, which term is defined in <u>Appendix B</u>. The Final Award Date is typically the date on which the Committee makes its determination as to the size of the payout to be paid out to you, but:
• In the event of a Change of Control, the amount of Payout Share Units will be calculated (as of the date of the Change of Control) as described in paragraph 8 below and determination of the Final Award will be made as soon as practicable after the Change of Control.
• In the event of your death (prior to a Change of Control), the amount of Payout Share Units will be calculated as described in paragraph 8 below as soon as practicable following the calendar year of your death. In the event of your death following a Change of Control, the Payout Share Units and the Final Award Date will be determined as described above.</td>
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8.	*Determination of Payout Share Units Upon Death or a Change of Control*	
	Death	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC ceases by reason of your death (or if you die following a termination of employment with PNC due to Disability or Retirement or following an Anticipatory Termination), but prior to the Committee-determined Final Award Date, then the total number of Payout Share Units is calculated based on (a) target corporate performance for all Performance Years and (b) actual risk performance for the completed Performance Years and the Performance Year in which the date of death occurs, and no risk adjustments for any remaining years in the Performance Period. The amount of Payout Share Units is rounded down to the nearest whole share unit. This amount is not pro-rated, but remains subject to the Committee's exercise of discretion. If a Change of Control occurs after your death and in the same calendar year of your death (but prior to the time the Committee makes a Final Award determination), the Final Award will be calculated as described below under "Change of Control" as though you remained continuously employed with PNC as of the Change of Control.
	Change of Control	Upon a Change of Control, the total number of Payout Share Units is calculated based on (a) target corporate performance for all Performance Years and (b) actual risk performance for the completed Performance Years, rounded down to the nearest whole share unit. For any remaining Performance Years (including the year of the Change of Control), if the CET1 Ratio was not met or exceeded as of the quarter-end immediately preceding the Change of Control, then for each Performance Year, one-third of the target number of PSUs will be forfeited and expire as of the Change of Control. The Committee does not have discretion to adjust this amount of Payout Share Units.

9.	*Definition of Change of Control Coverage Period*	"Change of Control Coverage Period" means a period commencing on the occurrence of a Change of Control Triggering Event (defined below) and ending upon the earlier to occur of (a) the date of a Change of Control Failure (defined below) and (b) the date of a Change of Control. After the termination of any Change of Control Coverage Period, another Change of Control Coverage Period will commence upon the occurrence of another Change of Control Triggering Event. For purposes of this definition: • a "Change of Control Triggering Event" means the occurrence of either of the following: (i) the Board or the Corporation's shareholders approve a Business Combination, other than an Excluded Combination (as defined in the definition of Change of Control in Appendix B), or (ii) the commencement of a proxy contest in which any Person seeks to replace or remove a majority of the members of the Board • a "Change of Control Failure" means: (x) with respect to a Change of Control Triggering Event, the Corporation's shareholders vote against the transaction approved by the Board or the agreement to consummate the transaction is terminated; or (y) with respect to a Change of Control Triggering Event described in clause (ii) of the definition above, the proxy contest fails to replace or remove a majority of the members of the Board.
10.	*Committee Determination*	The Committee may make prospective adjustments to the Award. All determinations made by the Committee or otherwise by PNC hereunder shall be made in its sole discretion and shall be final, binding and conclusive for all purposes on all parties.

PNC

EXHIBIT 1: CORPORATE PERFORMANCE FACTOR

Once Average ROE and Relative Average EPS Growth are determined, the Corporate Performance Factor is calculated using the table below.

Bilinear interpolation applies for performance between the threshold and maximum levels (in either direction). If Average ROE falls below the threshold in the table below, and PNC's percentile rank relating to average relative EPS is at or below the 25th percentile, the award is eligible for forfeiture.

The calculated payout percentage will range from 0.00% to 150.00%.

		Three-year average EPS Growth (relative)		
		PNC Percent Rank at the 25th percentile or below	*PNC Percent Rank at the 50th percentile*	*PNC Percent Rank at the 75th percentile or above*
Three-year average ROE (absolute)	13.00%	100.0%	125.0%	150.0%
	12.25%	87.5%	112.5%	137.5%
	11.25%	75.0%	100.0%	125.0%
	10.25%	62.5%	87.5%	100.0%
	8.00%	50.0%	75.0%	87.5%
	Below	0.0%	25.0%	50.0%

IN WITNESS WHEREOF, the Corporation has caused this Agreement to be signed on its behalf as of the Grant Date.

THE PNC FINANCIAL SERVICES GROUP, INC.

By:

ATTEST:

By:

ACCEPTED AND AGREED TO by GRANTEE

____
Grantee

EXHIBIT 10.46

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN
***
RESTRICTED SHARE UNITS AWARD AGREEMENT

This Agreement sets forth the terms and conditions of your restricted share unit award made pursuant to The PNC Financial Services Group, Inc. 2016 Incentive Award Plan and any sub-plans thereto (this "Agreement").

Appendix A to this Agreement sets forth additional terms and conditions of the Award, including restrictive covenant provisions. Appendix B to this Agreement sets forth certain definitions applicable to this Agreement generally. Appendix C to this Agreement sets forth the risk performance-based vesting conditions applicable to the Award and certain related definitions. Capitalized terms not otherwise defined in the body of this Agreement have the meaning ascribed to such terms in the Plan or Appendices A, B or C.

The Corporation and the Grantee named below (referenced in this Agreement as "you" or "your") agree as follows:

Subject to your timely acceptance of this Agreement (as described in Section A below), the Corporation grants to you the Award set forth below, subject to the terms and conditions of the Plan and this Agreement.

A.	**GRANT AND ACCEPTANCE OF RSUs**
GRANTEE	[Name]
GRANT DATE	[Date]
AWARD	[# Shares] Restricted share units ("RSUs"), each representing a right to receive one Share, and related Dividend Equivalents award, payable in cash.
AWARD ACCEPTANCE; AWARD EFFECTIVE DATE	You must accept this Award by delivering an executed unaltered copy of this Agreement to the Corporation within 30 days of your receipt of this Agreement. Upon such execution and delivery of this Agreement by both you and the Corporation, this Agreement is effective as of the Grant Date (the "Award Effective Date"). If you do not properly accept this Award, the Corporation may, in its sole discretion, cancel the Award at any time thereafter.

B. VESTING REQUIREMENTS

B.1 ***An Award becomes vested only upon satisfaction of both the service-based vesting requirements and the risk performance-based vesting requirements set forth below.***

SERVICE-BASED VESTING REQUIREMENTS	The Award is divided into three approximately equal portions that will satisfy the service-based vesting requirements ratably over three years (each portion, a "Tranche") on three "Scheduled Vesting Dates", as follows: the service-based vesting requirement for the first Tranche will be satisfied on the 1st anniversary of the Grant Date, the service-based vesting requirement for the second Tranche will be satisfied on the 2nd anniversary of the Grant Date, and the service-based vesting requirement for the third Tranche will be satisfied on the 3rd anniversary of the Grant Date; in each case, provided you remain continuously employed by PNC through and including the applicable Scheduled Vesting Date (or such earlier date as prescribed by Section B.2 below).
RISK PERFORMANCE-BASED VESTING REQUIREMENTS	Provided the service-based vesting requirements have been met, each Tranche will vest on the applicable Scheduled Vesting Date upon satisfaction of the risk performance metric applicable to that Tranche, as set forth in Appendix C to this Agreement.

B.2 **EFFECT OF TERMINATION OF EMPLOYMENT PRIOR TO SCHEDULED VESTING DATE(S) ON VESTING REQUIREMENTS**

RETIREMENT	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC is terminated due to your Retirement, and not for Cause, then the service-based vesting requirements of the Award will be satisfied as of your Termination Date, but the Award will not vest and become payable until the Scheduled Vesting Date(s), subject to satisfaction of the risk performance-based vesting requirements and your continued compliance with the terms and conditions of this Agreement.

DISABILITY	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC is terminated by PNC due to your Disability, and not for Cause, then the service-based vesting requirements of the Award will be satisfied as of your Termination Date, but the Award will not vest and become payable until the Scheduled Vesting Date(s), subject to satisfaction of the risk performance-based vesting requirements and your continued compliance with the terms and conditions of this Agreement.
DEATH	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC ceases by reason of your death, or if you die after a termination of employment with PNC due to Disability or Retirement or by reason of an Anticipatory Termination, but prior to a Change of Control or any Scheduled Vesting Date(s), then the service-based requirements of the Award will be satisfied as of your date of death, and the risk performance-based vesting requirements will be satisfied as further described in Appendix C.
ANTICIPATORY TERMINATION	Notwithstanding anything to the contrary in this Agreement, if your termination of employment with PNC is an Anticipatory Termination, then the service-based vesting requirements of the Award will be satisfied as of the Termination Date, but the Award will not vest and become payable until the Scheduled Vesting Date(s), subject to satisfaction of the risk performance-based vesting requirements and your continued compliance with the terms of this Agreement.

	TERMINATION FOLLOWING A CHANGE OF CONTROL	Notwithstanding anything to the contrary in this Agreement, if you have been continuously employed by PNC, including any successor entity, through the date of a Change of Control, and your employment with PNC is terminated following such Change of Control but prior to a Scheduled Vesting Date(s), either (a) by PNC other than for Misconduct or (b) by you for Good Reason (a "Qualifying Termination"), then the service-based requirements of the Award will be satisfied as of your Termination Date, and the risk performance-based vesting requirements will be satisfied with respect to any outstanding Tranches as described in Appendix C. For the avoidance of doubt, upon the occurrence of a Change of Control, the Award will not become vested until the service-based vesting requirements are satisfied, either on the Scheduled Vesting Dates as set forth in Section B.1. or as a result of your Retirement, your termination of employment by reason of death, Disability or an Anticipatory Termination or the occurrence of a Qualifying Termination.
C.		**FORFEITURE**
C.1	**FORFEITURE UPON FAILURE TO MEET VESTING REQUIREMENTS**	Except as otherwise provided in Section B.2 above, if you cease to be an employee of PNC prior to an applicable Scheduled Vesting Date and the satisfaction of the risk performance-based vesting requirements, you will not have satisfied the vesting requirements and the outstanding portion of the Award will be automatically forfeited and cancelled as of your Termination Date.
C.2	**Forfeiture In Connection with Detrimental Conduct**	At any time prior to a Scheduled Vesting Date, to the extent that PNC (acting through a PNC Designated Person) determines in its sole discretion (a) that you have engaged in Detrimental Conduct and (b) to forfeit and cancel all or a specified portion of the outstanding Award as a result of such determination, then such portion will be forfeited and cancelled effective as of the date of such determination. Upon such determination, neither you nor your successors, heirs, assigns or legal representatives will have any further rights or interest in the Award under this Agreement.

D.		**DIVIDEND EQUIVALENTS**
D.1	**GENERALLY**	As of the Award Effective Date, you will be entitled to earn accrued cash Dividend Equivalents on the final number of vested RSUs for each Tranche, in an amount equal to the cash dividends that would have been paid (without interest or reinvestment) between the Grant Date and the Scheduled Vesting Date for that Tranche (or such earlier date in the event of your death or a Change of Control), as though you were the record holder of such RSUs, and such RSUs had been issued and outstanding shares on the Grant Date through the Scheduled Vesting Date for that Tranche (or such earlier date in the event of your death or a Change of Control).
D.2	**ACCRUED DIVIDEND EQUIVALENT PAYMENTS**	(a) Generally. Accrued Dividend Equivalents will vest and be paid out in cash, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A, if and when the applicable Tranche vests and pays out (at which point such Dividend Equivalents will terminate). Dividend Equivalents are subject to the same vesting requirements and payout size adjustments as the Tranche to which they relate. If the RSUs to which such Dividend Equivalents relate are forfeited and cancelled, such related Dividend Equivalents will also be forfeited and cancelled without payment of any consideration by PNC. (b) Payment Upon a Change of Control. Accrual of Dividend Equivalents will cease as of the Change of Control. Upon a Change of Control, Dividend Equivalents accrued (without reinvestment or interest) between the Grant Date and the Change of Control will vest and be paid out in cash, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A, if and when the applicable Tranche vests and pays out, as if you were the record holder of the number of Shares equal to the number of vested RSUs underlying such Tranche from the Grant Date through the date of the Change of Control.
E.		**PAYMENT OF THE AWARD**
E.1	**PAYMENT TIMING**	Except as otherwise provided below, vested RSUs that remain outstanding will be settled as soon as practicable following (i) the applicable Scheduled Vesting Date (but no later than March 15th following the year the applicable Scheduled Vesting Date occurs), or (ii) your date of death, if your date of death is prior to the last Scheduled Vesting Date (but no later than December 31st of the year following the year of your death).

E.2	**FORM OF PAYMENT; AMOUNT**	(a) Payment Generally. Except as provided in subsection (b) below, vested RSUs will be settled at the time set forth in this Section E.1 by delivery to you of that number of whole Shares equal to the number of RSUs less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A. (b) Payment On or After a Change of Control. Upon vesting on or after a Change of Control, vested RSUs will be settled at the time set forth in Section E.1 by payment to you of cash in an amount equal to that number of whole Shares equal to the number of vested RSUs, multiplied by the then current Fair Market Value of a share of Common Stock on the date of the Change of Control (subject to any applicable adjustment pursuant to Section 2 of Appendix A), less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A. Related accrued Dividend Equivalent payments will be paid to you in cash as described in Section D.2(b). No interest will be paid with respect to any such payments made pursuant to this Section E.
F.	**RESTRICTIVE COVENANTS**	Upon your acceptance of this Award, you shall become subject to the restrictive covenant provisions set forth in Section 1 of Appendix A.

G.	**CLAWBACK**	The Award, and any right to receive and retain any Shares (if applicable), cash or other value pursuant to the Award, is subject to rescission, cancellation or recoupment, in whole or in part, if and to the extent so provided under the Corporation's Incentive Compensation Adjustment and Clawback Policy, as in effect from time to time with respect to the Award, or any other applicable clawback, adjustment or similar policy in effect on or established after the Grant Date and to any clawback or recoupment that may be required by applicable law or regulation. By accepting this Award, you agree that you are obligated to provide all assistance necessary to the Corporation to recover or recoup the Shares, cash or other value pursuant to the Award which are subject to recovery or recoupment pursuant to applicable law, government regulation, stock exchange listing requirement or PNC policy. Such assistance shall include completing any documentation necessary to recover or recoup the Shares, cash or other value pursuant to the Award from any accounts you maintain with PNC or any pending or future compensation. A copy of the Incentive Compensation Adjustment and Clawback Policy is included in the materials distributed to you with this Agreement.

THE PNC FINANCIAL SERVICES GROUP, INC.
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RESTRICTED SHARE UNITS AWARD AGREEMENT

APPENDIX A

ADDITIONAL PROVISIONS

1. Restrictive Covenants. You and PNC acknowledge and agree that you have received adequate consideration with respect to enforcement of the provisions of this Section 1 by virtue of accepting this Award (regardless of whether the Award or any portion thereof is ultimately settled and paid to you); that such provisions are reasonable and properly required for the adequate protection of the business of PNC and its subsidiaries; and that enforcement of such provisions will not prevent you from earning a living.

(a) Non-Solicitation; No-Hire. You agree to comply with the provisions of this Section 1(a) during the period of your employment with PNC and the 12-month period following your Termination Date, regardless of the reason for such termination of employment, as follows:

i. *Non-Solicitation*. You will not, directly or indirectly, either for your own benefit or purpose or for the benefit or purpose of any Person other than PNC, solicit, call on, do business with, or actively interfere with PNC's relationship with, or attempt to divert or entice away, any Person that you should reasonably know (A) is a customer of PNC for which PNC provides any services as of your Termination Date, or (B) was a customer of PNC for which PNC provided any services at any time during the 12 months preceding your Termination Date, or (C) was, as of your Termination Date, considering retention of PNC to provide any services.

ii. *No-Hire*. You will not, directly or indirectly, either for your own benefit or purpose or for the benefit or purpose of any Person other than PNC, employ or offer to employ, call on, or actively interfere with PNC's relationship with, or attempt to divert or entice away, any employee of PNC. You also will not assist any other Person in such activities.

Notwithstanding Section 1(a)(i) and Section 1(a)(ii) above, if your termination of employment with PNC is an Anticipatory Termination, then commencing immediately after your Termination Date, the provisions of Section 1(a)(i) and Section 1(a)(ii) will no longer apply and will be replaced with the following provision:

"No-Hire. You agree that you will not, for a period of one year after your Termination Date, employ or offer to employ, solicit, actively interfere with PNC's or any PNC affiliate's relationship with, or attempt to divert or entice away, any officer of PNC or any affiliate of PNC."

(b) Confidentiality. During your employment with PNC and thereafter regardless of the reason for termination of such employment, you will not disclose or use in any way any confidential business or technical information or trade secret acquired in the course of such employment, all of which is the exclusive and valuable property of PNC whether or not conceived of or prepared by you, other than (i) information generally known in PNC's industry or acquired from public sources, (ii) as required in the course of employment by PNC, (iii) as required by any court, supervisory authority, administrative agency or applicable law, or (iv) with the prior written consent of PNC. Nothing in this Agreement, including this Section 1(b), is intended to limit you from reporting possible violations of law or regulation to any governmental entity or any self-regulatory organization or making other disclosures that are protected under the whistleblower provisions of federal, state or local law or regulation. You further understand and agree that you are not required to contact or receive consent from PNC before engaging in such communications with any such authorities.

(c) Ownership of Inventions. You will promptly and fully disclose to PNC any and all inventions, discoveries, improvements, ideas or other works of inventorship or authorship, whether or not patentable, that have been or will be conceived and/or reduced to practice by you during the term of your employment with PNC, whether alone or with others, and that are (i) related directly or indirectly to the business or activities of PNC or (ii) developed with the use of any time, material, facilities or other resources of PNC ("Developments"). You agree to assign and hereby do assign to PNC or its designee all of your right, title and interest, including copyrights and patent rights, in and to all Developments. You will perform all actions and execute all instruments that PNC or any subsidiary will deem necessary to protect or record PNC's or its designee's interests in the Developments. The obligations of this Section 1(c) will be performed by you without further compensation and will continue beyond your Termination Date.

(d) Enforcement Provisions. You understand and agree to the following provisions regarding enforcement of Section 1 of this Agreement:

i. *Equitable Remedies*. A breach of the provisions of Sections 1(a) - 1(c) will cause PNC irreparable harm, and PNC will therefore be entitled to seek issuance of immediate, as well as permanent, injunctive relief restraining you, and each and every person and entity acting in concert or participating with you, from initiation and/or continuation of such breach.

ii. *Tolling Period*. If it becomes necessary or desirable for PNC to seek compliance with the provisions of Section 1(a) by legal proceedings, the period during which you will comply with said provisions will extend for a period of 12 months from the date PNC institutes legal proceedings for injunctive or other relief.

iii. *Reform*. If any of Sections 1(a) - 1(c) are determined by a court of competent jurisdiction to be unenforceable because unreasonable either as to length of time or area to which the restriction applies, it is the intent of both parties that the court reduce and reform the restriction so as to apply the greatest limitations considered enforceable by the court.

iv. *Waiver of Jury Trial.* Each of you and PNC hereby waives any right to trial by jury with regard to any suit, action or proceeding under or in connection with any of Sections 1(a) - 1(c).

v. *Application of Defend Trade Secrets Act.* Regardless of any other provision in this Agreement, you may be entitled to immunity and protection from retaliation under the Defend Trade Secrets Act of 2016 for disclosing trade secrets under certain limited circumstances, as set forth in PNC's Defend Trade Secrets Act policy. The policy is available for viewing on PNC's intranet under the "PNC Ethics" page.

2. Capital Adjustments upon a Change of Control. Upon the occurrence of a Change of Control, (a) the number, class and kind of RSUs then outstanding under the Award will automatically be adjusted to reflect the same changes as are made to outstanding shares of Common Stock generally, (b) the value per share unit of any share-denominated award amount will be measured by reference to the per share value of the consideration payable to a holder of Common Stock in connection with such Corporate Transaction or Transactions if applicable, and (c) with respect to stock-payable RSUs only, if the effect of the Corporate Transaction or Transactions on a holder of Common Stock is to convert that shareholder's holdings into consideration that does not consist solely (other than as to a minimal amount) of shares of Common Stock, then the entire value of any payment to be made to you will be made solely in cash at the applicable time specified in this Agreement.

3. Fractional Shares. No fractional Shares will be delivered to you. If the outstanding vested RSUs being settled in Shares include a fractional interest, such fractional interest will be eliminated by rounding down to the nearest whole share unit.

4. No Rights as a Shareholder. You will have no rights as a shareholder of the Corporation by virtue of this Award unless and until Shares are issued and delivered in settlement of the Award pursuant to and in accordance with this Agreement.

5. Transfer Restrictions.

(a) The Award may not be sold, assigned, transferred, exchanged, pledged, or otherwise alienated or hypothecated.

(b) If you are deceased at the time any outstanding vested RSUs are settled and paid out in accordance with the terms of this Agreement, such delivery of Shares, cash payment or other payment (as applicable) shall be made to the executor or administrator of your estate or to your other legal representative or, as permitted under the election procedures of the Plan's third-party administrator, to your designated beneficiary, in each case, as determined in good faith by the Corporation. Any delivery of Shares, cash payment or other payment made in good faith by the Corporation to your executor, other legal representative or permissible designated beneficiary, or retained by the Corporation for taxes pursuant to Section 6 of this Appendix A, shall extinguish all right to payment hereunder.

6. Withholding Taxes.

(a) You shall be solely responsible for any applicable taxes (including, without limitation, income and excise taxes), penalties and interest that you incur in connection hereunder. The Corporation will, at the time any withholding tax obligation arises in connection herewith, retain an amount sufficient to satisfy the minimum amount of taxes then required to be withheld by PNC in connection therewith from amounts then payable hereunder to you.

(b) If any such withholding is required prior to the time amounts are payable to you hereunder or if such amounts are not sufficient to satisfy such obligation in full, the withholding will be taken from other compensation then payable to you or as otherwise determined by PNC.

(c) The Corporation will withhold cash from any amounts then payable to you hereunder that are settled in cash. Unless the Committee or PNC Designated Person determines otherwise, with respect to stock-payable RSUs only, the Corporation will retain whole Shares from any amounts then payable to you hereunder (or pursuant to any other RSUs previously awarded to you under the Plan) in the form of Shares. For purposes of this Section 6(c), Shares retained to satisfy applicable withholding tax requirements will be valued at their Fair Market Value on the date the tax withholding obligation arises (as such date is determined by the Corporation).

7. Employment. Neither the granting of the Award nor any payment with respect to such Award authorized hereunder nor any term or provision of this Agreement shall constitute or be evidence of any understanding, expressed or implied, on the part of PNC to employ you for any period or in any way alter your status as an employee at will.

8. Miscellaneous.

(a) Subject to the Plan and Interpretations. In all respects the Award and this Agreement are subject to the terms and conditions of the Plan, which has been made available to you and is incorporated herein by reference. The terms of the Plan will not be considered an enlargement of any benefits under this Agreement. If the Plan and this Agreement conflict, the provisions of the Plan will govern. Interpretations of the Plan and this Agreement by the Committee are binding on you and PNC.

(b) Governing Law and Jurisdiction. This Agreement is governed by and construed under the laws of the Commonwealth of Pennsylvania, without reference to its conflict of laws provisions. Any dispute or claim arising out of or relating to this Agreement or claim of breach hereof will be brought exclusively in the Federal court for the Western District of Pennsylvania or in the Court of Common Pleas of Allegheny County, Pennsylvania. By execution of this Agreement, you and PNC hereby consent to the exclusive jurisdiction of such courts, and waive any right to challenge jurisdiction or venue in such courts with regard to any suit, action, or proceeding under or in connection with this Agreement.

(c) Headings; Entire Agreement. Headings used in this Agreement are provided for reference and convenience only, are not considered part of this Agreement, and will not be employed in the construction of this Agreement. This Agreement, including any appendices or exhibits attached hereto, constitutes the entire agreement between you and PNC with respect to the subject matters addressed herein, and supersedes all other discussions, negotiations, correspondence, representations, understandings and agreements between the parties concerning the subject matters hereof.

(d) Modification. Modifications or adjustments to the terms of this Agreement may be made by the Corporation as permitted in accordance with the Plan or as provided for in this Agreement. No other modification of the terms of this Agreement will be effective unless embodied in a separate, subsequent writing signed by you and by an authorized representative of the Corporation.

(e) No Waiver. Failure of PNC to demand strict compliance with any of the terms, covenants or conditions of this Agreement will not be deemed a waiver of such term, covenant or condition, nor will any waiver or relinquishment of any such term, covenant or condition on any occasion or on multiple occasions be deemed a waiver or relinquishment of such term, covenant or condition.

(f) Severability. The restrictions and obligations imposed by this Agreement are separate and severable, and it is the intent of both parties that if any restriction or obligation imposed by any of these provisions is deemed by a court of competent jurisdiction to be void for any reason whatsoever, the remaining provisions, restrictions and obligations will remain valid and binding upon you.

(g) Applicable Laws. Notwithstanding anything in this Agreement, PNC will not be required to comply with any term, covenant or condition of this Agreement if and to the extent prohibited by law, including but not limited to Federal banking and securities regulations, or as otherwise directed by one or more regulatory agencies having jurisdiction over PNC.

(h) Compliance with Section 409A of the Internal Revenue Code. It is the intention of the parties that the Award and this Agreement comply with the provisions of Section 409A of the Internal Revenue Code to the extent, if any, that such provisions are applicable. This Agreement will be administered in a manner consistent with this intent, including as set forth in Section 20 of the Plan. If the Award includes a "series of installment payments" (within the meaning of Section 1.409A-2(b)(2)(iii) of the Treasury Regulations), your right to the series of installment payments will be treated as a right to a series of separate payments and not as a right to a single payment.

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THE PNC FINANCIAL SERVICES GROUP, INC.
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RESTRICTED SHARE UNITS AWARD AGREEMENT

APPENDIX B

DEFINITIONS

Certain Definitions. Except as otherwise provided, the following definitions apply for purposes of this Agreement.

"**Anticipatory Termination**" means a termination of employment where PNC terminates your employment with PNC (other than for Misconduct or Disability) prior to the date on which a Change of Control occurs, and you reasonably demonstrated that such termination of employment (i) was at the request of a third party that has taken steps reasonably calculated to effect a Change of Control or (ii) otherwise arose in connection with or in anticipation of a Change of Control.

"**Award Effective Date**" has the meaning set forth in Section A of this Agreement.

"Change of Control" means:

(a) Any Person becomes the beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 20% or more of either (x) the then-outstanding shares of Common Stock (the "Outstanding PNC Common Stock") or (y) the combined voting power of the then-outstanding voting securities of the Corporation entitled to vote generally in the election of directors (the "Outstanding PNC Voting Securities"). The following acquisitions will not constitute a Change of Control for purposes of this definition: (1) any acquisition directly from the Corporation, (2) any acquisition by the Corporation, (3) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Corporation or any company controlled by, controlling or under common control with the Corporation (an "Affiliated Company"), (4) any acquisition pursuant to an Excluded Combination (as defined below) or (5) an acquisition of beneficial ownership representing between 20% and 40%, inclusive, of the Outstanding PNC Voting Securities or Outstanding PNC Common Stock if the Incumbent Board (as defined below) as of immediately prior to any such acquisition approves such acquisition either prior to or immediately after its occurrence;

(b) Individuals who, as of the date hereof, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board (excluding any Board seat that is vacant or otherwise unoccupied). For purposes of this definition, any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the shareholders of the Corporation, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board will be considered as though such individual was a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board;

(c) Consummation of a reorganization, merger, statutory share exchange or consolidation or similar transaction involving the Corporation or any of its subsidiaries, a sale or other disposition of all or substantially all of the assets of the Corporation, or the acquisition of assets or stock of another entity by the Corporation or any of its subsidiaries (each, a "Business Combination"). A transaction otherwise meeting the definition of Business Combination will not be treated as a Change of Control if following completion of the transaction all or substantially all of the beneficial owners of the Outstanding PNC Common Stock and the Outstanding PNC Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 60% of the then-outstanding shares of Common Stock (or, for a non-corporate entity, equivalent securities) and the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors (or, for a non-corporate entity, equivalent governing body), as the case may be, of the entity resulting from such Business Combination (including, without limitation, an entity that, as a result of such transaction, owns the Corporation or all or substantially all of the Corporation's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership immediately prior to such Business Combination of the Outstanding PNC Common Stock and the Outstanding PNC Voting Securities, as the case may be (such a Business Combination, an "Excluded Combination"); or

(d) Approval by the shareholders of the Corporation of a complete liquidation or dissolution of the Corporation.

"Competitive Activity" means any participation in, employment by, ownership of any equity interest exceeding one percent in, or promotion or organization of, any Person other than PNC (1) engaged in business activities similar to some or all of the business activities of PNC during your employment or (2) engaged in business activities that you know PNC intends to enter within the next 12 months (or, if after your Termination Date, within the first 12 months after your Termination Date), in either case whether you are acting as agent, consultant, independent contractor, employee, officer, director, investor, partner, shareholder, proprietor or in any other individual or representative capacity therein. For purposes of Competitive Activity as defined herein (and as such similar term is defined in any equity-based award agreement held by you), the term "subsidiary" will not include any company in which PNC holds an interest pursuant to its merchant banking authority.

"**Detrimental Conduct**" means:

(a) You have engaged in, without the prior written consent of PNC (with consent to be given or withheld at PNC's sole discretion), in any Competitive Activity in the Restricted Territory at any time during the period of your employment with PNC and the 12-month period following your Termination Date;

(b) any act of fraud, misappropriation, or embezzlement by you against PNC or one of its subsidiaries or any client or customer of PNC or one of its subsidiaries; or

(c) you are convicted (including a plea of guilty or of nolo contendere) of, or you enter into a pre-trial disposition with respect to, the commission of a felony that relates to or arises out of your employment or other service relationship with PNC.

You will be deemed to have engaged in Detrimental Conduct for purposes of this Agreement only if and when the Committee or other PNC Designated Person determines that you have engaged in conduct described in clause (a) or clause (b) above or that an event described in clause (c) above has occurred with respect to you. Detrimental Conduct will not apply to conduct by or activities of successors to the Award by will or the laws of descent and distribution in the event of your death.

No determination that you have engaged in Detrimental Conduct may be made (x) on or after your Termination Date if your termination of employment was an Anticipatory Termination or (y) between the time PNC enters into an agreement providing for a Change of Control and the time such agreement either terminates or results in a Change of Control.

"Good Reason" means the definition of Good Reason contained in the Change of Control Employment Agreement between you and PNC or any substitute employment agreement entered into between you and PNC then in effect or, if none, the occurrence of any of the following events without your consent:

(a) the assignment to of any duties to you inconsistent in any material respect with your position (including status, offices, titles and reporting requirements), or any other material diminution in such position, authority, duties or responsibilities;

(b) any material reduction in your rate of base salary or the amount of your annual bonus opportunity (or, if less, the bonus opportunity established for the PNC's similarly situated employees for any year), or a material reduction in the level of any other employee benefits for which you are eligible receive below those offered to the PNC's similarly situated employees;

(c) PNC's requiring you to be based at any office or location outside of a fifty (50)-mile radius from the office where you were employed on the Grant Date;

(d) any action or inaction that constitutes a material breach by the PNC of any agreement entered into between you and PNC; or

(e) the failure by PNC to require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of PNC to assume expressly and agree to perform this Agreement in the same manner and to the same extent that PNC would be required to perform it if no such succession had taken place.

Notwithstanding the foregoing, none of the events described above shall constitute Good Reason unless and until (i) you first notify PNC in writing describing in reasonable detail the condition which constitutes Good Reason within 90 days of its initial occurrence, (ii) PNC fails to cure such condition within 30 days after receipt of such written notice, and (iii) you terminate employment within two years of its initial occurrence.

Your mental or physical incapacity following the occurrence of an event described above in clauses (a) through (e) shall not affect your ability to terminate employment for Good Reason, and your death following delivery of a notice of termination for Good Reason shall not affect your estate's entitlement to severance payments benefits provided hereunder upon a termination of employment for Good Reason.

"**Misconduct**" means, as it relates to an Anticipatory Termination or following a Change of Control, (a) your willful and continued failure to substantially perform your duties with PNC (other than any such failure resulting from incapacity due to physical or mental illness), after a written demand for substantial performance is delivered to you by the Board or the CEO that specifically identifies the manner in which the Board or the CEO believes that you have not substantially performed your duties; or (b) your willful engagement in illegal conduct or gross misconduct that is materially and demonstrably injurious to PNC or any of its subsidiaries. For purposes of clauses (a) and (b), no act or failure to act, on your part, shall be considered willful unless it is done, or omitted to be done, by you in bad faith and without reasonable belief that your action or omission was in the best interests of PNC. Any act, or failure to act, based upon the instructions or prior approval of the Board, the CEO or your superior or based upon the advice of counsel for PNC, will be conclusively presumed to be done, or omitted to be done, by you in good faith and in the best interests of PNC.

Your cessation of employment will be deemed to be a termination of your employment with PNC for Misconduct only if and when there shall have been delivered to you, as part of the notice of your termination, a copy of a resolution duly adopted by the affirmative vote of not less than a majority of the entire membership of the Board, at a Board meeting called and held for the purpose of considering such termination, finding on the basis of clear and convincing evidence that, in the good faith opinion of the Board, you are guilty of conduct described in clause (a) or clause (b) above and, in either case, specifying the particulars thereof in detail. Such resolution shall be adopted only after (i) reasonable notice of such Board meeting is provided to you, together with written notice that PNC believes that you are guilty of conduct described in clause (a) or clause (b) above and, in either case, specifying the particulars thereof in detail, and (ii) you are given an opportunity, together with counsel, to be heard before the Board.

"**Person**" means any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act**.**

"**PNC Designated Person**" means (a) the Committee or its delegate if you are (or were when you ceased to be an employee of PNC) either a member of the Corporate Executive Group (or equivalent successor classification) or subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to PNC securities (or both); or (b) the Committee, the CEO, or the Chief Human Resources Officer of PNC, or any other individual or group as may be designated by one of the foregoing to act as PNC Designated Person for purposes of this Agreement.

"**Qualifying Termination**" has the meaning set forth in Section B of this Agreement.

"**Restricted Territory**" means (a) if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in the United States or Canada as of the Termination Date, the United States and Canada, (b) if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in the United Kingdom as of the Termination Date, the United Kingdom or (c) if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in Germany as of the Termination Date, Germany or the United Kingdom.

"**Retirement"** means your termination of employment with PNC at any time for any reason (other than termination of employment by reason of your death, by PNC for Cause or by reason of termination of employment in connection with a divestiture of assets or a divestiture of one or more subsidiaries of PNC if the Committee or the CEO or his or her designee so determines prior to such divestiture) on or after the first date on which you have both attained at least age 55 and completed five years of service, where a year of service is determined in the same manner as the determination of a year of vesting service calculated under the provisions of The PNC Financial Services Group, Inc. Pension Plan.

"**Termination Date**" means the last day of your employment with PNC. If you are employed by a Subsidiary that ceases to be a Subsidiary or ceases to be a consolidated subsidiary of the Corporation under U.S. generally accepted accounting principles and you do not continue to be employed by or otherwise have a Service Relationship with PNC, then for purposes of this Agreement, your employment with PNC terminates effective at the time this occurs.

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

RESTRICTED SHARE UNITS AWARD AGREEMENT

APPENDIX C

RISK PERFORMANCE-BASED VESTING CONDITIONS

The following table sets forth the risk performance-based vesting conditions of the Award:

1.	*Generally*	The Award is divided into three Tranches, with the first Tranche relating to the 2019 performance year, the second Tranche relating to the 2020 performance year, and the third tranche relating to the 2021 performance year (each such year, a "Performance Year"). Each Tranche must satisfy a risk-related performance metric based on whether PNC has met or exceeded the common equity Tier 1 capital spot ratio limit as then in effect and applicable to The PNC Financial Services Group, Inc. ("CET1 Ratio") (which may be on a pro forma fully phased-in basis, if applicable) as set forth in PNC's Enterprise Capital Management Policy (or any successor policy) and monitored at least quarterly. "PNC" for purposes of this Appendix C as it refers to risk performance-based vesting conditions means the Corporation and its consolidated subsidiaries for financial reporting purposes.

2.	*Applying the Risk Performance Metric*	*(a) CET1 Ratio Generally*. Each of Tranche is subject to a risk performance factor based on whether PNC has met or exceeded the CET1 Ratio as of the last day of each Performance Year. The current CET1 Ratio is 7.0%. *(b) Determination of Annual CET1 Ratio*. As soon as practicable following the end of each Performance Year, PNC will present information to the Committee relating to (i) the CET1 Ratio compared to (ii) the actual CET1 Ratio achieved by PNC with respect to that Performance Year, based on PNC's publicly reported financial results for the period ending on the applicable end date. Except as otherwise provided in paragraph 5 in the event of your death or a Change of Control, this will generally be the public release of earnings results for PNC's fourth quarter that occurs after the year-end measurement date, so that the Committee will be able to make its determination in late January or early February following a Performance Year. • If PNC meets or exceeds the CET1 Ratio for a Performance Year, the risk performance metric is satisfied. • If PNC does not meet the CET1 Ratio for a Performance Year, the applicable Tranche is eligible for forfeiture as determined by the Committee prior to settlement of the Tranche.
3.	*Risk Performance Review Adjustment*	In addition, and independent from the CET1 Ratio performance metric described in paragraph 2 above, with respect to each Tranche and prior to the settlement of that Tranche, the Committee has the discretion to conduct a risk performance review relating to a risk-related action of potentially material consequence to PNC. If the Committee exercises its discretion to conduct a risk performance review, the Committee will review and determine if a downward adjustment for risk performance is appropriate for the applicable Tranche. Any determination to conduct a risk performance review will be made shortly after the close of the Performance Year, but no later than the 45th day following the close of the Performance Year, and any required review will be conducted no later than two and a half-months after the close of the Performance Year.

4.	*Determination of Final Number of RSUs*	Following the Performance Year, the Committee determines whether to approve the number of RSUs subject to the applicable Tranche, a lower number or zero based on application of the risk performance metric (described in paragraph 2) or any risk-related adjustment resulting from a risk performance review (described in paragraph 3), rounded down to the nearest whole Unit. **In no event can the size of the Tranche be greater than 100.00% of the target number of RSUs subject to that Tranche.**
5.	*Determination of Risk Performance Metric Upon Death or a Change of Control*	
	Death	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC ceases by reason of your death, or if you die after a termination of employment with PNC due to Disability or Retirement or by reason of an Anticipatory Termination, in any case, prior to a Change of Control or the last Scheduled Vesting Date, then all risk performance-based conditions will be met with respect to the outstanding portion of your Award, *unless* the date of death occurs after a calendar year but prior to performance-adjustment by the Committee (including a Committee determination made immediately preceding the date of the Change of Control), in which case such Tranche will vest based on actual performance as determined by the Committee. For the avoidance of doubt, in the event of your death following a Change of Control, the risk performance metric for any then-outstanding Tranche will be determined as provided in the "Change of Control" paragraph below.

	Change of Control	Notwithstanding anything to the contrary in this Agreement and subject to your satisfaction of the service-based vesting requirements, any outstanding Tranches for which no performance factors have been determined at the time of a Change of Control will be risk performance-adjusted, as follows: • If a Change of Control occurs after a completed Performance Year, but prior to the Scheduled Vesting Date for that Tranche, the actual CET1 Ratio for that Performance Year will continue to apply to that Tranche, and • For any Performance Year not completed prior to a Change of Control, if the CET1 Ratio was not met as of the quarter-end date immediately preceding the Change of Control (or if the Change of Control falls on a quarter-end date, and such information is available and applicable for such date, the date of the Change of Control), then all remaining Tranches will be forfeited and expire as of the Change of Control. For the avoidance of doubt: • If the CET1 Ratio was not met as of the applicable quarter-end performance measurement date, the Award will be forfeited by you as of the Change of Control. • Tranches where the CET1 Ratio was met and that remain outstanding will be paid out, without further Dividend Equivalents or any interest, on the Scheduled Vesting Dates (or earlier, in the event of your death) upon your satisfaction of the service-based vesting requirements.
6.	*Committee Determination*	The Committee may make prospective adjustments to the Award. All determinations made by the Committee or otherwise by PNC hereunder shall be made in its sole discretion and shall be final, binding and conclusive for all purposes on all parties.

In Witness Whereof, the Corporation has caused this Agreement to be signed on its behalf as of the Grant Date.

THE PNC FINANCIAL SERVICES GROUP, INC.

By:

ATTEST:

By:

Accepted and Agreed to by Grantee

____

Grantee

EXHIBIT 10.47

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN
*** * ***
RESTRICTED SHARE UNITS AWARD AGREEMENT

This Agreement sets forth the terms and conditions of your restricted share unit award made pursuant to The PNC Financial Services Group, Inc. 2016 Incentive Award Plan and any sub-plans thereto (this "Agreement").

Appendix A to this Agreement sets forth additional terms and conditions of the Award, including restrictive covenant provisions. Appendix B to this Agreement sets forth certain definitions applicable to this Agreement generally. Appendix C to this Agreement sets forth the risk performance-based vesting conditions applicable to the Award and certain related definitions. Capitalized terms not otherwise defined in the body of this Agreement have the meaning ascribed to such terms in the Plan or Appendices A, B or C.

The Corporation and the Grantee named below (referenced in this Agreement as "you" or "your") agree as follows:

Subject to your timely acceptance of this Agreement (as described in Section A below), the Corporation grants to you the Award set forth below, subject to the terms and conditions of the Plan and this Agreement.

A.	**GRANT AND ACCEPTANCE OF RSUs**
GRANTEE	[Name]
GRANT DATE	[Date]
AWARD	[# Shares] Restricted share units ("RSUs"), each representing a right to receive one Share, and related Dividend Equivalents award, payable in cash.
AWARD PROGRAM	Senior Leader Program
AWARD ACCEPTANCE; AWARD EFFECTIVE DATE	You must accept this Award by delivering an executed unaltered copy of this Agreement to the Corporation within 30 days of your receipt of this Agreement. Upon such execution and delivery of this Agreement by both you and the Corporation, this Agreement is effective as of the Grant Date (the "Award Effective Date"). If you do not properly accept this Award, the Corporation may, in its sole discretion, cancel the Award at any time thereafter.

B.	VESTING REQUIREMENTS	
B.1	***An Award becomes vested only upon satisfaction of both the service-based vesting requirements and the risk performance-based vesting requirements set forth below.***	
	SERVICE-BASED VESTING REQUIREMENTS	The Award is divided into three approximately equal portions that will satisfy the service-based vesting requirements ratably over three years (each portion, a "Tranche") on three "Scheduled Vesting Dates", as follows: • the service-based vesting requirement for the first Tranche will be satisfied on the 1st anniversary of the Grant Date, • the service-based vesting requirement for the second Tranche will be satisfied on the 2nd anniversary of the Grant Date, and • the service-based vesting requirement for the third Tranche will be satisfied on the 3rd anniversary of the Grant Date; in each case, provided you remain continuously employed by PNC through and including the applicable Scheduled Vesting Date (or such earlier date as prescribed by Section B.2 below).
	RISK PERFORMANCE-BASED VESTING REQUIREMENTS	Provided the service-based vesting requirements have been met, each Tranche will vest on the applicable Scheduled Vesting Date upon satisfaction of the risk performance metric applicable to that Tranche, as set forth in Appendix C to this Agreement.
B.2	**EFFECT OF TERMINATION OF EMPLOYMENT PRIOR TO SCHEDULED VESTING DATES ON VESTING REQUIREMENTS**	
	RETIREMENT	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC is terminated due to your Retirement, and not for Cause (as determined by a PNC Designated Person), then the service-based vesting requirements of the Award will be satisfied as of your Termination Date, but the Award will not vest and become payable until the Scheduled Vesting Date(s), subject to satisfaction of the risk performance-based vesting requirements and your continued compliance with the terms and conditions of this Agreement.

DISABILITY	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC is terminated by PNC due to your Disability, and not for Cause (as determined by a PNC Designated Person), then the service-based vesting requirements of the Award will be satisfied as of your Termination Date, but the Award will not vest and become payable until the Scheduled Vesting Date(s), subject to satisfaction of the risk performance-based vesting requirements and your continued compliance with the terms and conditions of this Agreement.
DEATH	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC ceases by reason of your death, or if you die after a termination of employment with PNC due to Disability or Retirement or by reason of an Anticipatory Termination, but prior to a Change of Control or any Scheduled Vesting Date(s), then the service-based requirements of the Award will be satisfied as of your date of death, and the risk performance-based vesting requirements will be satisfied as further described in Appendix C.
ANTICIPATORY TERMINATION	Notwithstanding anything to the contrary in this Agreement, if your termination of employment with PNC is an Anticipatory Termination, then the service-based vesting requirements of the Award will be satisfied as of the Termination Date, but the Award will not vest and become payable until the Scheduled Vesting Date(s), subject to satisfaction of the risk performance-based vesting requirements and your continued compliance with the terms of this Agreement.
TERMINATION FOLLOWING A CHANGE OF CONTROL	Notwithstanding anything to the contrary in this Agreement, if you have been continuously employed by PNC, including any successor entity, through the date of a Change of Control, and your employment with PNC is terminated following such Change of Control but prior to a Scheduled Vesting Date(s), either (a) by PNC other than for Misconduct or (b) by you for Good Reason (a "Qualifying Termination"), then the service-based requirements of the Award will be satisfied as of your Termination Date, and the risk performance-based vesting requirements will be satisfied with respect to any outstanding Tranches as described in Appendix C. For the avoidance of doubt, upon the occurrence of a Change of Control, the Award will not become vested until the service-based vesting requirements are satisfied, either on the Scheduled Vesting Dates as set forth in Section B.1. or as a result of your Retirement, your termination of employment by reason of death, Disability or an Anticipatory Termination or the occurrence of a Qualifying Termination.

C.	**FORFEITURE**	
C.1	**FORFEITURE UPON FAILURE TO MEET VESTING REQUIREMENTS**	Except as otherwise provided in Section B.2 above, if you cease to be an employee of PNC prior to an applicable Scheduled Vesting Date and the satisfaction of the risk performance-based vesting requirements, you will not have satisfied the vesting requirements and the outstanding portion of the Award will be automatically forfeited and cancelled as of your Termination Date.
C.2	**FORFEITURE IN CONNECTION WITH DETRIMENTAL CONDUCT**	At any time prior to a Scheduled Vesting Date, to the extent that PNC (acting through a PNC Designated Person) determines in its sole discretion (a) that you have engaged in Detrimental Conduct and (b) to forfeit and cancel all or a specified portion of the outstanding Award as a result of such determination, then such portion will be forfeited and cancelled effective as of the date of such determination. Upon such determination, neither you nor your successors, heirs, assigns or legal representatives will have any further rights or interest in the Award under this Agreement.
D.	**DIVIDEND EQUIVALENTS**	
D.1	**GENERALLY**	As of the Award Effective Date, you will be entitled to earn accrued cash Dividend Equivalents on the final number of vested RSUs for each Tranche, in an amount equal to the cash dividends that would have been paid (without interest or reinvestment) between the Grant Date and the Scheduled Vesting Date for that Tranche (or such earlier date in the event of your death or a Change of Control), as though you were the record holder of such RSUs, and such RSUs had been issued and outstanding shares on the Grant Date through the Scheduled Vesting Date for that Tranche (or such earlier date in the event of your death or a Change of Control).

D.2	**ACCRUED DIVIDEND EQUIVALENT PAYMENTS**	(a) Generally. Accrued Dividend Equivalents will vest and be paid out in cash, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A, if and when the applicable Tranche vests and pays out (at which point such Dividend Equivalents will terminate). Dividend Equivalents are subject to the same vesting requirements and payout size adjustments as the Tranche to which they relate. If the RSUs to which such Dividend Equivalents relate are forfeited and cancelled, such related Dividend Equivalents will also be forfeited and cancelled without payment of any consideration by PNC. (b) Payment Upon a Change of Control. Accrual of Dividend Equivalents will cease as of the Change of Control. Upon a Change of Control, Dividend Equivalents accrued (without reinvestment or interest) between the Grant Date and the Change of Control will vest and be paid out in cash, less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A, if and when the applicable Tranche vests and pays out, as if you were the record holder of the number of Shares equal to the number of vested RSUs underlying such Tranche from the Grant Date through the date of the Change of Control.
E.		**PAYMENT OF THE AWARD**
E.1	**PAYMENT TIMING**	Except as otherwise provided below, vested RSUs that remain outstanding will be settled as soon as practicable following (i) the applicable Scheduled Vesting Date (but no later than March 15th following the year the applicable Scheduled Vesting Date occurs), or (ii) your date of death, if your date of death is prior to the last Scheduled Vesting Date (but no later than December 31st of the year following the year of your death).

E.2	**FORM OF PAYMENT; AMOUNT**	(a) Payment Generally. Except as provided in subsection (b) below, vested RSUs will be settled at the time set forth in this Section E.1 by delivery to you of that number of whole Shares equal to the number of RSUs less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A. (b) Payment On or After a Change of Control. Upon vesting on or after a Change of Control, vested RSUs will be settled at the time set forth in Section E.1 by payment to you of cash in an amount equal to that number of whole Shares equal to the number of vested RSUs, multiplied by the then current Fair Market Value of a share of Common Stock on the date of the Change of Control (subject to any applicable adjustment pursuant to Section 2 of Appendix A), less the payment of any applicable withholding taxes pursuant to Section 6 of Appendix A. Related accrued Dividend Equivalent payments will be paid to you in cash as described in Section D.2(b). No interest will be paid with respect to any such payments made pursuant to this Section E.
F.	**RESTRICTIVE COVENANTS**	Upon your acceptance of this Award, you shall become subject to the restrictive covenant provisions set forth in Section 1 of Appendix A.
G.	**CLAWBACK**	The Award, and any right to receive and retain any Shares (if applicable), cash or other value pursuant to the Award, is subject to rescission, cancellation or recoupment, in whole or in part, if and to the extent so provided under the Corporation's Incentive Compensation Adjustment and Clawback Policy, as in effect from time to time with respect to the Award, or any other applicable clawback, adjustment or similar policy in effect on or established after the Grant Date and to any clawback or recoupment that may be required by applicable law or regulation. By accepting this Award, you agree that you are obligated to provide all assistance necessary to the Corporation to recover or recoup the Shares, cash or other value pursuant to the Award which are subject to recovery or recoupment pursuant to applicable law, government regulation, stock exchange listing requirement or PNC policy. Such assistance shall include completing any documentation necessary to recover or recoup the Shares, cash or other value pursuant to the Award from any accounts you maintain with PNC or any pending or future compensation. A copy of the Incentive Compensation Adjustment and Clawback Policy is included in the materials distributed to you with this Agreement.

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

RESTRICTED SHARE UNITS AWARD AGREEMENT

APPENDIX A

ADDITIONAL PROVISIONS

1. Restrictive Covenants. You and PNC acknowledge and agree that you have received adequate consideration with respect to enforcement of the provisions of this Section 1 by virtue of accepting this Award (regardless of whether the Award or any portion thereof is ultimately settled and paid to you); that such provisions are reasonable and properly required for the adequate protection of the business of PNC and its subsidiaries; and that enforcement of such provisions will not prevent you from earning a living.

(a) Non-Solicitation; No-Hire. You agree to comply with the provisions of this Section 1(a) during the period of your employment with PNC and the 12-month period following your Termination Date, regardless of the reason for such termination of employment, as follows:

i. *Non-Solicitation*. You will not, directly or indirectly, either for your own benefit or purpose or for the benefit or purpose of any Person other than PNC, solicit, call on, do business with, or actively interfere with PNC's relationship with, or attempt to divert or entice away, any Person that you should reasonably know (A) is a customer of PNC for which PNC provides any services as of your Termination Date, or (B) was a customer of PNC for which PNC provided any services at any time during the 12 months preceding your Termination Date, or (C) was, as of your Termination Date, considering retention of PNC to provide any services.

ii. *No-Hire*. You will not, directly or indirectly, either for your own benefit or purpose or for the benefit or purpose of any Person other than PNC, employ or offer to employ, call on, or actively interfere with PNC's relationship with, or attempt to divert or entice away, any employee of PNC. You also will not assist any other Person in such activities.

Notwithstanding Section 1(a)(i) and Section 1(a)(ii) above, if your termination of employment with PNC is an Anticipatory Termination, then commencing immediately after your Termination Date, the provisions of Section 1(a)(i) and Section 1(a)(ii) will no longer apply and will be replaced with the following provision:

> "No-Hire. You agree that you will not, for a period of one year after your Termination Date, employ or offer to employ, solicit, actively interfere with PNC's or any PNC affiliate's relationship with, or attempt to divert or entice away, any officer of PNC or any affiliate of PNC."

(b) Confidentiality. During your employment with PNC and thereafter regardless of the reason for termination of such employment, you will not disclose or use in any way any confidential business or technical information or trade secret acquired in the course of such employment, all of which is the exclusive and valuable property of PNC whether or not conceived of or prepared by you, other than (i) information generally known in PNC's industry or acquired from public sources, (ii) as required in the course of employment by PNC, (iii) as required by any court, supervisory authority, administrative agency or applicable law, or (iv) with the prior written consent of PNC. Nothing in this Agreement, including this Section 1(b), is intended to limit you from reporting possible violations of law or regulation to any governmental entity or any self-regulatory organization or making other disclosures that are protected under the whistleblower provisions of federal, state or local law or regulation. You further understand and agree that you are not required to contact or receive consent from PNC before engaging in such communications with any such authorities.

(c) Ownership of Inventions. You will promptly and fully disclose to PNC any and all inventions, discoveries, improvements, ideas or other works of inventorship or authorship, whether or not patentable, that have been or will be conceived and/or reduced to practice by you during the term of your employment with PNC, whether alone or with others, and that are (i) related directly or indirectly to the business or activities of PNC or (ii) developed with the use of any time, material, facilities or other resources of PNC ("Developments"). You agree to assign and hereby do assign to PNC or its designee all of your right, title and interest, including copyrights and patent rights, in and to all Developments. You will perform all actions and execute all instruments that PNC or any subsidiary will deem necessary to protect or record PNC's or its designee's interests in the Developments. The obligations of this Section 1(c) will be performed by you without further compensation and will continue beyond your Termination Date.

(d) Enforcement Provisions. You understand and agree to the following provisions regarding enforcement of Section 1 of this Agreement:

i. *Equitable Remedies*. A breach of the provisions of Sections 1(a) – 1(c) will cause PNC irreparable harm, and PNC will therefore be entitled to seek issuance of immediate, as well as permanent, injunctive relief restraining you, and each and every person and entity acting in concert or participating with you, from initiation and/or continuation of such breach.

ii. *Tolling Period*. If it becomes necessary or desirable for PNC to seek compliance with the provisions of Section 1(a) by legal proceedings, the period during which you will comply with said provisions will extend for a period of 12 months from the date PNC institutes legal proceedings for injunctive or other relief.

iii. *Reform*. If any of Sections 1(a) – 1(c) are determined by a court of competent jurisdiction to be unenforceable because unreasonable either as to length of time or area to which the restriction applies, it is the intent of both parties that the court reduce and reform the restriction so as to apply the greatest limitations considered enforceable by the court.

iv. *Waiver of Jury Trial.* Each of you and PNC hereby waives any right to trial by jury with regard to any suit, action or proceeding under or in connection with any of Sections 1(a) – 1(c).

v. *Application of Defend Trade Secrets Act.* Regardless of any other provision in this Agreement, you may be entitled to immunity and protection from retaliation under the Defend Trade Secrets Act of 2016 for disclosing trade secrets under certain limited circumstances, as set forth in PNC's Defend Trade Secrets Act policy. The policy is available for viewing on PNC's intranet under the "PNC Ethics" page.

2. Capital Adjustments upon a Change of Control. Upon the occurrence of a Change of Control, (a) the number, class and kind of RSUs then outstanding under the Award will automatically be adjusted to reflect the same changes as are made to outstanding shares of Common Stock generally, (b) the value per share unit of any share-denominated award amount will be measured by reference to the per share value of the consideration payable to a holder of Common Stock in connection with such Corporate Transaction or Transactions if applicable, and (c) with respect to stock-payable RSUs only, if the effect of the Corporate Transaction or Transactions on a holder of Common Stock is to convert that shareholder's holdings into consideration that does not consist solely (other than as to a minimal amount) of shares of Common Stock, then the entire value of any payment to be made to you will be made solely in cash at the applicable time specified in this Agreement.

3. Fractional Shares. No fractional Shares will be delivered to you. If the outstanding vested RSUs being settled in Shares include a fractional interest, such fractional interest will be eliminated by rounding down to the nearest whole share unit.

4. No Rights as a Shareholder. You will have no rights as a shareholder of the Corporation by virtue of this Award unless and until Shares are issued and delivered in settlement of the Award pursuant to and in accordance with this Agreement.

5. Transfer Restrictions.

(a) The Award may not be sold, assigned, transferred, exchanged, pledged, or otherwise alienated or hypothecated.

(b) If you are deceased at the time any outstanding vested RSUs are settled and paid out in accordance with the terms of this Agreement, such delivery of Shares, cash payment or other payment (as applicable) shall be made to the executor or administrator of your estate or to your other legal representative or, as permitted under the election procedures of the Plan's third-party administrator, to your designated beneficiary, in each case, as determined in good faith by the Corporation. Any delivery of Shares, cash payment or other payment made in good faith by the Corporation to your executor, other legal representative or permissible designated beneficiary, or retained by the Corporation for taxes pursuant to Section 6 of this Appendix A, shall extinguish all right to payment hereunder.

6. Withholding Taxes.

(a) You shall be solely responsible for any applicable taxes (including, without limitation, income and excise taxes), penalties and interest that you incur in connection hereunder. The Corporation will, at the time any withholding tax obligation arises in connection herewith, retain an amount sufficient to satisfy the minimum amount of taxes then required to be withheld by PNC in connection therewith from amounts then payable hereunder to you.

(b) If any such withholding is required prior to the time amounts are payable to you hereunder or if such amounts are not sufficient to satisfy such obligation in full, the withholding will be taken from other compensation then payable to you or as otherwise determined by PNC.

(c) The Corporation will withhold cash from any amounts then payable to you hereunder that are settled in cash. Unless the Committee or PNC Designated Person determines otherwise, with respect to stock-payable RSUs only, the Corporation will retain whole Shares from any amounts then payable to you hereunder (or pursuant to any other RSUs previously awarded to you under the Plan) in the form of Shares. For purposes of this Section 6(c), Shares retained to satisfy applicable withholding tax requirements will be valued at their Fair Market Value on the date the tax withholding obligation arises (as such date is determined by the Corporation).

7. Employment. Neither the granting of the Award nor any payment with respect to such Award authorized hereunder nor any term or provision of this Agreement shall constitute or be evidence of any understanding, expressed or implied, on the part of PNC to employ you for any period or in any way alter your status as an employee at will.

8. Miscellaneous.

(a) Subject to the Plan and Interpretations. In all respects the Award and this Agreement are subject to the terms and conditions of the Plan, which has been made available to you and is incorporated herein by reference. The terms of the Plan will not be considered an enlargement of any benefits under this Agreement. If the Plan and this Agreement conflict, the provisions of the Plan will govern. Interpretations of the Plan and this Agreement by the Committee are binding on you and PNC.

(b) Governing Law and Jurisdiction. This Agreement is governed by and construed under the laws of the Commonwealth of Pennsylvania, without reference to its conflict of laws provisions. Any dispute or claim arising out of or relating to this Agreement or claim of breach hereof will be brought exclusively in the Federal court for the Western District of Pennsylvania or in the Court of Common Pleas of Allegheny County, Pennsylvania. By execution of this Agreement, you and PNC hereby consent to the exclusive jurisdiction of such courts, and waive any right to challenge jurisdiction or venue in such courts with regard to any suit, action, or proceeding under or in connection with this Agreement.

(c) Headings; Entire Agreement. Headings used in this Agreement are provided for reference and convenience only, are not considered part of this Agreement, and will not be employed in the construction of this Agreement. This Agreement, including any appendices or exhibits attached hereto, constitutes the entire agreement between you and PNC with respect to the subject matters addressed herein, and supersedes all other discussions, negotiations, correspondence, representations, understandings and agreements between the parties concerning the subject matters hereof.

(d) Modification. Modifications or adjustments to the terms of this Agreement may be made by the Corporation as permitted in accordance with the Plan or as provided for in this Agreement. No other modification of the terms of this Agreement will be effective unless embodied in a separate, subsequent writing signed by you and by an authorized representative of the Corporation.

(e) No Waiver. Failure of PNC to demand strict compliance with any of the terms, covenants or conditions of this Agreement will not be deemed a waiver of such term, covenant or condition, nor will any waiver or relinquishment of any such term, covenant or condition on any occasion or on multiple occasions be deemed a waiver or relinquishment of such term, covenant or condition.

(f) Severability. The restrictions and obligations imposed by this Agreement are separate and severable, and it is the intent of both parties that if any restriction or obligation imposed by any of these provisions is deemed by a court of competent jurisdiction to be void for any reason whatsoever, the remaining provisions, restrictions and obligations will remain valid and binding upon you.

(g) Applicable Laws. Notwithstanding anything in this Agreement, PNC will not be required to comply with any term, covenant or condition of this Agreement if and to the extent prohibited by law, including but not limited to Federal banking and securities regulations, or as otherwise directed by one or more regulatory agencies having jurisdiction over PNC.

(h) Compliance with Section 409A of the Internal Revenue Code. It is the intention of the parties that the Award and this Agreement comply with the provisions of Section 409A of the Internal Revenue Code to the extent, if any, that such provisions are applicable. This Agreement will be administered in a manner consistent with this intent, including as set forth in Section 20 of the Plan. If the Award includes a “series of installment payments” (within the meaning of Section 1.409A-2(b)(2)(iii) of the Treasury Regulations), your right to the series of installment payments will be treated as a right to a series of separate payments and not as a right to a single payment.

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THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

RESTRICTED SHARE UNITS AWARD AGREEMENT
SENIOR LEADER PROGRAM (SECTION 16)

APPENDIX B

DEFINITIONS

Certain Definitions. Except as otherwise provided, the following definitions apply for purposes of this Agreement.

"**Anticipatory Termination**" means a termination of employment where PNC terminates your employment with PNC (other than for Misconduct or Disability) prior to the date on which a Change of Control occurs, and you reasonably demonstrated that such termination of employment (i) was at the request of a third party that has taken steps reasonably calculated to effect a Change of Control or (ii) otherwise arose in connection with or in anticipation of a Change of Control.

"**Award Effective Date**" has the meaning set forth in Section A of this Agreement.

"Change of Control" means:

(a) Any Person becomes the beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 20% or more of either (x) the then-outstanding shares of Common Stock (the "Outstanding PNC Common Stock") or (y) the combined voting power of the then-outstanding voting securities of the Corporation entitled to vote generally in the election of directors (the "Outstanding PNC Voting Securities"). The following acquisitions will not constitute a Change of Control for purposes of this definition: (1) any acquisition directly from the Corporation, (2) any acquisition by the Corporation, (3) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Corporation or any company controlled by, controlling or under common control with the Corporation (an "Affiliated Company"), (4) any acquisition pursuant to an Excluded Combination (as defined below) or (5) an acquisition of beneficial ownership representing between 20% and 40%, inclusive, of the Outstanding PNC Voting Securities or Outstanding PNC Common Stock if the Incumbent Board (as defined below) as of immediately prior to any such acquisition approves such acquisition either prior to or immediately after its occurrence;

(b) Individuals who, as of the date hereof, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board (excluding any Board seat that is vacant or otherwise unoccupied). For purposes of this definition, any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the shareholders of the Corporation, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board will be considered as though such individual was a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board;

(c) Consummation of a reorganization, merger, statutory share exchange or consolidation or similar transaction involving the Corporation or any of its subsidiaries, a sale or other disposition of all or substantially all of the assets of the Corporation, or the acquisition of assets or stock of another entity by the Corporation or any of its subsidiaries (each, a "Business Combination"). A transaction otherwise meeting the definition of Business Combination will not be treated as a Change of Control if following completion of the transaction all or substantially all of the beneficial owners of the Outstanding PNC Common Stock and the Outstanding PNC Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 60% of the then-outstanding shares of Common Stock (or, for a non-corporate entity, equivalent securities) and the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors (or, for a non-corporate entity, equivalent governing body), as the case may be, of the entity resulting from such Business Combination (including, without limitation, an entity that, as a result of such transaction, owns the Corporation or all or substantially all of the Corporation's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership immediately prior to such Business Combination of the Outstanding PNC Common Stock and the Outstanding PNC Voting Securities, as the case may be (such a Business Combination, an "Excluded Combination"); or

(d) Approval by the shareholders of the Corporation of a complete liquidation or dissolution of the Corporation.

"Competitive Activity" means any participation in, employment by, ownership of any equity interest exceeding one percent in, or promotion or organization of, any Person other than PNC (1) engaged in business activities similar to some or all of the business activities of PNC during your employment or (2) engaged in business activities that you know PNC intends to enter within the next 12 months (or, if after your Termination Date, within the first 12 months after your Termination Date), in either case whether you are acting as agent, consultant, independent contractor, employee, officer, director, investor, partner, shareholder, proprietor or in any other individual or representative capacity therein. For purposes of Competitive Activity as defined herein (and as such similar term is defined in any equity-based award agreement held by you), the term "subsidiary" will not include any company in which PNC holds an interest pursuant to its merchant banking authority.

"**Detrimental Conduct**" means:

(a) You have engaged in, without the prior written consent of PNC (with consent to be given or withheld at PNC's sole discretion), in any Competitive Activity in the Restricted Territory at any time during the period of your employment with PNC and the 12-month period following your Termination Date;

(b) any act of fraud, misappropriation, or embezzlement by you against PNC or one of its subsidiaries or any client or customer of PNC or one of its subsidiaries; or

(c) you are convicted (including a plea of guilty or of nolo contendere) of, or you enter into a pre-trial disposition with respect to, the commission of a felony that relates to or arises out of your employment or other service relationship with PNC.

You will be deemed to have engaged in Detrimental Conduct for purposes of this Agreement only if and when the Committee or other PNC Designated Person determines that you have engaged in conduct described in clause (a) or clause (b) above or that an event described in clause (c) above has occurred with respect to you. Detrimental Conduct will not apply to conduct by or activities of successors to the Award by will or the laws of descent and distribution in the event of your death.

No determination that you have engaged in Detrimental Conduct may be made (x) on or after your Termination Date if your termination of employment was an Anticipatory Termination or (y) between the time PNC enters into an agreement providing for a Change of Control and the time such agreement either terminates or results in a Change of Control.

"Good Reason" means the definition of Good Reason contained in the Change of Control Employment Agreement between you and PNC or any substitute employment agreement entered into between you and PNC then in effect or, if none, the occurrence of any of the following events without your consent:

(a) the assignment to of any duties to you inconsistent in any material respect with your position (including status, offices, titles and reporting requirements), or any other material diminution in such position, authority, duties or responsibilities;

(b) any material reduction in your rate of base salary or the amount of your annual bonus opportunity (or, if less, the bonus opportunity established for the PNC's similarly situated employees for any year), or a material reduction in the level of any other employee benefits for which you are eligible receive below those offered to the PNC's similarly situated employees;

(c) PNC's requiring you to be based at any office or location outside of a fifty (50)-mile radius from the office where you were employed on the Grant Date;

(d) any action or inaction that constitutes a material breach by the PNC of any agreement entered into between you and PNC; or

(e) the failure by PNC to require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of PNC to assume expressly and agree to perform this Agreement in the same manner and to the same extent that PNC would be required to perform it if no such succession had taken place.

Notwithstanding the foregoing, none of the events described above shall constitute Good Reason unless and until (i) you first notify PNC in writing describing in reasonable detail the condition which constitutes Good Reason within 90 days of its initial occurrence, (ii) PNC fails to cure such condition within 30 days after receipt of such written notice, and (iii) you terminate employment within two years of its initial occurrence.

Your mental or physical incapacity following the occurrence of an event described above in clauses (a) through (e) shall not affect your ability to terminate employment for Good Reason, and your death following delivery of a notice of termination for Good Reason shall not affect your estate's entitlement to severance payments benefits provided hereunder upon a termination of employment for Good Reason.

"**Misconduct**" means, as it relates to an Anticipatory Termination or following a Change of Control, (a) your willful and continued failure to substantially perform your duties with PNC (other than any such failure resulting from incapacity due to physical or mental illness), after a written demand for substantial performance is delivered to you by the Board or the CEO that specifically identifies the manner in which the Board or the CEO believes that you have not substantially performed your duties; or (b) your willful engagement in illegal conduct or gross misconduct that is materially and demonstrably injurious to PNC or any of its subsidiaries. For purposes of clauses (a) and (b), no act or failure to act, on your part, shall be considered willful unless it is done, or omitted to be done, by you in bad faith and without reasonable belief that your action or omission was in the best interests of PNC. Any act, or failure to act, based upon the instructions or prior approval of the Board, the CEO or your superior or based upon the advice of counsel for PNC, will be conclusively presumed to be done, or omitted to be done, by you in good faith and in the best interests of PNC.

Your cessation of employment will be deemed to be a termination of your employment with PNC for Misconduct only if and when there shall have been delivered to you, as part of the notice of your termination, a copy of a resolution duly adopted by the affirmative vote of not less than a majority of the entire membership of the Board, at a Board meeting called and held for the purpose of considering such termination, finding on the basis of clear and convincing evidence that, in the good faith opinion of the Board, you are guilty of conduct described in clause (a) or clause (b) above and, in either case, specifying the particulars thereof in detail. Such resolution shall be adopted only after (i) reasonable notice of such Board meeting is provided to you, together with written notice that PNC believes that you are guilty of conduct described in clause (a) or clause (b) above and, in either case, specifying the particulars thereof in detail, and (ii) you are given an opportunity, together with counsel, to be heard before the Board.

"**Person**" means any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act**.**

"**PNC Designated Person**" means (a) the Committee or its delegate if you are (or were when you ceased to be an employee of PNC) either a member of the Corporate Executive Group (or equivalent successor classification) or subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to PNC securities (or both); or (b) the Committee, the CEO, or the Chief Human Resources Officer of PNC, or any other individual or group as may be designated by one of the foregoing to act as PNC Designated Person for purposes of this Agreement.

"**Qualifying Termination**" has the meaning set forth in Section B of this Agreement.

"**Restricted Territory**" means if you are employed by (or, if you are not an employee, providing the majority of your services to) PNC in the United States or Canada as of the Termination Date, the United States and Canada.

"**Retirement"** means your termination of employment with PNC at any time for any reason (other than termination of employment by reason of your death, by PNC for Cause or by reason of termination of employment in connection with a divestiture of assets or a divestiture of one or more subsidiaries of PNC if the Committee or the CEO or his or her designee so determines prior to such divestiture) on or after the first date on which you have both attained at least age 55 and completed five years of service, where a year of service is determined in the same manner as the determination of a year of vesting service calculated under the provisions of The PNC Financial Services Group, Inc. Pension Plan.

"**Termination Date**" means the last day of your employment with PNC. If you are employed by a Subsidiary that ceases to be a Subsidiary or ceases to be a consolidated subsidiary of the Corporation under U.S. generally accepted accounting principles and you do not continue to be employed by or otherwise have a Service Relationship with PNC, then for purposes of this Agreement, your employment with PNC terminates effective at the time this occurs.

THE PNC FINANCIAL SERVICES GROUP, INC.
2016 INCENTIVE AWARD PLAN

RESTRICTED SHARE UNITS AWARD AGREEMENT

APPENDIX C

RISK PERFORMANCE-BASED VESTING CONDITIONS
SENIOR LEADER PROGRAM (SECTION 16)

The following table sets forth the risk performance-based vesting conditions of the Award:

1.	*Generally*	The Award is divided into three Tranches, with the first Tranche relating to the 2019 performance year, the second Tranche relating to the 2020 performance year, and the third tranche relating to the 2021 performance year (each such year, a "Performance Year"). Each Tranche must satisfy a risk-related performance metric based on whether PNC has met or exceeded the common equity Tier 1 capital spot ratio limit as then in effect and applicable to The PNC Financial Services Group, Inc. ("CET1 Ratio") (which may be on a pro forma fully phased-in basis, if applicable) as set forth in PNC's Enterprise Capital Management Policy (or any successor policy) and monitored at least quarterly. Each Tranche of the Award will also be subject to an annual risk review based on business unit financial performance (or at the discretion of the Committee). "PNC" for purposes of this Appendix C as it refers to risk performance-based vesting conditions means the Corporation and its consolidated subsidiaries for financial reporting purposes. All performance metrics, including any adjustments, will be determined on the basis of PNC's internal financial information as of the date immediately prior to the date the Committee certifies this metric for PNC's corporate executive group and only where such amounts can be reasonably determined.

2.	*Applying the Risk Performance Metric*	*(a) CET1 Ratio Generally*. Each Tranche is subject to a risk performance factor based on whether PNC has met or exceeded the CET1 Ratio as of the last day of each Performance Year. The current CET1 Ratio is 7.0%. *(b) Determination of Annual CET1 Ratio*. As soon as practicable following the end of each Performance Year, PNC will present information to the Committee relating to (i) the CET1 Ratio compared to (ii) the actual CET1 Ratio achieved by PNC with respect to that Performance Year, based on PNC's publicly reported financial results for the period ending on the applicable end date. Except as otherwise provided in paragraph 5 in the event of your death or a Change of Control, this will generally be the public release of earnings results for PNC's fourth quarter that occurs after the year-end measurement date, so that the Committee will be able to make its determination in late January or early February following a Performance Year. • If PNC meets or exceeds the CET1 Ratio for a Performance Year, the risk performance metric is satisfied. • If PNC does not meet the CET1 Ratio for a Performance Year, the applicable Tranche is eligible for forfeiture as determined by the Committee prior to settlement of the Tranche.
3.	*Risk Performance Review Adjustments*	In addition, and independent from the CET1 Ratio performance metric described in paragraph 2 above, with respect to each Tranche and prior to the settlement of that Tranche, the Committee conducts a risk performance review either (1) as a result of business unit financial performance (as described below) or (2) at the discretion of the Committee, relating to a risk-related action of potentially material consequence to PNC. A risk performance review is triggered under (1) above if (a) one of the specific business unit or enterprise level review triggers set forth below is met and (b) that review trigger is applicable to you because either it (i) applies to your business unit or functional area as of the Grant Date and the Committee has not determined in its discretion to apply a different review trigger to you for the Performance Year, or (ii) the Committee has determined in its discretion to apply such specific business unit or enterprise level review trigger to you for the Performance Year.

		The specific business unit or enterprise level review triggers are as follows: • PNC's Retail Banking segment reports a loss for the Performance Year • PNC's Corporate & Institutional Banking segment reports a loss for the Performance Year • PNC's Asset Management Group segment reports a loss for the Performance Year If you are not assigned to one of the above-named business units as of the Grant Date, the review trigger will be applicable to you only in the event the Committee determines in its discretion to apply such review trigger, as described in (ii) above. If your affiliated business unit or functional area as of the Grant Date is eliminated or no longer reportable due to restructuring or other business reason, the specific review trigger applicable to you will be based on your newly assigned business unit or functional area. For purposes of this Agreement, whether or not a specified business unit has a loss for a given Performance Year will be determined on the basis of the reported earnings or loss, as the case may be, of the reportable business segment that includes the results of such business unit, based on PNC's publicly reported financial results for that year. If a risk performance review is triggered as a result of business financial performance under (1) or if the Committee exercises its discretion to conduct a risk performance review under (2) above, the Committee will review and determine if a downward adjustment for risk performance is appropriate either for the applicable Tranche or to a specific Grantee. Any determination to conduct a risk performance review will be made shortly after the close of the Performance Year, but no later than the 45th day following the close of the Performance Year, and any required review will be conducted no later than two and a half-months after the close of the Performance Year.

4.	*Determination of Final Number of RSUs*	Following the Performance Year, if (1) the risk performance metric is satisfied and if no risk review is conducted with respect to that year, or (2) the Committee determines not to apply a downward adjustment for risk performance, then the final Award will be the number of RSUs subject to the applicable Tranche. If the risk performance metric is not satisfied, or if a review is conducted, and the Committee applies a downward adjustment for risk performance, than the final award will be a lower number of RSUs subject to the applicable Tranche (rounded down to the nearest whole Unit) or zero, as determined by the Committee. If the Committee elects to forfeit a Tranche as it relates to all members of PNC's Group 1 executives by reason of the CET1 Ratio risk performance metric not being satisfied, such Tranche will also be forfeited for all members of the Senior Leader program. **In no event can the size of the Tranche be greater than 100.00% of the target number of RSUs subject to that Tranche.**
5.	*Determination of Risk Performance Metric Upon Death or a Change of Control*	
	Death	Notwithstanding anything to the contrary in this Agreement, if your employment with PNC ceases by reason of your death, or if you die after a termination of employment with PNC due to Disability or Retirement or by reason of an Anticipatory Termination, in any case, prior to a Change of Control or the last Scheduled Vesting Date, then all risk performance-based conditions will be met with respect to the outstanding portion of your Award, *unless* the date of death occurs after a calendar year but prior to performance-adjustment by the Committee (including a Committee determination made immediately preceding the date of the Change of Control), in which case such Tranche will vest based on actual performance as determined by the Committee. For the avoidance of doubt, in the event of your death following a Change of Control, the risk performance metric for any then-outstanding Tranche will be determined as provided in the "Change of Control" paragraph below.

	Change of Control	Notwithstanding anything to the contrary in this Agreement and subject to your satisfaction of the service-based vesting requirements, any outstanding Tranches for which no performance factors have been determined at the time of a Change of Control will be risk performance-adjusted, as follows: • If a Change of Control occurs after a completed Performance Year, but prior to the Scheduled Vesting Date for that Tranche, the actual CET1 Ratio for that Performance Year will continue to apply to that Tranche, and • For any Performance Year not completed prior to a Change of Control, if the CET1 Ratio was not met as of the quarter-end date immediately preceding the Change of Control (or if the Change of Control falls on a quarter-end date, and such information is available and applicable for such date, the date of the Change of Control), then all remaining Tranches will be forfeited and expire as of the Change of Control. For the avoidance of doubt: • If the CET1 Ratio was not met as of the applicable quarter-end performance measurement date, the Award will be forfeited by you as of the Change of Control. • Tranches where the CET1 Ratio was met and that remain outstanding will be paid out, without further Dividend Equivalents or any interest, on the Scheduled Vesting Dates (or earlier, in the event of your death) upon your satisfaction of the service-based vesting requirements.
6.	*Committee Determination*	The Committee may make prospective adjustments to the Award. All determinations made by the Committee or otherwise by PNC hereunder shall be made in its sole discretion and shall be final, binding and conclusive for all purposes on all parties.

IN WITNESS WHEREOF, the Corporation has caused this Agreement to be signed on its behalf as of the Grant Date.

THE PNC FINANCIAL SERVICES GROUP, INC.

By:

ATTEST:

By:

ACCEPTED AND AGREED TO by GRANTEE

____

Grantee

EXHIBIT 31.1

In accordance with Exchange Act Rules 13a-14(f) and 15d-14(f), this certification does not relate to Interactive Data Files as defined in Rule 11 of Regulation S-T.

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, William S. Demchak, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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: November 4, 2019

/s/ William S. Demchak

William S. Demchak
Chairman, President and Chief Executive Officer

EXHIBIT 31.2

In accordance with Exchange Act Rules 13a-14(f) and 15d-14(f), this certification does not relate to Interactive Data Files as defined in Rule 11 of Regulation S-T.

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Robert Q. Reilly, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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: November 4, 2019

/s/ Robert Q. Reilly

Robert Q. Reilly
Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

In accordance with Exchange Act Rules 13a-14(f) and 15d-14(f), this certification does not relate to Interactive Data Files as defined in Rule 11 of Regulation S-T.

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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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

November 4, 2019

EXHIBIT 32.2

In accordance with Exchange Act Rules 13a-14(f) and 15d-14(f), this certification does not relate to Interactive Data Files as defined in Rule 11 of Regulation S-T.

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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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

November 4, 2019