

PNC Bank, National Association

**2018 Resolution Plan: Public Executive
Summary**

Table of Contents

I. Introduction and Executive Summary	3
II. Material Entities	5
III. Core Business Lines.....	7
IV. Summary Financial Information Regarding Assets, Liabilities, Capital and Major Funding Sources	10
V. Derivatives and Hedging Activities	16
VI. Memberships in Material Payment, Clearing and Settlement Systems	18
VII. Foreign Operations	21
VIII. Material Supervisory Authorities	22
IX. Principal Officers.....	23
X. Corporate Governance Structure and Processes Related to Resolution Planning	24
XI. Material Management Information Systems	26
XII. High-Level Resolution Strategy Overview	27

I. Introduction and Executive Summary

PNC Bank, National Association (PNC Bank) is a Main Street, regional bank headquartered in Pittsburgh, Pennsylvania. PNC Bank provides a range of traditional retail banking, home lending, corporate and institutional banking and asset management products and services. The PNC Financial Services Group, Inc. (PNC) is PNC Bank's top-tier parent financial holding company. The business and organizational structure of the PNC organization is built predominantly around PNC Bank. As of December 31, 2017, PNC Bank had total consolidated assets of \$370.0 billion, representing approximately 97% (before consolidating entries) of the total consolidated assets of PNC.

Because PNC and PNC Bank each have more than \$50 billion in total assets, PNC and PNC Bank — as well as other U.S. banking organizations that exceed this asset threshold — are each required to develop and periodically submit to U.S. banking regulators a resolution plan addressing how they hypothetically could be resolved in a rapid and orderly fashion if they were to fail or experience material financial distress. PNC Bank submitted its 2018 resolution plan (Bank Plan) to the Federal Deposit Insurance Corporation (FDIC) in June 2018. PNC submitted its most recent resolution plan to the Board of Governors of the Federal Reserve System (Federal Reserve) and the FDIC in December 2017.

Importantly, PNC and PNC Bank are not in financial distress or in danger of failing. As of December 31, 2017, both PNC and PNC Bank had regulatory capital ratios significantly in excess of the amount required to be considered “well capitalized” under U.S. banking regulations. In addition, the Liquidity Coverage Ratio (LCR) for PNC and PNC Bank exceeded 100% as of December 31, 2017.

Moreover, PNC Bank is core-deposit funded — meaning its activities primarily are funded by customer deposits, which are a relatively stable source of funding. PNC Bank's loan-to-deposit ratio at December 31, 2017, was 82.2%.¹ Core deposits totaled \$257.1 billion as of that same date. PNC Bank monitors its liquidity position and funding needs using a variety of measures and tools, including 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 30-day stress scenario. For more details on the capital and funding resources of PNC Bank, please see Section IV. Summary Financial Information Regarding Assets, Liabilities, Capital and Major Funding Sources.

The Bank Plan is governed by a regulation issued by the FDIC (the CIDI Rule).² Under the CIDI Rule, PNC Bank must, on a periodic basis, file a resolution plan that addresses how the FDIC could resolve PNC Bank in a hypothetical resolution scenario in a manner that ensures that

¹ The loan-to-deposit ratio is calculated as the ratio of total loans and leases (net of unearned income and gross of reserve) over total deposits (including domestic and foreign deposits).

² 12 C.F.R. § 360.10. Banks that are required to file resolution plans under the CIDI Rule are referred to as “covered insured depository institutions” or “CIDIs.”

depositors would have access to their insured deposits within one business day of the bank's failure, maximizes the net present value return from the sale or disposition of the bank's assets and minimizes the amount of any loss realized by creditors of the bank.

This public section provides an overview of the Bank Plan. It describes, among other things, PNC Bank's organizational structure, three core business lines and limited number of material entities identified for resolution plan purposes. It also provides a high-level overview of the resolution strategies for PNC Bank and includes certain other information related to the business of PNC and PNC Bank.

PNC Bank believes that the resolution strategies included in the Bank Plan would allow PNC Bank to be resolved in an orderly manner consistent with the FDIC's resolution objectives outlined above and without threatening U.S. financial stability or the need for any extraordinary government or taxpayer support.

Information included in this Public Summary is as of December 31, 2017, unless otherwise indicated.

II. Material Entities

Only two entities within the PNC organizational structure are considered “material entities” for resolution planning purposes — PNC and PNC Bank. Under the CIDI Rule, a “material entity” is a company that is significant to a core business line or the activities of a critical service³ of the CIDI. As discussed in Section III, PNC Bank has three core business lines — Retail Banking, Corporate & Institutional Banking and the Asset Management Group. The following provides a brief overview of PNC and PNC Bank:

The PNC Financial Services Group, Inc.

The PNC Financial Services Group, Inc. is a bank holding company registered under the Bank Holding Company Act of 1956, as amended (BHC Act), and a financial holding company under the Gramm-Leach-Bliley Act. The company is incorporated in the Commonwealth of Pennsylvania and headquartered in Pittsburgh, Pennsylvania. PNC’s common stock is listed on the New York Stock Exchange and is traded under the ticker symbol “PNC.” PNC is the ultimate parent company within PNC’s organizational structure and the indirect owner of 100% of the outstanding stock of PNC Bank.

PNC Bank, National Association

PNC Bank, National Association is a national bank and its deposits are insured by the FDIC (up to, and in accordance with, applicable limitations and restrictions). PNC Bank is headquartered in Pittsburgh, Pennsylvania. PNC Bank is PNC’s only insured depository institution subsidiary. It is the entity through which PNC conducts the vast majority of its businesses and operations, including those of its three core business lines (Retail Banking, Corporate & Institutional Banking and the Asset Management Group). As of December 31, 2017, PNC Bank’s total consolidated assets represented approximately 97% of PNC’s total consolidated assets. As of that same date, PNC Bank had 2,459 branches in 19 states and the District of Columbia. The bank also services customers through a network of 9,051 ATMs, nationwide call centers and online and mobile banking platforms. PNC Bank is an indirect, wholly-owned subsidiary of PNC.

³ Section III of this Public Summary includes the definition of a “core business line.” A “critical service” is defined by the CIDI Rule as a service or operation of the CIDI, such as servicing, information technology support and operations, and human resources and personnel, which are necessary to continue the day-to-day operations of the CIDI. 12 C.F.R. § 360.10(b)(5).

Simplified Organizational Chart of Material Entities⁴

The PNC Financial Services Group, Inc.

PNC Bank, National Association

- FDIC-insured National Bank
- Cornerstone of the PNC organization

⁴ The direct parent company of PNC Bank — PNC Bancorp, Inc. — is not considered a material entity and, therefore, is not included in this simplified organizational chart.

III. Core Business Lines

PNC Bank has three “core business lines” — Retail Banking, Corporate and Institutional Banking and the Asset Management Group. “Core business lines” are defined for these purposes as those business lines of the CIDI (including associated operations, service functions and support) that upon failure would result in a material loss of revenue, profit or franchise value to the CIDI. Retail Banking, Corporate and Institutional Banking and the Asset Management Group constitute all of the ongoing operating lines of business of PNC Bank.⁵

The products and services of these business lines are mainly offered to customers in PNC Bank’s primary geographic markets (located in Pennsylvania, Ohio, New Jersey, Michigan, Illinois, Maryland, Indiana, North Carolina, Florida, Kentucky, the District of Columbia, Delaware, Alabama, Virginia, Georgia, Missouri, Wisconsin, South Carolina, New York and West Virginia). Certain products and services are offered nationally, and, to a limited extent, internationally. The following provides a brief overview of PNC Bank’s three core business lines. All core business lines operate exclusively or primarily through PNC Bank.

Retail Banking

The Retail Banking core business line provides deposit, lending, brokerage, investment management and cash management services to individual consumers and small business customers. 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 loans and lines of credit. Retail Banking customers are serviced through PNC Bank’s branch network, call centers, online banking and mobile channels. PNC Bank’s branch network covers 19 states and the District of Columbia, and includes 2,459 branch locations and 9,051 ATMs.

Corporate & Institutional Banking

The Corporate & Institutional Banking (C&IB) core business line provides lending, treasury management and capital markets-related products and services to mid-sized and large corporations, as well as government and not-for-profit entities. Lending products include secured and unsecured loans, letters of credit and equipment leases. Treasury management services include cash and investment management, receivables management, disbursement services, funds transfer services, information reporting and global trade services. Capital markets-related products and services include foreign exchange, derivatives, securities, loan syndications, mergers and acquisitions advisory and equity capital markets advisory related services. C&IB also provides commercial loan servicing and real estate advisory and technology solutions for the

⁵ The three identified core business lines constitute three of the four business segments PNC uses for Securities and Exchange Commission (SEC) financial reporting purposes. The fourth business segment used for SEC financial reporting purposes — PNC’s equity investment in BlackRock, Inc. — is held outside of PNC Bank and is not considered a core business line for purposes of the Bank Plan.

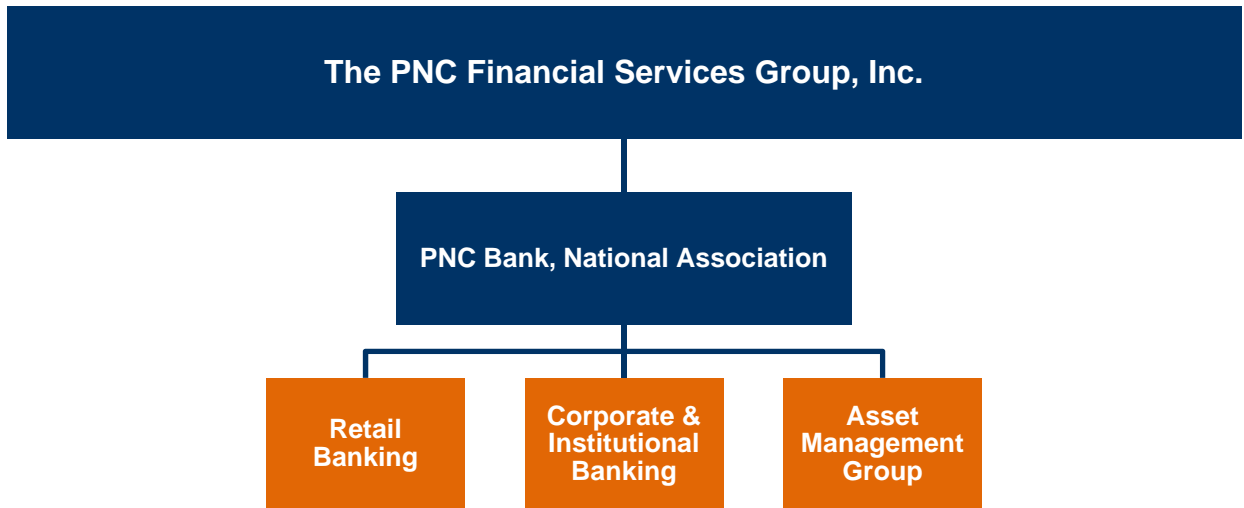
commercial real estate finance industry. C&IB products and services are offered nationally and, to a limited extent, internationally.

Asset Management Group

The Asset Management Group (AMG) core business line provides personal wealth management for high net worth and ultra-high net worth clients, as well as institutional asset management. Wealth management products and services include investment and retirement planning, customized investment management, private banking, tailored credit solutions and trust management and administration for individuals and their families. Hawthorn, a unit within the AMG core business line, provides multi-generational family planning including estate, financial, tax planning, fiduciary, investment management and consulting, private banking, personal administration services, asset custody and customized performance reporting to ultra-high net worth families. Institutional asset management provides advisory, custody and retirement administration services. The business also offers PNC proprietary mutual funds. Institutional clients include corporations, unions, municipalities, non-profits, foundations and endowments, primarily located in PNC Bank's geographic footprint.

Graphical Representation of Core Business Lines

The following chart illustrates a mapping of PNC Bank's three core business lines to the Material Entities through which they predominantly operate:



All core business lines operate predominantly through PNC Bank. Core business lines are not separate legal entities, although certain aspects of a core business line may operate through one or more separate legal entities.

IV. Summary Financial Information Regarding Assets, Liabilities, Capital and Major Funding Sources

The following provides summary financial information regarding PNC Bank derived from financial and regulatory reports as of December 31, 2017.

For detailed financial information with respect to PNC, please refer to PNC's annual, quarterly and current reports filed with the SEC which are available on the SEC's website at www.sec.gov, including the Annual Report on Form 10-K for the year ended December 31, 2017. The information below regarding PNC Bank is based on PNC Bank's Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices on FFIEC Form 031 for the year ended December 31, 2017, which is available on the Federal Financial Institutions Examination Council's website at www.ffiec.gov.

\$ in millions	PNC Bank, N.A. ⁶
Assets	
Cash and due from banks	\$33,822
Securities	76,035
Fed fund sold and repurchase agreements	2,507
Loans held for sale	2,655
Loans	220,408
Allowance for loan and lease losses	(2,611)
Net loans	217,797
Trading assets	3,182
Premises and fixed assets	4,754
Goodwill	9,173
Other intangible assets	2,158
Other assets	17,919
Total assets	\$370,002
Liabilities	
Deposits	
Noninterest-bearing	80,349
Interest-bearing	191,007
Total Deposits	271,356
Fed funds purchased and securities sold under repo agreements	2,038
Trading liabilities	2,352
FHLB advances	21,037
Other borrowed money	24,605
Subordinated notes and debentures	4,064
Other liabilities	5,603
Total liabilities	\$331,055
Equity	
Common stock	\$240
Surplus	28,369
Retained earnings	9,643
Accumulated other comprehensive income	-64
Total shareholders' equity	38,188
Noncontrolling interests	760
Total equity	\$38,948
Total liabilities and equity	\$370,002

⁶ Source: PNC Bank's Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices on FFIEC Form 031 for the year ended December 31, 2017.

Capital

PNC's primary capital management goal is to maintain a strong capital position both for PNC and PNC Bank. Doing so best positions the enterprise to satisfy the needs and objectives of its primary constituencies — shareholders, customers (including depositors), counterparties, regulators and rating agencies.

Regulatory Capital

The following table provides information regarding the transitional Basel III regulatory capital ratios of PNC Bank as of December 31, 2017.⁷

Transitional Basel III Regulatory Capital Ratios

\$ in millions	December 31, 2017	
	Amount	Ratios
Risk-Based		
Common equity Tier 1	\$28,771	9.7%
Tier 1	28,942	9.7%
Total	34,756	11.7%
Leverage	28,942	8.2%
Supplementary Leverage	28,942	6.8%

As a result of the staggered effective dates of the final Basel III risk-based capital rules, as well as the fact that PNC Bank remains in the parallel run qualification phase for the Advanced Approaches, PNC Bank's regulatory risk-based capital ratios in 2017 were based on the definitions of, and deductions from, capital under the Basel III rules (as phased-in for 2017) and risk-weighted assets determined in accordance with the Standardized Approach under the Basel III rules. PNC Bank was "well capitalized" as of December 31, 2017, under applicable regulatory capital rules. To qualify as "well capitalized", regulators require insured depository institutions to maintain transitional Basel III regulatory capital ratios of at least 6.5% for Common equity Tier 1, 8% for Tier 1 risk-based, 10% for Total risk-based and 5% for Leverage.⁸

PNC Bank also calculates and discloses its Basel III supplementary leverage ratio (SLR).⁹ As of December 31, 2017, the SLR for PNC Bank was 6.8%, well in excess of the 3% minimum that became effective January 1, 2018.

⁷ Source: PNC Bank, N.A. Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices on FFIEC Form 031 for the year ended December 31, 2017.

⁸ See 12 C.F.R. § 6.4(b)(1).

⁹ Unlike the existing leverage ratio, the denominator of the SLR takes into account certain off-balance sheet items, including loan commitments and potential future exposure under derivative contracts.

Stress Testing

Sound stress testing practices and methodologies are a key component of PNC's capital adequacy assessment process. PNC conducts capital stress test activities on an enterprise-wide basis at least semi-annually, including for the Federal Reserve's annual Comprehensive Capital Assessment and Review exercise and the semi-annual company-run stress tests required under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). PNC makes summary results of its Dodd-Frank Act company-run stress test exercises publicly available on its website:

<http://phx.corporate-ir.net/phoenix.zhtml?c=107246&p=irol-RegDisclosures>.

Please see PNC's 2017 Annual Report on Form 10-K for additional information on PNC's capital management philosophy and practices.

Funding Sources and Liquidity

PNC Bank is primarily funded through its customer deposit base derived from its retail and commercial businesses. PNC Bank's loan-to-deposit ratio was 82.2% as of December 31, 2017.¹⁰ In addition to the customer deposit base, which has historically provided the single largest source of relatively stable and low-cost funding, PNC Bank also obtains liquidity through the issuance of traditional forms of funding, including long-term debt (for example, senior notes, subordinated debt and Federal Home Loan Bank advances) and short-term borrowings (such as securities sold under repurchase agreements, commercial paper issuances and other short-term borrowings). Liquid assets (including, for example, high quality liquid securities, Federal Funds sold, resale agreements and interest-earning deposits with other banks) and unused borrowing capacity from a number of sources also are available to maintain PNC Bank's liquidity position.

A summary overview of PNC Bank's sources of funding (balances for 2017) is included in the following table.

¹⁰ The loan-to-deposit ratio is calculated as the ratio of total loans and leases (net of unearned income and gross of reserve) to total deposits (including domestic and foreign deposits).

Deposits and Borrowed Funds Balances for 2017 ¹¹	Balance (\$ in millions)
Deposits	
Noninterest-bearing	\$80,349
Interest-bearing	191,007
Total Deposits	271,356
Borrowed Funds	
Federal Home Loan Bank borrowings	21,037
Fed Funds Purchased and Securities Sold Under Repurchase Agreements	2,038
Subordinated debt	4,064
Other	26,957
Total Borrowed Funds	54,096
Total Funding Sources	\$325,452

Liquidity Risk Management

Liquidity risk has two fundamental components. The first is the potential cost if PNC were unable to meet its funding requirements at a reasonable cost. The second is PNC's potential inability to operate its businesses because adequate contingent liquidity is not available. PNC manages liquidity risk at the consolidated company level (bank, parent company and non-bank subsidiaries combined) to help ensure that PNC can obtain cost-effective funding to meet current and future obligations under normal, "business as usual" circumstances and in times of financial stress, and to help ensure that PNC maintains an appropriate level of contingent liquidity.

Management monitors liquidity through a series of early warning indicators that may indicate a potential market, or PNC-specific, liquidity stress event. In addition, management performs a set of liquidity stress tests over multiple time horizons with varying levels of severity and maintains a contingency funding plan to address potential stress events. In the most severe liquidity stress simulation, PNC assumes that its liquidity position is under pressure, while the market in general is under systemic pressure. The simulation considers, among other things, the impact of restricted access to both secured and unsecured external sources of funding, accelerated run-off of customer deposits, valuation pressure on assets and heavy demand to fund contingent obligations. Liquidity-related risk limits are established within PNC's Enterprise Liquidity Management Policy and supporting policies. Management committees, including the Asset and Liability Committee, and the Board of Directors and its Risk Committee regularly review compliance with key established limits.

In addition to the liquidity monitoring measures and tools described above, PNC and PNC Bank also monitor liquidity by reference to the LCR, a regulatory minimum liquidity requirement. The U.S. banking agencies' LCR rules are designed to ensure that covered banking organizations

¹¹ Source: PNC Bank's Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices on FFIEC Form 031 for the year ended December 31, 2017.



maintain an adequate level of cash and high quality, unencumbered liquid assets (HQLA) to meet estimated net liquidity needs in a short-term stress scenario using liquidity inflow and outflow assumptions prescribed in the rules (net cash outflow). A company's LCR is the amount of its HQLA, as defined and calculated in accordance with the haircuts and limitations in the rule, divided by its net cash outflows, with the quotient expressed as a percentage. As of December 31, 2017, the LCR for PNC and PNC Bank exceeded the 100% regulatory minimum.

Please see "Liquidity Risk Management" in the Risk Management section of PNC's 2017 Annual Report on Form 10-K for additional information on PNC's liquidity risk management.

V. Derivatives and Hedging Activities

PNC uses a variety of financial derivatives as part of the overall asset and liability management process to help manage its exposure to the interest rate, market, credit and other risks inherent in its business activities. Substantially all such instruments are used to manage risk related to changes in interest rates. Interest rate and total return swaps, interest rate caps and floors, swaptions, options, forwards and futures contracts are the primary instruments PNC uses for interest rate risk management. PNC Bank also enters into derivatives with customers to facilitate their risk management activities. The financial derivatives that PNC enters into involve, to varying degrees, interest rate, market and credit risk. PNC manages these risks as part of its asset and liability management process and through credit policies and procedures. PNC seeks to minimize counterparty credit risk by entering into transactions with only high-quality institutions, establishing credit limits and generally requiring bilateral netting and collateral agreements.

As of December 31, 2017, the aggregate notional/ contractual amount of PNC's financial derivatives (including derivatives designated, and not designated, as hedges under GAAP) was \$418.6 billion with a net fair value (after collateral and master netting agreements) of approximately \$18 million. To put PNC's limited derivatives exposure into perspective, the aggregate notional/ contractual amount of financial derivatives of the largest U.S. bank holding company by asset size was \$48.4 trillion, an amount approximately 116 times larger than PNC's exposure, as of the same date.

Customer Needs

PNC Bank may enter into derivatives with customers to facilitate their risk management activities. These derivatives primarily consist of interest rate swaps, interest rate caps, floors, swaptions, foreign exchange contracts, equity contracts and commodity contracts. PNC Bank primarily manages its market risk exposure from customer transactions by entering into a variety of hedging transactions with third-party dealers.

Hedging and Risk Mitigation

Consistent with PNC's risk management practices, PNC dynamically manages risks that arise in the normal course of its banking activities, including, for example, lending and mortgage servicing activities. The types of risks PNC seeks to manage using derivatives primarily include interest rate risk, adverse changes in foreign exchange rates, risk related to residential and commercial mortgage banking activities and the risk of economic loss on loan exposures. Examples of hedging products PNC employs include over-the-counter spot, forward, swap and option contracts as well as exchange traded futures and options on futures.

PNC enters into foreign currency forward contracts to hedge its non-U.S. Dollar net investments in foreign subsidiaries against adverse changes in foreign exchange rates.



PNC may use derivatives to manage risk related to residential and commercial mortgage banking activities. For example, PNC hedges interest rate risk with forward contracts to sell mortgage-backed securities, as well as U.S. Treasury and Eurodollar futures and options. Additionally, PNC may use forward loan sale contracts and interest rate swaps to manage its risks.

Please see PNC's 2017 Annual Report on Form 10-K for additional information on its derivatives and hedging activities.

VI. Memberships in Material Payment, Clearing and Settlement Systems

PNC Bank participates and has memberships in a number of multilateral systems (often referred to as Financial Market Utilities or FMUs) that provide the infrastructure necessary to transfer, clear and settle payments, securities and other financial transactions. PNC Bank's participation in these systems supports PNC Bank's provision of banking and financial services to its customers and its risk management activities. For example, these systems allow PNC to provide payment services, serve as a broker-dealer for certain securities transactions and engage in other financial transactions needed to meet the needs of customers, manage risk and secure funding.

Set forth below is a list of PNC Bank's memberships in material payment, clearing and settlement systems:

Electronic Payments Network (EPN)

EPN is an electronic payments system that provides automated clearinghouse (ACH) services. The EPN system facilitates exchanges of batched debit and credit payments among business, consumer and government accounts. EPN processes pre-authorized recurring payments such as payroll, Social Security, mortgage and utility payments and non-recurring payments such as telephone-initiated payments and checks that are converted into ACH payments at lockboxes and points of sale. EPN is owned and operated by The Clearing House Payments Company, L.L.C.

Small Value Payments Company L.L.C. (SVPCo)

SVPCo is the check image exchange business of The Clearing House Payments Company, L.L.C., and provides check imaging and related services to financial institutions of all sizes. Members use SVPCo to distribute checks to other SVPCo members, including through an Image Payments Network that allows financial institutions to exchange images and share best practices amongst one another.

Depository Trust Company (DTC)

DTC is a central securities depository providing depository and book-entry services for eligible securities and other financial assets to its participants, which principally are banks and broker-dealers. DTC processes the movement of securities for trades that are cleared and settled by its affiliate, National Securities Clearing Corporation. DTC is a subsidiary of The Depository Trust and Clearing Corporation (DTCC) which, in turn, is owned by its users, including major banks, broker-dealers and other financial institutions.

National Securities Clearing Corporation (NSCC)

NSCC provides clearing, settlement, risk management, central counterparty services and a guarantee of completion for certain transactions for U.S. broker-to-broker trades involving equities, corporate and municipal debt, American Depositary Receipts, exchange-traded funds and unit investment trusts. NSCC is a subsidiary of DTCC.

Fixed Income Clearing Corporation (FICC)

FICC operates two divisions, the Government Securities Division (GSD) and the Mortgage Backed Securities Division (MBSD). GSD provides real-time trade matching, clearing, risk management and netting for trades in U.S. Government debt issues, including repurchase agreements or repos. MBSD provides real-time automated and trade matching, trade confirmation, risk management, netting and electronic pool notification to the mortgage-backed securities market. FICC is a subsidiary of DTCC.

FedACH Services (FedACH)

FedACH is an electronic payment system, owned and operated by the Federal Reserve System, which provides ACH services. The ACH system exchanges batched debit and credit payments among business, consumer and government accounts. The system processes pre-authorized recurring payments such as payroll, Social Security, mortgage and utility payments and non-recurring payments such as telephone-initiated payments and checks that are converted into ACH payments at lockboxes and points of sale.

Fedwire Funds Service (Fedwire Funds)

Fedwire Funds provides a real-time gross settlement system in which more than 9,500 participants are able to initiate electronic funds transfers that are immediate, final and irrevocable. For example, depository institutions that maintain an account with a Federal Reserve Bank are eligible to use the service to send payments to, or receive payments from, other participants. Participants generally use Fedwire to handle large-value, time-critical payments, such as payments to settle interbank purchases and sales of federal funds; to purchase, sell or finance securities transactions; to disburse or repay large loans; and to settle real estate transactions. The Department of the Treasury, other federal agencies and government-sponsored enterprises also use Fedwire Funds to disburse and collect funds. Fedwire Funds is owned and operated by the Federal Reserve System.

Fedwire Securities Service (Fedwire Securities)

Fedwire Securities provides safekeeping, transfer and settlement services for securities issued by the Department of the Treasury, other federal agencies, government-sponsored enterprises and certain international organizations. The Federal Reserve Banks perform these

services as fiscal agents for these entities. Securities are safekept in the form of electronic records of securities held in custody accounts and are transferred according to instructions provided by parties with access to the system. Access to Fedwire Securities is limited to depository institutions that maintain accounts with a Federal Reserve Bank, and certain other organizations, e.g., federal agencies, government-sponsored enterprises and state government treasurer's offices (designated by the Department of the Treasury to hold securities accounts). Other parties, such as brokers and dealers, hold and transfer securities through depository institutions that are Fedwire Securities participants and that provide specialized government securities clearing services.

Society for Interbank Financial Telecommunication (SWIFT)

SWIFT provides a telecommunication platform for the exchange of standardized financial messages between financial institutions and corporations. SWIFT is neither a payment system nor a settlement system, though the SWIFT messaging standard is used in many payment and settlement systems. SWIFT's customers include banks, market infrastructures, broker-dealers, corporations, custodians and investment managers. SWIFT is a member-owned cooperative and is subject to oversight by the central banks of the Group of Ten countries.

VII. Foreign Operations

PNC Bank has only limited foreign operations and employees, with the vast majority of its operations and employees being located in the United States. Of PNC's approximately 53,000 total employees as of December 31, 2017, only 117 were located outside of the United States. PNC Bank's foreign operations are conducted through two foreign branches as well as certain subsidiaries. The foreign branches are located in Toronto, Canada and Nassau, Bahamas. PNC Bank's principal foreign subsidiaries are:

- Harris Williams & Co. Ltd., which provides financial advisory services to companies in the European Union through offices located in London, United Kingdom and Frankfurt, Germany; and
- PNC Financial Services UK Ltd., which provides asset-backed commercial loans in the United Kingdom through offices located in London and several other locations in the U.K.

VIII. Material Supervisory Authorities

PNC and its subsidiaries are subject to comprehensive supervision and examination by several regulatory bodies. As a bank holding company registered under the BHC Act, PNC is subject to comprehensive, consolidated regulation, supervision and examination by the Federal Reserve.

PNC Bank is chartered as a national bank and is subject to regulation, supervision and examination by the Office of the Comptroller of the Currency. PNC Bank's foreign branches also are regulated by the relevant supervisory authorities in the host country. PNC Bank also is subject to oversight by the FDIC, which insures PNC Bank's deposits (up to, and in accordance with, applicable limitations and restrictions). PNC Bank is registered with the Commodity Futures Trading Commission (CFTC) as a swap dealer and is subject to CFTC requirements imposed on registered swap dealers.

The Consumer Financial Protection Bureau is responsible for examining PNC Bank and its affiliates (including PNC) for compliance with most consumer financial protection laws and for enforcing such laws with respect to PNC Bank and its affiliates.

IX. Principal Officers

The principal executive officers of PNC Bank, current as of March 31, 2018, are listed in the table below:

Principal Officers	PNC Bank
William S. Demchak	Chairman, Chief Executive Officer and President
Michael J. Hannon	Executive Vice President and Chief Credit Officer
Vicki C. Henn	Executive Vice President and Chief Human Resources Officer
Gregory B. Jordan	Executive Vice President, General Counsel and Chief
Stacy Juchno	Administrative Officer
Gregory H. Kozich	Executive Vice President and General Auditor
Karen L. Larrimer	Executive Vice President and Controller
Michael P. Lyons	Executive Vice President, Chief Customer Officer and Head of
E William Parsley, III	Retail Banking
Robert Q. Reilly	Executive Vice President, Head of Corporate & Institutional
Joseph E. Rockey	Banking and Head of Asset Management Group
Steven Van Wyk	Executive Vice President, Chief Operating Officer and Head of
	Consumer Lending
	Executive Vice President and Chief Financial Officer
	Executive Vice President, Derivatives Chief Compliance Officer
	and Chief Risk Officer
	Executive Vice President and Head of Technology and
	Innovation

X. Corporate Governance Structure and Processes Related to Resolution Planning

PNC has developed and implemented a robust governance framework to ensure that resolution planning is appropriately integrated into the overall governance structure and processes for PNC and PNC Bank, and that all aspects of resolution planning receive the appropriate level of attention by management and the Boards of Directors of PNC and PNC Bank. The ultimate responsibility for approving the resolution plan of PNC Bank rests with its Board of Directors. The Board of Directors of PNC Bank approved the current Bank Plan in May 2018.

In addition to the Boards of Directors, the following bodies are integral parts of PNC's overall resolution planning governance framework:

Executive Committee

PNC's Executive Committee is responsible for developing enterprise-wide strategy and achieving PNC's strategic objectives and, in that capacity, provides strategic oversight with respect to PNC's resolution planning. The Executive Committee reviews the Resolution Plans and makes recommendations to the Boards of Directors for approval and submission of the PNC and PNC Bank resolution plans. The Executive Committee is a senior management-level corporate committee comprising senior executive management as well as senior leadership responsible for each of PNC's core business lines and key enterprise functions.

Executive Sponsor

PNC's Chief Financial Officer serves as the Executive Sponsor of PNC's overall resolution planning initiatives and is designated as the senior management official primarily responsible for overseeing the development, maintenance, implementation and filing of both the PNC and Bank resolution plans.

Recovery and Resolution Planning Steering Committee

PNC's Recovery and Resolution Planning Steering Committee (RRPSC) is responsible for overseeing the development and submission of the PNC and PNC Bank resolution plans. The membership of the RRPSC includes senior managers from key enterprise-level functional areas (including Finance, Asset & Liability Management, Information Technology and Independent Risk Management). The RRPSC is supported by members of the Legal Department, and a representative from Internal Audit attends the meetings of the RRPSC. The RRPSC develops and approves the project plan for the development and timely submission of the resolution plans, reviews the resolution plans and recommends approval of the plans to the Executive Committee. The RRPSC also is responsible for ongoing monitoring of developments with the potential to materially impact the resolution plans, and to ensure that the resolution plans are updated in accordance with applicable regulations.

To support the work of the RRPSC, PNC established a Resolution Planning Working Group comprising members of PNC's key functional areas (including the Legal Department), who work with the lines of businesses and shared services areas to collect the data used directly in the resolution plans as well as to collect data and other information supporting the resolution strategies for PNC and PNC Bank.

XI. Material Management Information Systems

The ability of PNC to identify, manage and monitor risk is critical to the safety and soundness of the company. PNC utilizes a variety of management information systems (MIS) in order for its businesses, management and Board of Directors to have timely access to management information and reports in areas of risk management, accounting, finance, operations and regulatory reporting.

Risk Management Systems

PNC utilizes an enterprise-wide risk management framework, including strategies, policies, processes and systems, to identify, assess, measure and manage risks that may significantly affect its financial performance. Among the key risks managed by PNC are credit, liquidity, interest rate, market and operational risk. MIS applications are critical to providing the necessary data, reports and oversight mechanisms for the prudent management and control of these risks. Key MIS applications in place for these purposes include systems that provide aggregate counterparty exposures, information regarding credit concentrations and performance and simulations to examine interest rate risk and other analytics.

Accounting and Financial and Regulatory Reporting Tools

MIS applications are used by accounting teams across the enterprise and centrally within the Finance Department to record transactions, reconcile general ledger balances, ensure the adequacy of financial controls and generate information necessary for the preparation of financial statements and SEC and regulatory reports.

Business Continuity and Disaster Recovery

PNC maintains Business Continuity and Disaster Recovery plans for critical business functions, technology and the related infrastructure to ensure continuity of operations in the event of a business interruption. These business continuity measures are centrally managed through PNC's Business Continuity Program and tested to validate PNC's resiliency capabilities.

XII. High-Level Resolution Strategy Overview

The Bank Plan includes hypothetical strategies for the orderly resolution of PNC Bank under the Federal Deposit Insurance Act (FDI Act). Importantly, these resolution strategies:

- Would allow PNC Bank to be resolved in a manner that is consistent with the FDIC's resolution objectives and that substantially mitigates the potential for systemic risk;
- Would not require extraordinary support from the U.S. government (or any other government); and
- Do not contemplate the use of any provisions of the Orderly Liquidation Authority established by Title II of the Dodd-Frank Act.

In the unlikely event that PNC Bank were to fail and need to be resolved, the FDIC would be appointed as receiver for PNC Bank. PNC has identified and analyzed multiple strategies that the FDIC could then follow to resolve PNC Bank under the FDI Act in a manner that: (i) ensures that depositors have access to their insured deposits within one business day of the bank's failure, (ii) maximizes the net present value return from the sale or disposition of the bank's assets, (iii) minimizes the amount of any loss realized by creditors of the bank in the resolution and (iv) is consistent with the least cost requirement established under section 13(c)(4) of the FDI Act. These strategies include:

- The prompt sale of PNC Bank to another owner after establishment of the FDIC receivership; and
- The establishment by the FDIC of a bridge bank to:
 - Carry on the operations of PNC Bank for a period of time until the sale of the bank's operations to another owner(s) can be completed; or
 - Allow the strategic sale of a geographic portion of PNC Bank's business followed by an initial public offering and secondary offerings to return the remaining core banking franchise to private ownership.

Potential third-party purchasers of PNC Bank, or a geographic portion of its business, from a bridge bank would include a range of global, national or regional financial institutions.

To facilitate a least cost analysis of these resolution strategies, a liquidation strategy for PNC Bank is also prepared, which assumes that, after the FDIC is appointed receiver of PNC Bank, insured deposits would be paid and that the FDIC, as receiver, would liquidate PNC Bank's assets.