

Vision, Values, Results.

TWO THOUSAND FIFTEEN | BNY MELLON ANNUAL REPORT



BNY MELLON | Invested

ACHIEVING OUR VISION OF IMPROVING LIVES THROUGH INVESTING

We play an important role in the financial marketplace and describe ourselves as the Investments Company for the World. Our mission is to help people realize their full potential by leveraging our distinctive expertise to power investment success. In doing so, we seek to improve the lives of countless people globally – a goal that motivates us to be the very best at what we do.

We hold a unique position in the global financial industry. We manage and service assets for financial institutions, corporations and individual investors, delivering data-driven insights and innovative solutions to complex issues and investment excellence to our clients, all of which drive long-term value for our shareholders. In the process, we help companies raise and invest capital to create jobs, drive economic growth and raise living standards. We help governments raise and invest capital to serve citizens. We help institutions and individuals invest to achieve their financial and life goals, including retirement, health care and education needs.

We have a clear strategy that not only positions us to realize our vision but also, we believe, uniquely situates us to be more successful and become an even more important partner to our clients. Our strategy is also designed to help us capture the largest, fastest-growing investment activities, stay ahead of changing marketplace forces and capitalize on new and emerging opportunities.

LIVING OUR VALUES

Our high-performance culture is built on a foundation of enduring values that we commit to live each and every day: client focus, integrity, teamwork and excellence. We put the client at the center of all that we do, acting with the highest ethical standards. We foster collaboration and diversity to empower employees to build relationships and deliver insights. And we aim to set the standard for leading-edge solutions, innovation and continuous improvement.

MANAGING CHANGE THROUGH ALL INVESTMENT CYCLES

The financial services industry has experienced unprecedented change since the 2008 crisis. Globalization, increased regulatory oversight and revolutionary developments in technology have all accelerated the pace of change in the financial markets beyond what Alexander Hamilton, our founder, could have ever imagined. In fact, one could argue that the changes we have experienced in recent history have been greater than any since our company was founded in 1784. As modern-day stewards of our institution, we recognize that in order to thrive, we need to embrace inherent uncertainties, continuously innovate and transform our organization to remain important to our clients and be successful in the competitive marketplace.

Dear Fellow Shareholders, Clients and Employees,

In 2015, we executed against our strategic priorities, and the results were evident in our financial performance.

We are proud of what we accomplished this year as our financial performance improved against many of the measures that matter most. We are meeting our three-year Investor Day goals and positioning the company to be even more effective and successful. Yet, we realize that we have more to do.

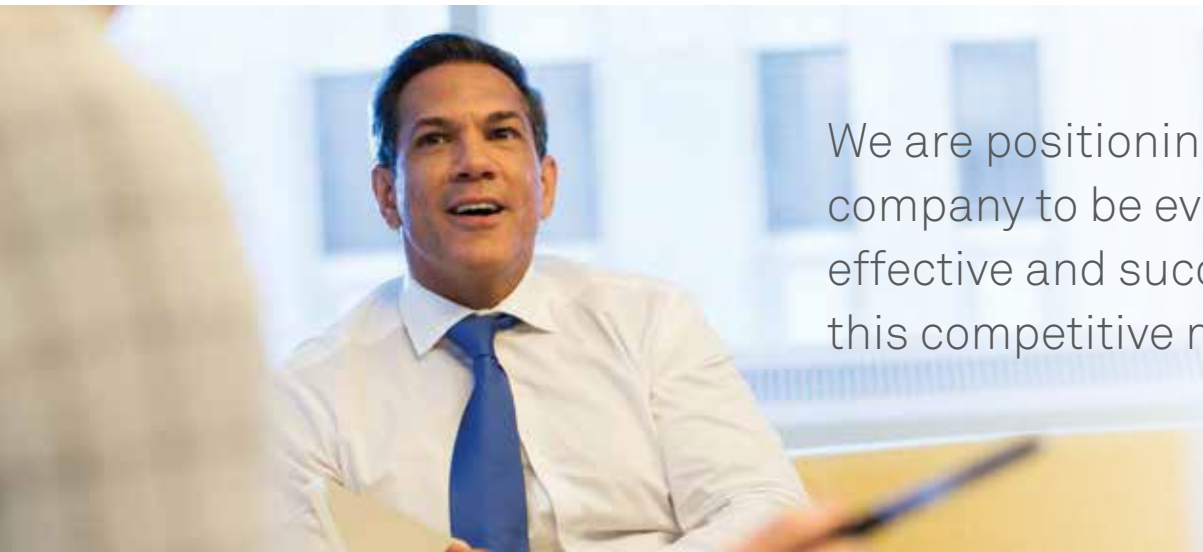
We are energized and up for the challenges our industry is facing, with a strategic plan designed to tackle them and drive success. We remain dedicated to managing our company to create long-term shareholder value regardless of the environment.

Our company, like many other financial services firms, has been grappling with the pace of global change and post-crisis economic, geopolitical and regulatory complexities. These challenges have required us to evolve in order to thrive in the years ahead.

With a largely new leadership team in place, we have been transforming culturally, structurally and operationally. We have re-examined our competitive strengths and strategic priorities, while adapting to changing regulation. We have realigned our organization to focus our energies on what we do best. Importantly, we have also been letting go of what is not working for us through the sale or closing of under-performing businesses. And we have been investing in next-generation technology platforms to simplify our operating environment, lower structural costs and deliver innovative and strategic solutions for our clients.

We are also committed to improving and transforming the client experience. We are convinced that innovating and collaborating with our clients will deliver better, more efficient solutions for them and will accelerate our revenue growth in the years ahead. The world expects us to have the highest levels of service, resiliency and reliability. We are determined to deliver.

We are playing in a competitive space, but we have a distinctive strategy we believe in. And we remain confident that we can deliver on our Investor Day goals.



We are positioning the company to be even more effective and successful in this competitive marketplace.

EARNINGS PER SHARE

INCREASED EARNINGS PER SHARE:

On a GAAP basis, we earned \$2.71 per share in 2015, up 26 percent compared to 2014. On an adjusted basis, we earned \$2.85 per share, up 19 percent from last year's adjusted EPS.ⁱ Nearly all business lines were positive contributors to this improvement.

+19%

\$2.39

\$2.85

■ 2014 ■ 2015

NONINTEREST EXPENSE (\$ IN MILLIONS)

\$10,453

(2%)

REDUCED EXPENSES:

On an adjusted basis, we reduced our expenses 2 percent compared to 2014.ⁱ Our business improvement process and cost discipline more than offset continued strategic investments to enhance client service delivery, improve our technology platforms, and strengthen our risk management, compliance and control functions.

\$10,645

PRE-TAX OPERATING MARGIN

INCREASED PRE-TAX OPERATING MARGIN:

Our adjusted pre-tax operating margin was 31 percent, up 270 basis points versus 2014, and we generated 420 basis points of positive operating leverage.ⁱ

+270 bps

28%

31%

RETURN ON TANGIBLE COMMON EQUITY

INCREASED RETURN ON TANGIBLE COMMON EQUITY (TCE):

We achieved an adjusted return on TCE of 21 percent, up from 18 percent in 2014.ⁱ Return on TCE reflects the value we are creating from the investments we are making.

+310 bps

17.6%

20.7%



Delivering Results in Difficult Market Conditions

It was a challenging revenue environment in 2015. Yet, we remained on track to meet our three-year performance goals set in late 2014 – goals which called for healthy earnings growth not reliant on improved market conditions. Our success during 2015 notwithstanding, we are far from satisfied. Our journey is just beginning.

	Three-year Goals ^{i,ii}	2015 Actuals ⁱ
REVENUE	3.5-4.5%	2%
EPS	7-9%	19%
RETURN ON TANGIBLE COMMON EQUITY	17-19%	21%

Our total shareholder return for 2015 was more than 3 percent, outpacing the S&P Financials Index, which declined 2 percent.

Invested in Our Strategy to Drive Success

We have a clear set of strategic priorities designed to capitalize on our expertise, scale and trust while strengthening the client experience. Our goal: driving economic value for our company and our clients.

DRIVING PROFITABLE REVENUE GROWTH

Our improved performance reflects our heightened focus on profitable and disciplined revenue growth. We are not focused on driving gross revenue and expanding our market share at any cost.

We leverage our insight and expertise to continually create new sources of value for clients and shareholders. At the same time, we are also examining each business and solution we offer to ensure they are working well for us and our clients.

LEVERAGING EXPERTISE AND SCALE

- We are making strategic platform investments in high-growth markets that enable clients to leverage our expertise and scale. In the process, we are improving our clients' efficiency as we lower our costs. We are also improving our services and providing clients with sophisticated tools and insights to manage increased marketplace and regulatory complexities. We are seeing evidence that our solutions are resonating with clients and our investments are paying off. As an example, we won a significant middle-office contract to service approximately \$770 billion in assets for a prominent investment manager.
- We are involving clients in co-creating solutions to meet their evolving needs and incorporating their feedback on the innovative solutions we have under development. We now have six innovation centers in strategic locations globally, including Silicon Valley. They enable us to harness emerging and disruptive technologies and to tap into the best talent in the world for our clients' benefit.

DELIVERING INNOVATIVE STRATEGIC SOLUTIONS TO CLIENTS

- In Investment Management, our efforts to align our investment portfolio with the fastest growing strategies are contributing to our results. Our U.S. retail initiative is focused on extending the reach of our investment strategies to third-party intermediary advisors and growing the Dreyfus distribution platform. Our Wealth Management sales force expansion in the fastest-growing U.S. wealth markets, combined with the broadened service offering from the collaboration with our Pershing subsidiary, has enabled us to grow our private banking offering nationally.
- Our acquisition of Cutwater Asset Management, a U.S.-based fixed-income and solutions specialist, has enabled us to extend our liability-driven investment strategies offered by Insight, our highly successful LDI boutique, into the U.S. market. The acquisition also enhanced Insight's research resources and increased their capacity in the strategies most widely used by our international clients.
- We continue to enhance our collateral management systems and foreign exchange (FX) electronic trading platforms to provide broader capabilities for term financing, securities lending, managing collateral and capturing more FX trading volume.

OUR STRATEGIC PRIORITIES





INCREASING OUR TECHNOLOGICAL EDGE TO REVOLUTIONIZE THE CLIENT EXPERIENCE

Technology is one vital component of our quest to deliver excellence to our clients.

Our technology innovations will make it easier for clients to do business with us. They will also reduce costs for them and us. Our innovations will also enable us to create new solutions for our clients, providing additional revenue streams and enhanced future profitability.

We are boldly advancing our use of new technologies to create a more digital enterprise, ensuring delivery of the next generation of innovations for our clients. We have made significant investments and advances already, but we recognize that we have more work to do.

We are making further investments in the resiliency and reliability of our proprietary systems to help ensure the seamless delivery of critical services to our clients.

The world depends on us to have a highly reliable network. We hold ourselves to that standard.

NEXEN, our next-generation technology platform, enables client and developer innovation and consolidates solutions from BNY Mellon, select third parties and clients onto one secure, intuitive and powerful platform. The open architecture platform will allow us to integrate with complementary third-party providers and fintech solutions emerging in the industry. It will provide a consistent client experience across businesses and regions while offering clients increased flexibility and new opportunities to leverage services and data.

NEXEN embodies innovation, both in its use of leading-edge technology and its establishment of a digital ecosystem for financial services. We believe NEXEN is a real game-changer for us and our clients.

EXECUTING ON OUR BUSINESS IMPROVEMENT PROCESS

Our business improvement process is leveraging our scale and expertise to deliver efficiency benefits to clients and improved results for our company. It is strengthening service quality and client and employee productivity, while reducing risk and structural costs.

Our success on this front is reflected in 1) a better client experience; 2) lower expenses in nearly all categories; and 3) improved margins in our businesses.

Here are some examples of our business improvement process at work:

OPTIMIZING OUR BUSINESS MIX

- Sold Meriten, our German-based boutique
- Realigned our UK transfer agency operating model to improve profitability
- Exited the derivatives clearing business
- Streamlined our APAC Investment Management operations
- Shut down our separately managed account offering for APAC



Redeploying our capital

BOOSTING OUR PRODUCTIVITY AND EFFECTIVENESS

- Simplifying and automating our end-to-end global processes
- Optimizing and streamlining our technology infrastructure; lowering annual infrastructure investment
- Reducing our real estate footprint; balancing our workforce globally
- Analyzing and measuring our service delivery costs to better align our costs with client pricing



Improving service quality, while reducing risk and cost

BEING A STRONG, SAFE, TRUSTED COUNTERPARTY

We recognize the importance of our organization to the financial marketplace. We have maintained the strong capital and liquidity positions and high credit ratings that our clients expect of us. We have also continued to invest in and focus on compliance, risk management and control functions to help ensure our continued safety and soundness.

ACTIONS TO INCREASE OUR SAFETY AND SOUNDNESS

- Reduced and simplified our counterparty exposures
- Implemented a new system to meet Volcker reporting requirements
- Strengthened our capital adequacy process
- Invested in and focused on compliance, risk management and control functions
- Made significant investments in our resolution and recovery plans
- Completed a program to reduce intraday credit risk exposure in our tri-party repo business

GENERATING EXCESS CAPITAL AND DEPLOYING IT EFFECTIVELY

We are using our capital wisely and maintaining a strong balance sheet. Over the last four years, we generated more than \$12 billion of tangible capital. In 2015, we returned \$3.1 billion of that capital to shareholders in the form of share repurchases and dividends even as we have increased our capital to meet new higher regulatory requirements. Our payout ratio in 2015 was 97 percent on an adjusted basis,ⁱ near the top end of our targeted range of approximately 80-100 percent. Over the last four years we have reduced our shares outstanding by 13 percent, which is among the best in the industry.

ATTRACTING, DEVELOPING AND RETAINING TOP TALENT

Our people are our ultimate competitive advantage and we are continuing to invest in them globally. We are focused on attracting, developing and retaining top talent. Our philosophy is simple: if we are committed to attracting and developing highly talented people and helping them reach their full potential, it will manifest itself in positive ways for our clients and all our stakeholders. It is a reliable formula. We do this by providing an inclusive and collaborative culture with unique opportunities to learn, grow and take career ownership.



Invested in Being Socially Responsible


Corporate and personal accountability is at the core of our business strategy. Our Corporate Social Responsibility (CSR) practices help us to earn the trust of our clients and other stakeholders. They also promote transparency and encourage innovation for a better world.

We focus on three CSR strategy pillars:

- **Market Integrity:** As the Investments Company for the World, we play a significant role in helping financial markets remain stable, efficient and resilient. We are committed to a rigorous risk culture across our businesses.
- **Our People:** Our progress on this front was evident in our improvement in employee engagement globally, driven by increases in leadership, performance management, career opportunities and risk management, and continued strengthening in measures of diversity and inclusion.
- **Our World:** We continue to demonstrate our commitment to promoting sustainable practices. We are advocates for the rule of law and recognized leaders on climate change.

Our total employee and company contributions to charities in communities around the world increased in 2015 to nearly \$40 million, including donations to support flood relief efforts in Chennai, India. As part of our Powering Potential philanthropic focus, we continued to work with our non-profit partners to provide workforce development opportunities for underrepresented groups. Over the past six years, we estimate that this support has helped more than 100,000 people around the world.

Reflecting our continued progress in these areas, our company was named for the second consecutive year to the Dow Jones Sustainability World Index (DJSI World), one of the most highly regarded global sustainability indices.

A photograph of a man with short-cropped hair and glasses, wearing a dark suit, white shirt, and patterned tie. He is gesturing with his hands as if speaking. The background is blurred, showing what appears to be an office or conference room setting.

Our ultimate competitive advantage is our people.

Looking Forward

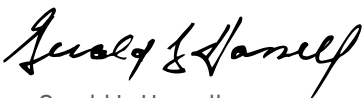
We remain confident in our ability to achieve our three-year performance targets.

Given the challenging market conditions as we begin 2016, it is critical for us to drive efficiencies and stay focused on executing well on our priorities. We continue to identify opportunities to reduce corporate overhead and to leverage scale in operations, technology and distribution – while investing in revenue, technology and regulatory initiatives and delivering a high level of service to our clients.

I want to thank all of our team members and my Executive Committee partners for rising to the occasion to meet the heightened expectations we've set for ourselves, beyond those of our clients and shareholders.

I would also like to thank our Board of Directors for their strategic counsel and for continuing to challenge us to ask more of ourselves and our company. My special thanks to William C. Richardson and Richard J. Kogan, who will not stand for re-election to our board. Both have served our company for nearly 20 years. They have made significant contributions during an extended period of growth, change and strategic realignment, and I am personally grateful for their guidance and support.

Thank you to my fellow shareholders for recognizing our tremendous potential and having faith that we will continue to realize it.

A handwritten signature in black ink, reading "Gerald L. Hassell".

Gerald L. Hassell
Chairman and Chief Executive Officer

*i For a reconciliation and explanation of these non-GAAP measures, see pages 125-131 of our 2015 Annual Report.
ii Three-year performance goal assuming a flat interest-rate scenario.*

About BNY Mellon

WHO WE ARE

BNY Mellon is a global investments company. We service and manage financial assets. Our business model is driven by twin engines of growth that span the entire investment lifecycle: Investment Services and Investment Management. We hold a unique position in the financial services industry due to the breadth and depth of the services we offer to our clients, equipping us with insights that provide us and the clients we serve with distinct competitive advantages.

WHERE WE PLAY

We service financial assets on both the buy side and sell side through Investment Services. We also manage assets through our investment management boutiques within Investment Management, and provide investment advice through our Wealth Management offices located in the fastest-growing U.S. wealth markets.

This broad and diverse set of capabilities is centered on a simple idea – that over time, financial asset growth will exceed economic growth, creating the opportunity for excess return. Given our global scale and diversity, we see more and can deliver more, placing us in a strong position competitively.

Our business model is largely fee-based, with fees representing nearly 80 percent of our revenues. The vast majority of those fees provide recurring revenue streams. Our credit ratings and payout ratio are each among the highest in the industry.

LONG-TERM TRENDS FUEL OUR GROWTH

The drivers that create demand for our business model remain strong. Our businesses benefit from global growth in financial assets, the globalization of the investment process, changes in demographics and the continued evolution of the regulatory landscape – each providing us with opportunities to service and advise clients to enable their investment success.

- Investors are seeking strategies and insights that appropriately balance the risk/return rewards throughout the investment cycle.
- Investors are requiring investment strategies with greater transparency and better risk analytics.
- Individuals increasingly need to save and invest for their long-term needs.
- Cost and capital pressures are compelling financial institutions to seek scalable, more variable-cost servicing models, including technology platforms that offer a variety of applications that can help them succeed with their customers.
- Capital rules and other regulations are dictating that investment managers and capital markets providers become the suppliers of capital.
- Maturing economies are investing in infrastructure and other economic development programs to improve and stimulate their own growth rates.

We are a global leader in almost every aspect of servicing financial assets. Our broad set of capabilities and advanced technology platforms enable speed to market, and drive innovative, cost-effective solutions and growth opportunities unique to BNY Mellon.

We also have a comprehensive array of investment management strategies, with solutions for every risk profile, strategy and asset class. We have become the seventh largest investment manager in the world by working across the investment spectrum to offer clients a diverse portfolio that fosters innovation and financial performance across cycles.

OUR CLIENTS

As a result of our leading and broad-based positions in both Investment Services and Investment Management, our clients comprise financial market leaders – buy side, sell side, governments and market infrastructure providers. Our clients include three-quarters of the Fortune 500, central banks that hold approximately 90 percent of all capital and more than two-thirds of the top 1,000 pension funds. Most of our clients utilize both of our major business lines, giving us dual revenue streams. Approximately 75 percent of our top 100 clients are enterprise clients – utilizing the services of both Investment Services and Investment Management – contributing approximately \$3 billion in revenue.

We are organized to deliver our services through relationship teams focused on key market segments, such as investment managers; insurance companies; banks, broker-dealers and advisors; corporate and public finance; and alternative asset managers. This alignment positions us to develop more sophisticated and innovative solutions.

The breadth of our capabilities and diversity of the clients we serve enable us to leverage our insight and expertise to address their evolving needs. We are collaborating with our clients to develop solutions to better manage their risk positions and make better-informed investment decisions. This means creating and delivering solutions that make a difference to our clients while delivering profitable, risk-adjusted returns and growth for our shareholders.

HOW WE EMPOWER SUCCESS

Our global strategy is powered by a strong and engaged leadership team, board of directors and more than 50,000 investments professionals – experts in their field. We leverage our competitive strengths, which are rooted in the quality of our client experience, our expertise and scale, and the trust we have built over time. We deliver data-driven insights, innovative solutions to complex issues and investment excellence to our clients - performance that also drives long-term value for our shareholders.



Our Competitive Strengths Defined



CLIENT EXPERIENCE

- Flexibility in accessing our investment strategies
- Penetrating resource-intensive distribution channels
- Delivering high-quality products and services



EXPERTISE

- Specialized talent
- Global capabilities
- Breadth of solutions



SCALE

- Providing central investment management distribution and infrastructure
- Delivering productivity and efficiency
- Enabling sustainable cost improvement



TRUST

- Integrity and focus on doing what's right
- Financial strength and stability
- High level of reliability and transparency



Financial Highlights

The Bank of New York Mellon Corporation (and its subsidiaries)

(dollar amounts in millions, except per common share amounts and unless otherwise noted)

	2015	2014
FINANCIAL RESULTS		
Net income applicable to shareholders of The Bank of New York Mellon Corporation	\$ 3,158	\$ 2,567
Preferred stock dividends	(105)	(73)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$ 3,053	\$ 2,494
Earnings per common share – <i>diluted</i> ^(a)	\$ 2.71	\$ 2.15
KEY DATA		
Total revenue	\$ 15,194	\$ 15,692
Total expenses	10,799	12,177
Fee revenue as a percentage of total revenue excluding net securities gains	79%	80%
Percentage of non-U.S. total revenue ^(b)	36%	38%
Assets under management at year end (in billions) ^(c)	\$ 1,625	\$ 1,686
Assets under custody and/or administration at year end (in trillions) ^(d)	\$ 28.9	\$ 28.5
Cash dividends per common share	\$ 0.68	\$ 0.66
BALANCE SHEET AT DECEMBER 31		
Total assets	\$ 393,780	\$ 385,303
Total deposits	279,610	265,869
Total The Bank of New York Mellon Corporation common shareholders' equity	35,485	35,879
CAPITAL RATIOS AT DECEMBER 31		
Consolidated regulatory capital ratios: ^(e)		
Common equity Tier 1 ("CET1") ratio	10.8%	11.2%
Tier 1 capital ratio	12.3%	12.2%
Total (Tier 1 plus Tier 2) capital ratio	12.5%	12.5%
Leverage capital ratio	6.0%	5.6%
BNY Mellon common shareholders' equity to total assets ratio ^(f)	9.0%	9.3%
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP ^(f)	6.5%	6.5%
Selected regulatory capital ratios – fully phased-in – Non-GAAP: ^{(f)(g)}		
Estimated CET1 ratio:		
Standardized Approach	10.2%	10.6%
Advanced Approach	9.5%	9.8%
Estimated supplementary leverage ratio ("SLR") ^(h)	4.9%	4.4%

- (a) Diluted earnings per share under the two class method are determined on the net income applicable to common shareholders of The Bank of New York Mellon Corporation reported on the income statement less earnings allocated to participating securities, and the change in the excess of redeemable value over the fair value of noncontrolling interests.
- (b) Includes fee revenue, net interest revenue and income from consolidated investment management funds, net of net income attributable to noncontrolling interests.
- (c) Excludes securities lending cash management assets and assets managed in the Investment Services business. In 2015, prior periods' AUM was restated to reflect the reclassification of Meriten Investment Management GmbH from the Investment Management business to the Other segment.
- (d) Includes the assets under custody and/or administration of CIBC Mellon Global Securities Services Company, a joint venture.
- (e) The CET1, Tier 1 and Total risk-based regulatory capital ratios are based on Basel III components of capital, as phased-in, and credit risk asset risk-weightings using the U.S. capital rules' advanced approaches framework (the "Advanced Approach"). The leverage capital ratios are based on Basel III's definition of Tier 1 capital, as phased-in, and quarterly average total assets. For additional information on these ratios, see "Capital" beginning on page 58.
- (f) See "Supplemental Information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 125 for a reconciliation of these ratios.
- (g) The estimated fully phased-in CET1 ratios are based on our interpretation of U.S. capital rules, which are being gradually phased in over a multi-year period.
- (h) The estimated fully phased-in SLR is based on our interpretation of the U.S. capital rules. When the SLR becomes effective, we expect to maintain an SLR of over 5%. The minimum required SLR is 3% and there is a 2% buffer, in addition to the minimum, that is applicable to U.S. G-SIBs.

Financial Section

Exhibit 13.1

THE BANK OF NEW YORK MELLON CORPORATION
2015 Annual Report
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The Bank of New York Mellon Corporation (and its subsidiaries)

Financial Summary

<i>(dollar amounts in millions, except per common share amounts and unless otherwise noted)</i>	2015	2014	2013	2012	2011
Year ended Dec. 31					
Fee revenue	\$ 11,999	\$ 12,558	\$ 11,715	\$ 11,286	\$ 11,566
Net securities gains	83	91	141	162	48
Income from consolidated investment management funds	86	163	183	189	200
Net interest revenue	3,026	2,880	3,009	2,973	2,984
Total revenue	15,194	15,692	15,048	14,610	14,798
Provision for credit losses	160	(48)	(35)	(80)	1
Noninterest expense	10,799	12,177	11,306	11,333	11,112
Income from continuing operations before income taxes	4,235	3,563	3,777	3,357	3,685
Provision for income taxes	1,013	912	1,592	842	1,122
Net income	3,222	2,651	2,185	2,515	2,563
Net (income) attributable to noncontrolling interests (a)	(64)	(84)	(81)	(78)	(53)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	3,158	2,567	2,104	2,437	2,510
Preferred stock dividends	(105)	(73)	(64)	(18)	—
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$ 3,053	\$ 2,494	\$ 2,040	\$ 2,419	\$ 2,510
Earnings per diluted common share applicable to common shareholders of The Bank of New York Mellon Corporation:					
Net income applicable to common stock	\$ 2.71	\$ 2.15	\$ 1.73	\$ 2.03	\$ 2.02
At Dec. 31					
Interest-earning assets	\$ 338,955	\$ 317,646	\$ 305,169	\$ 292,887	\$ 259,231
Assets of operations	392,379	376,021	363,244	347,745	314,078
Total assets	393,780	385,303	374,516	359,226	325,425
Deposits	279,610	265,869	261,129	246,095	219,094
Long-term debt	21,547	20,264	19,864	18,530	19,933
Preferred stock	2,552	1,562	1,562	1,068	—
Total The Bank of New York Mellon Corporation common shareholders' equity	35,485	35,879	35,935	35,346	33,408
At Dec. 31					
Assets under management (in billions) (b)	\$ 1,625	\$ 1,686	\$ 1,557	\$ 1,349	\$ 1,226
Assets under custody and/or administration (in trillions) (c)	28.9	28.5	27.6	26.3	25.1
Market value of securities on loan (in billions) (d)	277	289	235	237	266

(a) Primarily attributable to noncontrolling interests related to consolidated investment management funds.

(b) Excludes securities lending cash management assets and assets managed in the Investment Services business. In 2015, prior periods' AUM was restated to reflect the reclassification of Meriten Investment Management GmbH from the Investment Management business to the Other segment. Also excludes assets under management related to Newton's private client business that was sold in 2013.

(c) Includes the assets under custody and/or administration ("AUC/A") of CIBC Mellon Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of \$1 trillion at Dec. 31, 2015, \$1.1 trillion at Dec. 31, 2014, \$1.2 trillion at Dec. 31, 2013 and \$1.1 trillion at Dec. 31, 2012 and Dec. 31, 2011.

(d) Represents the total amount of securities on loan managed by the Investment Services business. Excludes securities for which BNY Mellon acts as an agent, beginning in 2013, on behalf of CIBC Mellon clients, which totaled \$55 billion at Dec. 31, 2015, \$65 billion at Dec. 31, 2014 and \$62 billion at Dec. 31, 2013.

The Bank of New York Mellon Corporation (and its subsidiaries)

Financial Summary (continued)

<i>(dollar amounts in millions, except per common share amounts and unless otherwise noted)</i>	2015	2014	2013	2012	2011
Net income basis:					
Return on common equity (a)	8.6%	6.8%	5.9%	7.0%	7.5%
Non-GAAP adjusted (a)(b)	9.5	8.1	8.3	8.8	9.0
Return on tangible common equity – Non-GAAP (a)(b)	19.7	16.0	15.3	19.3	22.6
Non-GAAP adjusted (a)(b)	20.7	17.6	19.7	21.8	24.5
Return on average assets	0.82	0.67	0.60	0.77	0.86
Pre-tax operating margin (b)	28	23	25	23	25
Non-GAAP adjusted (a)(b)	31	28	28	29	30
Fee revenue as a percentage of total revenue excluding net securities gains	79	80	79	78	78
Percentage of non-U.S. total revenue (c)	36	38	37	37	37
Net interest margin (on a fully taxable equivalent basis)	0.98	0.97	1.13	1.21	1.36
Cash dividends per common share	\$ 0.68	\$ 0.66	\$ 0.58	\$ 0.52	\$ 0.48
Common dividend payout ratio	25%	31% (d)	34% (d)	26%	24%
Common dividend yield	1.6%	1.6%	1.7%	2.0%	2.4%
Closing stock price per common share	\$ 41.22	\$ 40.57	\$ 34.94	\$ 25.70	\$ 19.91
Market capitalization (in billions)	44.7	45.4	39.9	29.9	24.1
Book value per common share – GAAP (a)	32.69	32.09	31.46	30.38	27.62
Tangible book value per common share – Non-GAAP (a)(b)	15.27	14.70	13.95	12.81	10.56
Full-time employees	51,200	50,300	51,100	49,500	48,700
Year-end common shares outstanding (in thousands)	1,085,343	1,118,228	1,142,250	1,163,490	1,209,675
Average total equity to average total assets	10.2%	10.2%	10.6%	11.0%	11.5%
Capital ratios at Dec. 31 (e)					
CET1 ratio (a)(f)(g)	10.8%	11.2%	14.5%	13.5%	13.4%
Tier 1 capital ratio (f)(g)	12.3	12.2	16.2	15.0	15.0
Total (Tier 1 plus Tier 2) capital ratio (f)(g)	12.5	12.5	17.0	16.3	17.0
Leverage capital ratio (g)	6.0	5.6	5.4	5.3	5.2
BNY Mellon shareholders' equity to total assets ratio (a)	9.7	9.7	10.0	10.1	10.3
BNY Mellon common shareholders' equity to total assets ratio (a)	9.0	9.3	9.6	9.8	10.3
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP (a)	6.5	6.5	6.8	6.3	6.4
Estimated CET1 ratio, fully phased-in – Non-GAAP (a)(f)(h):					
Standardized Approach	10.2	10.6	10.6	N/A	N/A
Advanced Approach	9.5	9.8	11.3	9.8	N/A
Estimated SLR, fully phased-in – Non-GAAP (a)(i)	4.9	4.4	N/A	N/A	N/A

- (a) See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 125 for the reconciliation of Non-GAAP measures.
- (b) Non-GAAP excludes net income attributable to noncontrolling interests of consolidated investment management funds, M&I, litigation and restructuring charges, amortization of intangible assets, the impairment charge related to a recent court decision, the gains on the sales of our investment in Wing Hang Bank Limited ("Wing Hang") and our One Wall Street building, the benefit primarily related to a tax carryback claim, the charge related to investment management funds, net of incentives, and the net charge related to the disallowance of certain foreign tax credits, if applicable.
- (c) Includes fee revenue, net interest revenue and income from consolidated investment management funds, net of net income attributable to noncontrolling interests.
- (d) The common dividend payout ratio was 25% for 2014 after adjusting for increased litigation expense, and 26% for 2013 after adjusting for the net impact of the U.S. Tax Court's decisions regarding certain foreign tax credits.
- (e) See "General" on page 4 for a clarification of the references to Basel I and Basel III used throughout this Annual Report.
- (f) Risk-based capital ratios at Dec. 31, 2015 reflect the adoption of new accounting guidance related to Consolidations (ASU 2015-02). See Note 2 for additional information. At Dec. 31, 2014, risk-based capital ratios include the net impact of the total consolidated assets of certain consolidated investment management funds in risk-weighted assets. These assets were not included in prior periods' risk-based ratios. The leverage capital ratio was not impacted.
- (g) At Dec. 31, 2015 and Dec. 31, 2014, the CET1, Tier 1 and Total risk-based consolidated regulatory capital ratios are based on Basel III components of capital, as phased-in, and credit risk asset risk-weightings using the U.S. capital rules' advanced approaches framework (the "Advanced Approach"). The leverage capital ratio at these dates is based on Basel III's definition of Tier 1 capital, as phased-in, and quarterly average total assets. The capital ratios prior to Dec. 31, 2014 are based on Basel I rules (including Basel I Tier 1 common in the case of the CET1 ratio). For additional information on these ratios, see "Capital" beginning on page 58.
- (h) The estimated fully phased-in CET1 ratios (Non-GAAP) are based on our interpretation of the U.S. capital rules, which are being gradually phased-in over a multi-year period. For additional information on these ratios, see "Capital" beginning on page 58.
- (i) The estimated fully phased-in SLR (Non-GAAP) is based on our interpretation of the U.S. capital rules. When the SLR becomes effective, we expect to maintain an SLR of over 5%. The minimum required SLR is 3% and a 2% buffer, in addition to the minimum, that is applicable to U.S. global systemically important banks ("G-SIBs"). For additional information on these Non-GAAP ratios, see "Capital" beginning on page 58.

Results of Operations

General

In this Annual Report, references to “our,” “we,” “us,” “BNY Mellon,” the “Company” and similar terms refer to The Bank of New York Mellon Corporation and its consolidated subsidiaries. The term “Parent” refers to The Bank of New York Mellon Corporation but not its subsidiaries.

BNY Mellon’s actual results of future operations may differ from those estimated or anticipated in certain forward-looking statements contained herein for reasons which are discussed below and under the heading “Forward-looking Statements.” When used in this Annual Report, words such as “estimate,” “forecast,” “project,” “anticipate,” “target,” “expect,” “intend,” “continue,” “seek,” “believe,” “plan,” “goal,” “could,” “should,” “would,” “may,” “will,” “strategy,” “synergies,” “opportunities,” “trends,” and words of similar meaning, may signify forward-looking statements.

Certain business terms and commonly used acronyms used in this Annual Report are defined in the Glossary and Acronyms sections.

The following should be read in conjunction with the Consolidated Financial Statements included in this report. Investors should also read the section titled “Forward-looking Statements.”

How we reported results

Throughout this Annual Report, certain measures, which are noted as “Non-GAAP financial measures,” exclude certain items or otherwise include components that differ from GAAP. BNY Mellon believes that these measures are useful to investors because they permit a focus on period-to-period comparisons using measures that relate to our ability to enhance revenues and limit expenses in circumstances where such matters are within our control. We also present the net interest revenue and net interest margin on an FTE basis. We believe that this presentation allows for comparison of amounts arising from both taxable and tax-exempt sources and is consistent with industry practice. Certain immaterial reclassifications have been made to prior periods to place them on a basis comparable with the current period presentation. See “Supplemental information - Explanation of GAAP and Non-GAAP

financial measures” beginning on page 125 for a reconciliation of financial measures presented in accordance with GAAP to adjusted Non-GAAP financial measures.

In the second quarter of 2015, BNY Mellon elected to early adopt the new accounting guidance included in ASU 2015-02, “Consolidation (Topic 810): Amendments to the Consolidation Analysis” retrospectively to Jan. 1, 2015. As a result, we restated the first quarter 2015 financial statements. See Note 2 of the Notes to Consolidated Financial Statements for additional information.

When in this Annual Report we refer to BNY Mellon’s or our bank subsidiary’s “Basel I” capital measures, we mean those capital measures, as calculated under the Board of Governors of the Federal Reserve System’s (the “Federal Reserve”) risk-based capital rules that are based on the 1988 Basel Accord, which is often referred to as “Basel I.” When we refer to BNY Mellon’s “Basel III” capital measures (e.g., CET1), we mean those capital measures as calculated under the U.S. capital rules.

Overview

The Bank of New York Mellon Corporation (BNY Mellon) was the first company listed on the New York Stock Exchange (NYSE symbol: BK). With a rich history of maintaining our financial strength and stability through all business cycles, BNY Mellon is a global investments company dedicated to improving lives through investing.

We manage and service assets for financial institutions, corporations and individual investors in 35 countries and more than 100 markets. As of Dec. 31, 2015, BNY Mellon had \$28.9 trillion in assets under custody and/or administration, and \$1.6 trillion in assets under management.

BNY Mellon is focused on enhancing our clients’ experience by leveraging our scale and expertise to deliver innovative and strategic solutions for our clients, building trusted relationships that drive value. We hold a unique position in the global financial services industry. We service both the buy-side and sell-side, providing us with unique marketplace insights that enable us to support our clients’ success.

BNY Mellon's businesses benefit from the global growth in financial assets, the globalization of the investment process, changes in demographics and the continued evolution of the regulatory landscape - each providing us with opportunities to advise and service clients.

Strategy and priorities

Our strategy is designed to create economic value by differentiating our services to create competitive advantages that will deliver value to our clients and shareholders.

In late 2014, we shared our three-year strategic plan at our Investor Day - a plan designed to set us on a path of continuous improvement as we transform our organization to drive growth across the enterprise and power investment success for our clients.

In 2015, we demonstrated that our strategic plan has positioned us to perform well. Even with geopolitical instability, emerging market weakness, higher regulatory compliance requirements and low interest rates, we executed on our strategic priorities and focused on what was within our control.

Our top priorities, as outlined in our strategic plan, include:

- driving profitable revenue growth by leveraging our expertise and scale to offer broad-based, innovative solutions to clients;
- executing our business improvement processes to increase productivity and effectiveness while controlling expenses and enhancing our efficiency;
- being a strong, trusted counterparty by maintaining our safety and soundness, low-risk profile, and strong liquidity and capital positions;
- generating excess capital and deploying it effectively; and
- attracting, developing and retaining top talent.

Key initiatives

- Enhancing the Client Experience

In 2015, we continued to focus on deepening our client relationships by leveraging our expertise and scale. We are dedicated to innovation and developing strategic solutions that enable our clients' success.

We have made strategic platform investments to enhance our clients' experience and we are working with them to determine how we can add further value to their experience while ensuring we also receive value for the solutions we deliver. Importantly, we remain committed to the highest levels of service, reliability and resiliency as we advance the use of new technologies to create a more digital enterprise. While we made progress against our priorities, we realize that there is still untapped potential for improvement in 2016 and beyond.

- Leveraging Technology to Drive Investment Success

A key, ongoing initiative is revolutionizing our clients' experience by investing in best-in-class technology solutions to enable investment success.

With a history of innovation in financial services, we have kept close to emerging trends in digital technology by establishing innovation centers in six locations globally, including Silicon Valley. Our investments in Silicon Valley and in digital "hubs" globally have allowed us to tap great talent, exposing us to new digital methodologies and standards.

This year we launched our next generation digital technology ecosystem called NEXEN which generates predictive data and insights to anticipate client needs and enhance their experience. This is a gateway that utilizes leading-edge "open-source" technology to provide our clients with one source for all their transactional and data needs from us and select third parties - creating a powerful, cohesive experience.

We are the first in the trust bank space to embrace and deploy this leading edge "open source" platform strategy. We believe that this capability, combined with Digital Pulse, our "Big Data" analytics platform, and our private cloud, provide a holistic and powerful way for our clients to conduct business with us and deliver excellence to their clients.

While we are in the early stages of our deployment, we will continue to add capabilities, enabling clients to lower costs, reduce capital investments and improve profitability. Importantly, we will be able to co-create applications with our clients to offer new business solutions and insights much faster than we could before, providing our clients with a competitive advantage.

- Executing our Business Improvement Process

In addition to the work we have done to simplify and further automate, optimize and streamline our global processes, we have reduced our real estate footprint, creating significant structural expense savings. We relocated to new, more cost-efficient headquarters in New York City and continued to rationalize our real estate portfolio globally.

As part of this effort, we have continued to build out our Global Delivery Centers in lower-cost locations to allow for further expansion and position migrations. In 2015, we moved more than 1,000 full-time positions to these cost-effective locations.

Within Investment Services, we have:

- continued to transform our company through a continuous business improvement process, which is helping to fund new client solutions and regulatory change and transformation initiatives, while increasing efficiency and improving our operating margin;
- introduced a more robust data governance framework designed to strengthen our data collection and analytical capabilities which are important to meet our regulatory requirements globally. We are also making significant investments in our resolution and recovery plans;
- examined and enhanced our vendor management practices following the SunGard incident, incorporating and sharing with our clients lessons learned;
- established significant strategic partnerships, leveraging our strategic platform capabilities to help clients lower their costs, reduce capital investments and improve profitability;
- formed a Client Pricing Strategy group to analyze and measure service delivery costs to better align our costs with client pricing; and
- enhanced our comprehensive collateral services and foreign exchange trading platforms to provide clients with broader capabilities - all to drive efficiencies, capture more volume and improve opportunities for future revenue growth.

Within Investment Management, we have:

- extended our US retail distribution reach by focusing on intermediary channels, through

realigning and bolstering our sales, marketing and product functions;

- completed the expansion of our Wealth Management sales force in targeted U.S. markets;
- continued to leverage our Wealth Management solutions by offering them to our Pershing clients; and
- enhanced our liability-driven investment strategies in the U.S. market through our Cutwater acquisition.

Increasing Safety and Soundness

As we execute our strategy, we are continuing to drive efficient regulatory compliance for us and for our clients globally. Excellence in risk management is essential, and we continue to invest in systems to comply with evolving global regulations. Maintaining our strong capital position is a priority as we seek to maintain our balance sheet strength and deploy our capital efficiently to fuel future growth and to return value to shareholders.

With respect to our CET1 ratio, which is a measure of our financial strength, we expect to maintain our ratio at least 100 basis points above the regulatory minimum requirement plus the applicable buffers. As a U.S. G-SIB, we will be subject to the Supplementary Leverage Ratio. We currently expect to maintain a ratio of at least 50 to 70 basis points above the regulatory minimum requirement plus the applicable buffers.

As we discussed at our Investor Day, our key growth initiatives -- including driving profitable revenue growth, lowering costs and reducing risks -- will extend into the foreseeable future as we continue to transform our company to remain a global leader in investment services and investment management.

Key 2015 and subsequent events

Agreement to acquire Atherton Lane Advisers, LLC

In January 2016, BNY Mellon signed a definitive agreement to acquire the assets of Menlo Park, CA-based Atherton Lane Advisers, LLC. With approximately \$2.7 billion in assets under management, Atherton Lane Advisers is one of Silicon Valley's premier independent investment managers serving approximately 700 high net-worth

clients. The transaction is expected to close in the second quarter of 2016.

Impairment charge related to court decision on Sentinel Management Group, Inc.

In January 2016, the United States Seventh Circuit Court of Appeals entered a decision with respect to the status of BNY Mellon's \$312 million secured loan to Sentinel Management Group, Inc. ("Sentinel"), which filed for bankruptcy in 2007. The Seventh Circuit invalidated our lien on the collateral supporting the loan but rejected the trustee's request for equitable subordination. The impact of this decision is that we now have an unsecured claim in the Sentinel bankruptcy. As a result, BNY Mellon recorded an impairment charge in the fourth quarter of 2015 of \$170 million on a pre-tax basis, or \$106 million on an after-tax basis.

Corporate headquarters

In October 2015, BNY Mellon relocated its corporate headquarters to Brookfield Place in lower Manhattan. This move is part of the Company's previously-announced decision to consolidate and streamline operations and reduce structural costs. The previous corporate headquarters was located at One Wall Street in lower Manhattan and was sold in the third quarter of 2014.

SunGard matter

In August 2015, the SunGard U.S. InvestOne fund accounting platform environment we use to process net asset values ("NAV's") became corrupted during an operating system upgrade undertaken by SunGard, impacting certain mutual fund, exchange-traded fund and unregistered collective fund clients. The resulting outage delayed or prevented us from being able to deliver system-generated NAVs and client reports to these clients in a timely manner during the week of Aug. 24-28, 2015. During the period when system-generated NAVs were delayed, we were generally able to provide our fund clients with daily NAVs using alternative procedures, as directed by them. System-generated NAVs returned to daily production on Monday, Aug. 31, 2015.

Sale of Meriten Investment Management

In July 2015, BNY Mellon completed the sale of Meriten Investment Management GmbH ("Meriten"),

a German-based investment management boutique with approximately \$23 billion in assets under management.

Outsourcing agreement

In June 2015, BNY Mellon was selected to provide portfolio and fund accounting services to support T. Rowe Price's investment operation, which had assets valued in excess of \$770 billion as of March 31, 2015. In addition to supporting T. Rowe Price's portfolio accounting services through our Eagle/OnCore platform, BNY Mellon is providing a range of fund accounting and administration services.

In August 2015, approximately 220 T. Rowe Price associates – the majority based in the Baltimore area – became BNY Mellon employees.

Settlement agreement with the UK Financial Conduct Authority

The UK Financial Conduct Authority (the "FCA") has been conducting an investigation into compliance by subsidiaries of the Company, The Bank of New York Mellon, London Branch and The Bank of New York Mellon (International) Limited (the "firms"), with the FCA's Client Assets Sourcebook ("CASS Rules"). On April 15, 2015, the firms reached a settlement agreement with the FCA in which the firms agreed to pay a fine in the amount of £126 million (or approximately \$190 million). This amount was fully covered by pre-existing Company legal reserves.

The firms engaged in a remediation process and put in place a framework of new and improved policies and operational procedures to reinforce their compliance with CASS Rules. The firms' clients suffered no loss as a result of the identified areas of CASS non-compliance.

Capital plan, share repurchase program and issuance of preferred stock

In March 2015, BNY Mellon received confirmation that the Federal Reserve did not object to our 2015 comprehensive capital plan submitted in connection with the Federal Reserve's Comprehensive Capital Analysis and Review ("CCAR"). The board of directors subsequently approved the repurchase of up to \$3.1 billion worth of common stock over a five-quarter period beginning in the second quarter of

2015 and continuing through the second quarter of 2016, including employee benefit plan repurchases. Of the \$3.1 billion authorization, common stock repurchases of \$700 million were contingent on a prior issuance of \$1 billion of qualifying preferred stock. In conjunction with our capital plan, in April 2015, we completed a \$1 billion offering of preferred stock. For additional information on our preferred stock, see Note 15 of the Notes to Consolidated Financial Statements.

We repurchased 45.3 million common shares for \$2.0 billion in 2015 under the current program, which began in the second quarter of 2015 and continues through the second quarter of 2016, including employee benefit plan repurchases. We expect to continue to repurchase shares in the first half of 2016 under the 2015 capital plan.

Settlement of standing instruction foreign exchange related actions

In March 2015, the Company reached settlement agreements with the U.S. Department of Justice, the New York Attorney General, the U.S. Department of Labor, the U.S. Securities and Exchange Commission and private customer class plaintiffs. BNY Mellon agreed to pay a total of \$714 million. These settlements fully resolve the lawsuits and enforcement matters pursued by these parties relating to certain of the standing instruction foreign exchange services that BNY Mellon provided to custody clients prior to early 2012.

In May 2015, BNY Mellon reached a settlement in a standing instruction foreign exchange-related putative class action lawsuit asserting securities law violations. BNY Mellon paid \$180 million, which resulted in a pre-tax charge of \$50 million in the second quarter of 2015. Collectively, these settlements, which are final except for an agreement in principle with the SEC staff, effectively resolves virtually all of the pending foreign exchange-related actions, with the exception of two lawsuits brought by individual customers and a derivative lawsuit.

Real estate fund administration outsourcing

In February 2015, BNY Mellon announced an outsourcing agreement with Deutsche Asset & Wealth Management. Under the agreement, BNY Mellon will provide direct real estate and infrastructure fund finance, fund accounting, asset management

accounting, and client and financial reporting functions for Deutsche Asset & Wealth Management's approximately \$46 billion in assets under administration.

Acquisition of Cutwater Asset Management

In January 2015, BNY Mellon completed the acquisition of Cutwater Asset Management ("Cutwater"), a U.S.-based fixed income and solutions specialist with approximately \$23 billion in assets under management at acquisition. Cutwater will work closely with Insight Investment, one of our investment management boutiques.

Summary of financial highlights

We reported net income applicable to common shareholders of \$3.1 billion, or \$2.71 per diluted common share, in 2015, or \$3.2 billion, or \$2.85 per diluted common share, adjusted for the impairment charge related to a recent court decision, litigation and restructuring charges. In 2014, net income applicable to common shareholders was \$2.5 billion, or \$2.15 per diluted common share, or \$2.8 billion, or \$2.39 per diluted common share, adjusted for gains related to the sales of our equity investment in Wing Hang and our One Wall Street building, the benefit primarily related to a tax carryback claim, litigation and restructuring charges and the charge related to investment management funds, net of incentives. See "Supplemental information - Explanation of GAAP and Non-GAAP financial measures" beginning on page 125 for the reconciliation of Non-GAAP measures.

Highlights of 2015 results

- AUC/A totaled \$28.9 trillion at Dec. 31, 2015 compared with \$28.5 trillion at Dec. 31, 2014. The increase of 1% primarily reflects net new business, partially offset by the unfavorable impact of a stronger U.S. dollar and lower market values. (See "Investment Services business" beginning on page 26).
- AUM totaled \$1.63 trillion at Dec. 31, 2015 compared with \$1.69 trillion at Dec. 31, 2014. The decrease of 4% primarily resulted from the unfavorable impact of a stronger U.S. dollar, net outflows and lower market values, partially offset by the January 2015 acquisition of Cutwater Asset Management. AUM excludes securities lending cash management assets and assets

managed in the Investment Services business. Additionally, in 2015, prior period AUM was restated to reflect the reclassification of Meriten from the Investment Management business to the Other segment. (See “Investment Management business” beginning on page 22).

- Investment services fees totaled \$7.1 billion in 2015, an increase of 2% compared with \$6.9 billion in 2014. Higher asset servicing fees, reflecting growth in the Global Collateral Services, Broker-Dealer Services and Asset Servicing businesses, and higher clearing services fees, primarily driven by higher mutual fund fees, were partially offset by lower treasury services fees. (See “Investment Services business” beginning on page 26).
- Investment management and performance fees totaled \$3.4 billion in 2015 compared with \$3.5 billion in 2014, a decrease of 2%, or an increase of 3% on a constant currency basis (Non-GAAP). The increase on a constant currency basis (Non-GAAP) primarily reflects the impact of the January 2015 acquisition of Cutwater and strategic initiatives, lower money market fee waivers and higher equity market values, partially offset by the impact of the July 2015 sale of Meriten and lower performance fees. (See “Investment Management business” beginning on page 22).
- Foreign exchange and other trading revenue totaled \$768 million in 2015 compared with \$570 million in 2014. Foreign exchange revenue totaled \$743 million in 2015, an increase of 29% compared with \$578 million in 2014. The increase primarily reflects lower volumes in standing instruction programs, which were more than offset by higher volumes in the other trading programs, higher volatility and the impact of hedging activity for foreign currency placements. (See “Fee and other revenue” beginning on page 11).
- Financing-related fees totaled \$220 million in 2015 compared with \$169 million in 2014. The increase primarily reflects fees related to secured intraday credit provided to dealers in connection with their tri-party repo activity and higher underwriting fees. (See “Fee and other revenue” beginning on page 11).
- Investment and other income totaled \$316 million in 2015 compared with \$1.2 billion in 2014. The decrease primarily reflects gains on the sales of our equity investment in Wing Hang and our One Wall Street building in 2014. (See “Fee and other revenue” beginning on page 11).
- Net interest revenue totaled \$3.0 billion in 2015 compared with \$2.9 billion in 2014. The increase primarily reflects the shift out of cash and into securities and loans, lower interest expense on deposits and higher average interest-earning assets driven by higher deposits, partially offset by lower accretion. Net interest margin (FTE) was 0.98% in 2015 compared with 0.97% in 2014. The increase reflects lower interest rates on deposits. (See “Net interest revenue” beginning on page 14).
- The provision for credit losses was \$160 million in 2015 and a credit of \$48 million in 2014. The provision in 2015 is primarily driven by the impairment charge related to a recent court decision. (See “Asset quality and allowance for credit losses” beginning on page 47).
- Noninterest expense totaled \$10.8 billion in 2015 compared with \$12.2 billion in 2014. The decrease reflects lower expenses in nearly all categories, except incentives and software. The lower expenses primarily reflect the favorable impact of a stronger U.S. dollar, lower consulting and legal expenses and the benefit of the business improvement process which focuses on reducing structural costs. (See “Noninterest expense” beginning on page 17).
- The provision for income taxes was \$1.0 billion (23.9% effective tax rate) in 2015. (See “Income taxes” on page 18).
- The net unrealized pre-tax gain on the investment securities portfolio was \$357 million at Dec. 31, 2015 compared with \$1.3 billion at Dec. 31, 2014. The decrease was primarily driven by higher market interest rates. (See “Investment securities” beginning on page 41).
- Our estimated CET1 ratio (Non-GAAP) calculated under the Advanced Approach on a fully phased-in basis was 9.5% at Dec. 31, 2015 and 9.8% at Dec. 31, 2014. The decrease primarily reflects higher RWA resulting from an increase in operational risk, driven by external financial services industry losses, and the impact of no longer using the simple VaR methodology, partially offset by the deconsolidation of certain investment management funds. Our estimated CET1 ratio (Non-GAAP) calculated under the Standardized Approach on a fully phased-in basis

was 10.2% at Dec. 31, 2015 and 10.6% at Dec. 31, 2014. (See “Capital” beginning on page 58).

Results for 2014

In 2014 we reported net income applicable to common shareholders of BNY Mellon of \$2.5 billion, or \$2.15 per diluted common share. These results were primarily driven by:

- Investment services fees totaled \$6.9 billion in 2014, an increase of 2% compared with \$6.8 billion in 2013. Higher asset servicing fees, reflecting organic growth, higher market values, higher collateral management fees in Global Collateral Services and net new business, as well as higher clearing services fees, primarily driven by higher mutual fund and asset-based fees, were partially offset by lower Corporate Trust fees and lower corporate actions and dividend fees in Depository Receipts.
- Investment management and performance fees totaled \$3.5 billion in 2014, a 3% increase compared with \$3.4 billion in 2013. The increase was primarily driven by higher equity market values, net new business and the favorable impact of a weaker U.S. dollar, partially offset by higher money market fee waivers and lower performance fees.
- Foreign exchange and other trading revenue totaled \$570 million in 2014, compared with \$674 million in 2013. The decrease reflects lower volatility, partially offset by higher volumes.
- The provision for credit losses was a credit of \$48 million in 2014 compared with a credit of \$35 million in 2013. The credit in 2014 is primarily driven by the continued improvement in the credit quality of the loan portfolio.
- Noninterest expense totaled \$12.2 billion in 2014 compared with \$11.3 billion in 2013. The increase primarily reflects higher litigation expense and restructuring charges, partially offset by lower staff expense.

- The provision for income taxes was \$912 million (25.6% effective tax rate) in 2014 including a net benefit primarily related to litigation expense and the approval of a tax carryback claim, offset by the sales of our investment in Wing Hang and our One Wall Street building.

Results for 2013

In 2013 we reported net income applicable to common shareholders of BNY Mellon of \$2.0 billion, or \$1.73 per diluted common share. These results were primarily driven by:

- Investment services fees totaled \$6.8 billion reflecting higher core asset servicing fees driven by organic growth and higher market values, higher clearing services fees and higher Depository Receipts revenue, partially offset by lower Corporate Trust fees reflecting the continued run-off of high margin structured debt securitizations.
- Investment management and performance fees totaled \$3.4 billion reflecting higher equity market values, net new business and the full-year impact of the acquisition of the remaining 50% interest in Meriten, partially offset by the unfavorable impact of the stronger U.S. dollar and higher money market fee waivers.
- Foreign exchange and other trading revenue totaled \$674 million reflecting higher volumes and volatility in foreign exchange revenue, partially offset by lower fixed income trading revenue.
- The provision for credit losses was a credit of \$35 million primarily driven by a broad improvement in the credit quality of the loan portfolio and a reduction in our qualitative allowance.
- Noninterest expense totaled \$11.3 billion reflecting lower litigation expense, primarily offset by higher staff, software and our branding initiatives.

Fee and other revenue

Fee and other revenue				2015	2014
				vs.	vs.
<i>(dollars in millions, unless otherwise noted)</i>	2015	2014	2013	2014	2013
Investment services fees:					
Asset servicing (a)	\$ 4,187	\$ 4,075	\$ 3,905	3 %	4%
Clearing services	1,375	1,335	1,264	3	6
Issuer services	978	968	1,090	1	(11)
Treasury services	555	564	554	(2)	2
Total investment services fees	7,095	6,942	6,813	2	2
Investment management and performance fees	3,438	3,492	3,395	(2)	3
Foreign exchange and other trading revenue	768	570	674	35	(15)
Financing-related fees	220	169	172	30	(2)
Distribution and servicing	162	173	180	(6)	(4)
Investment and other income	316	1,212	481	N/M	N/M
Total fee revenue	11,999	12,558	11,715	(4)	7
Net securities gains	83	91	141	N/M	N/M
Total fee and other revenue	\$ 12,082	\$ 12,649	\$ 11,856	(4)%	7%
Fee revenue as a percentage of total revenue excluding net securities gains	79%	80%	79%		
AUM at period end (in billions) (b)	\$ 1,625	\$ 1,686	\$ 1,557	(4)%	8%
AUC/A at period end (in trillions) (c)	\$ 28.9	\$ 28.5	\$ 27.6	1 %	3%

(a) Asset servicing fees include securities lending revenue of \$176 million in 2015, \$158 million in 2014 and \$155 million in 2013.

(b) Excludes securities lending cash management assets and assets managed in the Investment Services business. In 2015, prior periods' AUM were restated to reflect the reclassification of Meriten from the Investment Management business to the Other segment.

(c) Includes the AUC/A of CIBC Mellon of \$1.0 trillion at Dec. 31, 2015, \$1.1 trillion at Dec. 31, 2014 and \$1.2 trillion at Dec. 31, 2013.

Fee and other revenue

Fee and other revenue totaled \$12.1 billion in 2015, a decrease of 4% compared with \$12.6 billion in 2014. The decrease primarily reflects the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, both recorded in 2014, and lower investment management and performance fees, partially offset by higher foreign exchange and other trading revenue, asset servicing fees, financing-related fees and clearing services fees.

Investment services fees

Investment services fees were impacted by the following compared with 2014:

- Asset servicing fees increased 3% primarily reflecting growth in global collateral services, broker-dealer services and asset servicing, partially offset by the unfavorable impact of a stronger U.S. dollar.
- Clearing services fees increased 3% primarily driven by higher mutual fund and asset-based fees, partially offset by lost business.

- Issuer services fees increased 1% primarily reflecting higher Corporate Trust fees, partially offset by lower fees in Depository Receipts driven by fewer corporate actions.
- Treasury services fees decreased 2% primarily reflecting lower lockbox fees and higher compensating balance credits provided to clients, partially offset by higher payment volumes.

See the "Investment Services business" in "Review of businesses" for additional details.

Investment management and performance fees

Investment management and performance fees totaled \$3.4 billion in 2015, a decrease of 2%, or an increase of 3% on a constant currency basis (Non-GAAP), compared with 2014. The increase primarily resulted from the impact of the January 2015 acquisition of Cutwater and strategic initiatives, lower money market fee waivers and higher equity market values, partially offset by the impact of the July 2015 sale of Meriten and lower performance fees. Performance

fees were \$97 million in 2015 and \$115 million in 2014.

Total AUM for the Investment Management business was \$1.6 trillion at Dec. 31, 2015, a decrease compared with \$1.7 trillion at Dec. 31, 2014. The decrease reflects the unfavorable impact of a stronger U.S. dollar, net outflows and lower market values, partially offset by the January 2015 acquisition of Cutwater. Net long-term outflows in 2015 totaled \$17 billion driven by active equity and index investments, partially offset by continued strength in liability-driven investments. Net short-term outflows were \$18 billion in 2015.

See the “Investment Management business” in “Review of businesses” for additional details regarding the drivers of investment management and performance fees.

Foreign exchange and other trading revenue

Foreign exchange and other trading revenue			
<i>(in millions)</i>	2015	2014	2013
Foreign exchange	\$ 743	\$ 578	\$ 608
Other trading revenue (loss)	25	(8)	66
Total foreign exchange and other trading revenue	\$ 768	\$ 570	\$ 674

Foreign exchange and other trading revenue increased \$198 million, or 35%, from \$570 million in 2014. In 2015, foreign exchange revenue totaled \$743 million, an increase of 29% compared with \$578 million in 2014. The increase primarily reflects lower volumes in standing instruction programs, which were more than offset by higher volumes in the other trading programs, higher volatility and the impact of hedging activity for foreign currency placements. Total other trading revenue was \$25 million in 2015, compared to a loss of \$8 million in 2014. The increase primarily reflects higher fixed income trading and losses on hedging activities within a boutique recorded in 2014. Foreign exchange revenue is reported in the Investment Services business and the Other segment. Other trading revenue is reported in all three business segments.

Our foreign exchange trading generates revenues which are influenced by the volume of client transactions and the spread realized on these transactions. Revenues are impacted by market pressures which continue to be increasingly

competitive. The level of volume and spreads is affected by market volatility, the level of cross-border assets held in custody for clients, the level and nature of underlying cross-border investments and other transactions undertaken by corporate and institutional clients. These revenues also depend on our ability to manage the risk associated with the currency transactions we execute and program pricing.

Generally speaking, custody clients enter into foreign exchange transactions in one of three ways: negotiated trading with BNY Mellon, BNY Mellon’s standing instruction programs, or transactions with third-party foreign exchange providers. Negotiated trading generally refers to orders entered by the client or the client’s investment manager, with all decisions related to the transaction, usually on a transaction-specific basis, made by the client or its investment manager. The preponderance of the notional value of our trading volume with clients is in negotiated trading. Our standing instruction programs, which are Session Range and our standard Defined Spread program, provide custody clients and their investment managers with an end-to-end solution that allows them to shift to BNY Mellon the cost, management and execution risk, often in small transactions or transactions in restricted and difficult to trade currencies.

A shift by custody clients from the standing instruction programs to other trading options combined with competitive market pressures on the foreign exchange business is negatively impacting our foreign exchange revenue. For the year ended Dec. 31, 2015, our total revenue for all types of foreign exchange trading transactions was \$743 million, or approximately 5% of our total revenue. In 2015, approximately 33% of our foreign exchange revenue resulted from foreign exchange transactions undertaken through our standing instruction programs, compared with 35% in 2014 and 41% in 2013.

Financing-related fees

Financing-related fees, which are primarily reported in the Other segment, include capital markets fees, loan commitment fees and credit-related fees. Financing-related fees totaled \$220 million in 2015 and \$169 million in 2014. The increase primarily reflects fees related to secured intraday credit provided to dealers in connection with their tri-party repo activity and higher underwriting fees.

Distribution and servicing fees

Distribution and servicing fee revenue earned from mutual funds are primarily based on average assets in the funds and the sales of funds that we manage or administer and are primarily reported in the Investment Management business. These fees, which include 12b-1 fees, fluctuate with the overall level of net sales, the relative mix of sales between share classes, the funds' market values and money market fee waivers.

The \$11 million decrease in distribution and servicing fee revenue compared with 2014 primarily reflects the unfavorable impact of a stronger U.S. dollar, partially offset by lower money market fee waivers. The impact of distribution and servicing fees on income in any one period is partially offset by distribution and servicing expense paid to other financial intermediaries to cover their costs for distribution and servicing of mutual funds. Distribution and servicing expense is recorded as noninterest expense on the income statement.

Investment and other income

Investment and other income <i>(in millions)</i>	2015	2014	2013
Corporate/bank-owned life insurance	\$ 139	\$ 131	\$ 144
Expense reimbursements from joint venture	63	55	42
Lease residual gains	45	49	18
Seed capital gains (a)	35	20	34
Private equity gains	1	6	6
Asset-related gains	—	872	71
Transitional services agreements	—	—	11
Equity investment (loss) revenue	(19)	1	98
Other income	52	78	57
Total investment and other income	\$ 316	\$1,212	\$ 481

(a) Does not include the gain (loss) on seed capital investments in consolidated investment management funds which are reflected in operations of consolidated investment management funds, net of noncontrolling interests.

Investment and other income includes corporate and bank-owned life insurance contracts, expense reimbursements from our CIBC Mellon joint venture, lease residual gains, seed capital gains and losses, gains and losses on private equity investments, asset-related gains and losses, transitional services agreements, equity investment revenue and loss and other income. Expense reimbursements from our CIBC Mellon joint venture relate to expenses incurred by BNY Mellon on behalf of the CIBC

Mellon joint venture. Asset-related gains include real estate, loans and other asset dispositions. Transitional services agreements primarily relate to the Shareowner Services business, which was sold on Dec. 31, 2011. Other income primarily includes foreign currency remeasurement gain (loss), other investments and various miscellaneous revenues. Investment and other income was \$316 million in 2015 compared with \$1,212 million in 2014. The decrease primarily reflects the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, both recorded in 2014.

Net securities gains

Net securities gains totaled \$83 million in 2015 compared with \$91 million in 2014, reflecting the rebalancing of the investment securities portfolio.

2014 compared with 2013

Fee and other revenue totaled \$12.6 billion in 2014 compared with \$11.9 billion in 2013. The increase was primarily driven by higher investment and other income, asset servicing revenue and investment management and performance fees, partially offset by lower issuer services revenue and foreign exchange and other trading revenue.

Investment and other income increased \$731 million compared with 2013 primarily reflecting the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, partially offset by lower equity investment revenue.

Investment services fees increased 2% compared with 2013 primarily reflecting higher asset servicing fees, driven by organic growth, higher market values and net new business, and higher clearing services fees, primarily driven by higher mutual fund and asset-based fees, partially offset by higher money market fee waivers.

Investment management and performance fees increased 3% compared with 2013 primarily reflecting higher equity market values, net new business and the favorable impact of a weaker U.S. dollar (primarily versus the British Pound), partially offset by higher money market fee waivers and lower performance fees.

Foreign exchange and other trading revenue decreased 15% compared with 2013. Foreign

exchange revenue decreased 5% compared with 2013 driven by lower volatility, partially offset by higher volumes. Other trading revenue decreased \$74 million, primarily reflecting lower fixed income

derivatives trading revenue due to exiting the derivative sales and trading business and losses on hedging activities within an Investment Management boutique.

Net interest revenue

Net interest revenue				2015	2014
				vs	vs
<i>(dollars in millions)</i>	2015	2014	2013	2014	2013
Net interest revenue (non-FTE)	\$ 3,026	\$ 2,880	\$ 3,009	5%	(4)%
Tax equivalent adjustment	58	62	63	(6)	(2)
Net interest revenue (FTE) – Non-GAAP	\$ 3,084	\$ 2,942	\$ 3,072	5%	(4)%
Average interest-earning assets	\$ 313,763	\$ 303,991	\$ 272,841	3%	11%
Net interest margin (FTE)	0.98%	0.97%	1.13%	1 bps	(16) bps

Net interest revenue totaled \$3.0 billion in 2015, an increase of \$146 million compared with 2014 primarily resulting from the shift out of cash and into securities and loans, lower interest expense on deposits and higher average interest-earning assets driven by higher deposits, partially offset by lower accretion.

The net interest margin (FTE) was 0.98% in 2015 compared with 0.97% in 2014. The increase in the net interest margin (FTE) reflects lower interest rates on deposits.

Average interest-earning assets were \$314 billion in 2015 compared with \$304 billion in 2014. The increase was due to higher client deposits. Average total securities increased to \$126 billion in 2015, from \$113 billion in 2014. Average loans increased to \$61 billion in 2015, from \$54 billion in 2014. Average assets related to interest-bearing deposits with banks and the Federal Reserve and other central banks decreased to \$104 billion in 2015, from \$122 billion in 2014. Increases in average securities and loans and

decreases in interest-bearing deposits with banks and the Federal Reserve and other central banks primarily reflect our strategy to shift out of cash deposits and into securities and loans.

Average non-U.S. dollar deposits comprised approximately 25% of our average total deposits in 2015. Approximately half of the average non-U.S. dollar deposits were euro-denominated in 2015.

2014 compared with 2013

Net interest revenue totaled \$2.9 billion in 2014, a decrease of \$129 million compared with 2013 primarily resulting from lower yields, lower accretion and the impact of interest rate hedging. The decrease was partially offset by a change in the mix of assets and higher average interest-earning assets driven by higher deposits. The net interest margin (FTE) was 0.97% in 2014 compared with 1.13% in 2013. The decline in the net interest margin (FTE) primarily reflects the factors noted above.

Results of Operations (continued)

Average balances and interest rates	2015		
	Average balance	Interest	Average rates
<i>(dollar amounts in millions, presented on an FTE basis)</i>			
Assets			
Interest-earning assets:			
Interest-bearing deposits with banks (primarily foreign banks)	\$ 20,531	\$ 104	0.51%
Interest-bearing deposits held at the Federal Reserve and other central banks	83,029	170	0.20
Federal funds sold and securities purchased under resale agreements	23,384	147	0.63
Margin loans	19,917	207	1.04
Non-margin loans:			
Domestic offices:			
Consumer	7,145	217	3.03
Commercial	19,647	346	1.76
Foreign offices	13,963	164	1.18
Total non-margin loans	40,755	727 (a)	1.78
Securities:			
U.S. Government obligations	25,904	378	1.46
U.S. Government agency obligations	55,044	967	1.76
State and political subdivisions – tax-exempt	4,712	128	2.73
Other securities:			
Domestic offices	14,644	302	2.06
Foreign offices	22,889	176	0.77
Total other securities	37,533	478	1.27
Trading securities (primarily domestic)	2,954	78	2.65
Total securities	126,147	2,029	1.61
Total interest-earning assets	\$ 313,763	\$ 3,384 (b)	1.08%
Allowance for loan losses	(186)		
Cash and due from banks	6,180		
Other assets	50,320		
Assets of consolidated investment management funds	2,110		
Total assets	\$ 372,187		
Liabilities			
Interest-bearing liabilities:			
Interest-bearing deposits:			
Domestic offices:			
Money market rate accounts	\$ 7,272	\$ 6	0.08%
Savings	1,312	4	0.28
Demand deposits	2,792	6	0.23
Time deposits	44,162	14	0.03
Total domestic offices	55,538	30	0.06
Foreign offices:			
Banks	16,626	10	0.06
Government and official institutions	5,591	—	—
Other	87,341	(3)	—
Total foreign offices	109,558	7	0.01
Total interest-bearing deposits	165,096	37	0.02
Federal funds purchased and securities sold under repurchase agreements	16,452	(6)	(0.04)
Trading liabilities	634	9	1.39
Other borrowed funds:			
Domestic offices	162	4	2.77
Foreign offices	652	5	0.71
Total other borrowed funds	814	9	1.12
Commercial paper	1,549	2	0.10
Payables to customers and broker-dealers	11,649	7	0.06
Long-term debt	20,832	242	1.16
Total interest-bearing liabilities	\$ 217,026	\$ 300	0.14%
Total noninterest-bearing deposits	86,338		
Other liabilities	29,127		
Liabilities and obligations of consolidated investment management funds	832		
Total liabilities	333,323		
Temporary equity			
Redeemable noncontrolling interests	240		
Permanent equity			
Total BNY Mellon shareholders' equity	37,812		
Noncontrolling interests	812		
Total permanent equity	38,624		
Total liabilities, temporary equity and permanent equity	\$ 372,187		
Net interest margin (FTE)			0.98%
Percentage of assets attributable to foreign offices (c)		30%	
Percentage of liabilities attributable to foreign offices		37	

(a) Includes fees of \$21 million in 2015. Non-accrual loans are included in the average loan balance; the associated income, recognized on the cash basis, is included in interest.

(b) The tax equivalent adjustment was \$58 million in 2015, and is based on the applicable tax rate (35%).

(c) Includes the Cayman Islands branch office.

Results of Operations (continued)

Average balances and interest rates (continued)	2014			2013		
	Average balance	Interest	Average rates	Average balance	Interest	Average rates
<i>(dollar amounts in millions, presented on an FTE basis)</i>						
Assets						
Interest-earning assets:						
Interest-bearing deposits with banks (primarily foreign banks)	\$ 35,588	\$ 238	0.67%	\$ 41,222	\$ 279	0.68%
Interest-bearing deposits held at the Federal Reserve and other central banks	86,594	207	0.24	67,073	150	0.23
Federal funds sold and securities purchased under resale agreements	14,704	86	0.59	8,412	47	0.56
Margin loans	17,484	182	1.04	14,288	160	1.12
Non-margin loans:						
Domestic offices:						
Consumer	6,461	199	3.08	6,001	192	3.20
Commercial	16,923	328	1.93	15,742	322	2.04
Foreign offices	13,342	170	1.28	12,285	160	1.30
Total non-margin loans	36,726	697 (a)	1.90	34,028	674 (a)	1.98
Securities:						
U.S. Government obligations	20,545	310	1.51	17,148	292	1.70
U.S. Government agency obligations	45,313	781	1.72	44,815	859	1.92
State and political subdivisions – tax-exempt	6,070	154	2.56	6,463	158	2.46
Other securities:						
Domestic offices	15,116	235	1.56	15,978	512	3.20
Foreign offices	20,827	283	1.36	17,304	126	0.73
Total other securities	35,943	518	1.44	33,282	638	1.92
Trading securities (primarily domestic)	5,024	123	2.43	6,110	158	2.59
Total securities	112,895	1,886	1.67	107,818	2,105	1.96
Total interest-earning assets	\$ 303,991	\$ 3,296 (b)	1.08%	\$ 272,841	\$ 3,415 (b)	1.25%
Allowance for loan losses	(195)			(230)		
Cash and due from banks	5,472			5,662		
Other assets	52,648			52,438		
Assets of consolidated investment management funds	10,650			11,600		
Total assets	\$ 372,566			\$ 342,311		
Liabilities						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Domestic offices:						
Money market rate accounts	\$ 5,605	\$ 7	0.12%	\$ 5,891	\$ 13	0.22%
Savings	1,186	3	0.28	932	2	0.26
Demand deposits	2,810	4	0.14	3,271	2	0.07
Time deposits	41,779	15	0.04	40,975	18	0.04
Total domestic office	51,380	29	0.06	51,069	35	0.07
Foreign offices:						
Banks	7,303	31	0.42	6,362	38	0.60
Government and official institutions	4,572	—	0.01	4,047	1	0.01
Other	97,543	23	0.02	90,930	31	0.04
Total foreign offices	109,418	54	0.05	101,339	70	0.07
Total interest-bearing deposits	160,798	83	0.05	152,408	105	0.07
Federal funds purchased and securities sold under repurchase agreements	18,631	(13)	(0.07)	10,942	(16)	(0.15)
Trading liabilities	2,199	25	1.12	2,611	38	1.46
Other borrowed funds:						
Domestic offices	183	2	1.32	322	4	1.05
Foreign offices	844	4	0.45	855	3	0.37
Total other borrowed funds	1,027	6	0.61	1,177	7	0.55
Commercial paper	2,546	2	0.08	690	—	0.06
Payables to customers and broker-dealers	9,502	9	0.09	9,038	8	0.09
Long-term debt	20,601	242	1.17	19,103	201	1.05
Total interest-bearing liabilities	\$ 215,304	\$ 354	0.16%	\$ 195,969	\$ 343	0.17%
Total noninterest-bearing deposits	81,741			73,288		
Other liabilities	26,912			25,514		
Liabilities and obligations of consolidated investment management funds	9,315			10,295		
Total liabilities	333,272			305,066		
Temporary equity						
Redeemable noncontrolling interests	242			196		
Permanent equity						
Total BNY Mellon shareholders' equity	38,180			36,220		
Noncontrolling interests						
Total permanent equity	39,052			37,049		
Total liabilities, temporary equity and permanent equity	\$ 372,566			\$ 342,311		
Net interest margin (FTE)			0.97%			1.13%
Percentage of assets attributable to foreign offices (c)	31%			33%		
Percentage of liabilities attributable to foreign offices	35			33		

(a) Includes fees of \$29 million in 2014 and \$37 million in 2013. Non-accrual loans are included in the average loan balance; the associated income, recognized on the cash basis, is included in interest.

(b) The tax equivalent adjustment was \$62 million in 2014 and \$63 million in 2013, and is based on the applicable tax rate (35%).

(c) Includes the Cayman Islands branch office.

Noninterest expense

Noninterest expense				2015	2014
<i>(dollars in millions)</i>	2015	2014	2013	vs.	vs.
				2014	2013
Staff:					
Compensation	\$ 3,580	\$ 3,630	\$ 3,620	(1)%	— %
Incentives	1,415	1,331	1,384	6	(4)
Employee benefits	842	884	1,015	(5)	(13)
Total staff	5,837	5,845	6,019	—	(3)
Professional, legal and other purchased services	1,230	1,339	1,252	(8)	7
Software	627	620	596	1	4
Net occupancy	600	610	629	(2)	(3)
Distribution and servicing	381	428	435	(11)	(2)
Furniture and equipment	280	322	337	(13)	(4)
Sub-custodian	270	286	280	(6)	2
Business development	267	268	317	—	(15)
Other	961	1,031	1,029	(7)	—
Amortization of intangible assets	261	298	342	(12)	(13)
M&I, litigation and restructuring charges	85	1,130	70	N/M	N/M
Total noninterest expense – GAAP	\$ 10,799	\$ 12,177	\$ 11,306	(11)%	8 %
Total staff expense as a percentage of total revenue	38%	37%	40%		
Full-time employees at year end	51,200	50,300	51,100	2 %	(2)%
Memo:					
Total noninterest expense excluding amortization of intangible assets, M&I, litigation and restructuring charges and the charge related to investment management funds, net of incentives – Non-GAAP (a)	\$ 10,453	\$ 10,645	\$ 10,882	(2)%	(2)%

(a) The charge related to investment management funds, net of incentives was \$ - million in 2015, \$104 million in 2014 and \$12 million in 2013.

Total noninterest expense was \$10.8 billion in 2015, a decrease of 11% compared with \$12.2 billion in 2014. The decrease primarily reflects lower litigation expense and restructuring charges. Excluding amortization of intangible assets, M&I, litigation and restructuring charges and the charge related to investment management funds, net of incentives (Non-GAAP), noninterest expense decreased 2% compared with 2014 primarily reflecting lower expenses in all categories, except incentives and software expense. The lower expenses primarily reflect the favorable impact of a stronger U.S. dollar, lower consulting and legal expenses and the benefit of the business improvement process which focuses on reducing structural costs.

We continue to invest in our risk management, regulatory compliance and other control functions in light of increasing regulatory requirements. As a result, we expect an increase in our expense run rate relating to these functions.

Staff expense

Given our mix of fee-based businesses, which are staffed with high-quality professionals, staff expense comprised 56% of total noninterest expense in 2015 and 55% in 2014, excluding amortization of intangible assets, M&I, litigation and restructuring charges and the charge related to investment funds, net of incentives (Non-GAAP).

Staff expense consists of:

- compensation expense, which includes:
 - salary expense, primarily driven by headcount;
 - the cost of temporary services and overtime; and
 - severance expense;
- incentive expense, which includes:
 - additional compensation earned under a wide range of sales commission and incentive plans designed to reward a combination of individual, business unit and corporate performance goals; as well as,
 - stock-based compensation expense; and

- employee benefit expense, primarily medical benefits, payroll taxes, pension and other retirement benefits.

Staff expense was \$5.8 billion in 2015, down slightly compared with 2014. The decrease primarily reflects the favorable impact of a stronger U.S. dollar, the impact of curtailing the U.S. pension plan, partially offset by higher incentive expense reflecting better performance.

Non-staff expense

Non-staff expense includes certain expenses that vary with the levels of business activity and levels of expensed business investments, fixed infrastructure costs and expenses associated with corporate activities related to technology, compliance, legal, productivity initiatives and business development.

Non-staff expense, excluding amortization of intangible assets, M&I, litigation and restructuring charges, and the charge related to investment management funds, net of incentives (Non-GAAP), totaled \$4.6 billion in 2015, a decrease of 4% compared with 2014. The decrease primarily reflects the favorable impact of a stronger U.S. dollar, lower consulting and legal expenses and the benefit of the business improvement process which focuses on reducing structural costs. The decrease in consulting expense was driven by the implementation of strategic platforms in 2014. The decrease in legal expenses primarily reflects the resolution of several legal proceedings that resulted in legal expense in 2014.

In 2015, we incurred \$85 million of M&I, litigation and restructuring charges compared with \$1.1 billion in 2014. The decrease primarily reflects lower litigation expense.

For additional information on restructuring charges, see Note 11 of the Notes to Consolidated Financial Statements.

2014 compared with 2013

Noninterest expense totaled \$12.2 billion in the 2014, an increase of 8%, compared with 2013. The increase primarily reflects higher litigation expense and restructuring charges, partially offset by lower staff expense. Excluding amortization of intangible assets, M&I, litigation and restructuring charges and the

charge related to investment management funds, net of incentives (Non-GAAP), noninterest expense decreased 2% compared with 2013.

Income taxes

BNY Mellon recorded an income tax provision of \$1.0 billion (23.9% effective tax rate) in 2015. The income tax provision was \$912 million (25.6% effective tax rate) in 2014 including a net benefit primarily related to litigation expense and the approval of a tax carryback claim, offset by the sales of our investment in Wing Hang and our One Wall Street building. The income tax provision was \$1.6 billion (42.1% effective tax rate) in 2013 including a 15.7% net charge, or \$593 million, resulting from the U.S. Tax Court's decisions related to the disallowance of certain foreign tax credits.

We expect the effective tax rate to be approximately 25-26% in 2016.

Review of businesses

We have an internal information system that produces performance data along product and service lines for our two principal businesses and the Other segment.

Business accounting principles

Our business data has been determined on an internal management basis of accounting, rather than the generally accepted accounting principles used for consolidated financial reporting. These measurement principles are designed so that reported results of the businesses will track their economic performance.

For information on the accounting principles of our businesses, the primary types of revenue by business and how our businesses are presented and analyzed, see Note 24 of the Notes to Consolidated Financial Statements.

Business results are subject to reclassification whenever organizational changes are made or when improvements are made in the measurement principles. On July 31, 2015, BNY Mellon completed the sale of Meriten, a German-based investment management boutique. In 2015, we reclassified the results of Meriten from the Investment Management business to the Other segment. The reclassifications did not impact the

consolidated results. All prior periods have been restated.

The results of our businesses may be influenced by client and other activities that vary by quarter. In the first quarter, incentive expense typically increases reflecting the vesting of long-term stock awards for retirement eligible employees. In the second quarter, we typically experience an increase in securities lending fees due to an increase in demand to borrow securities outside of the United States. In the third quarter, Depository Receipts and related foreign exchange revenue is typically higher due to an increased level of client dividend payments paid in the quarter. Also in the third quarter, volume-related fees may decline due to reduced client activity. In the fourth quarter, we typically incur higher business development and marketing expenses. In our Investment Management business, performance fees are typically higher in the fourth quarter, as the fourth quarter represents the end of the measurement period for many of the performance fee-eligible relationships.

The results of our businesses may also be impacted by the translation of financial results denominated in

foreign currencies to the U.S. dollar. We are primarily impacted by activities denominated in the British pound sterling, euro and the Indian rupee. On a consolidated basis and in our Investment Services business, we typically have more foreign currency denominated expenses than revenues. However, our Investment Management business typically has more foreign currency denominated revenues than expenses. Overall, currency fluctuations impact the year-over-year growth rate in the Investment Management business more than the Investment Services business. However, currency fluctuations, in isolation, are not expected to significantly impact net income on a consolidated basis.

Net securities gains (losses) are recorded in the Other segment. M&I expense is a corporate-level item and is recorded in the Other segment. Restructuring charges (recoveries) recorded in 2015 and 2014 relate to corporate-level initiatives and were therefore recorded in the Other segment. In the fourth quarter of 2013, restructuring charges were recorded in the businesses. Prior to the fourth quarter of 2013, restructuring charges were reported in the Other segment.

The following table presents key market metrics at period end and on an average basis.

Key market metrics				Increase/(Decrease)	
	2015	2014	2013	2015 vs. 2014	2014 vs. 2013
S&P 500 Index (a)	2044	2059	1848	(1) %	11 %
S&P 500 Index – daily average	2061	1931	1644	7	17
FTSE 100 Index (a)	6242	6566	6749	(5)	(3)
FTSE 100 Index – daily average	6590	6681	6472	(1)	3
MSCI World Index (a)	1663	1710	1661	(3)	3
MSCI World Index – daily average	1718	1694	1496	1	13
Barclays Capital Global Aggregate Bond SM Index (a)(b)	342	357	354	(4)	1
NYSE and NASDAQ share volume (in billions)	776	754	705	3	7
JPMorgan G7 Volatility Index – daily average (c)	9.97	7.19	9.19	39	(22)
Average Fed Funds effective rate	0.13%	0.09%	0.11%	4 bps	(2) bps
Foreign exchange rates vs. U.S. dollar:					
British pound – average rate	\$ 1.53	\$ 1.65	\$ 1.56	(7) %	6 %
Euro – average rate	1.11	1.33	1.33	(17)	—

(a) Period end.

(b) Unhedged in U.S. dollar terms.

(c) The JPMorgan G7 Volatility Index is based on the implied volatility in 3-month currency options.

Fee revenue in Investment Management, and to a lesser extent in Investment Services, is impacted by the value of market indices. At Dec. 31, 2015, we estimate that a 5% change in global equity markets, spread evenly throughout the year, would impact fee

revenue by less than 1% and diluted earnings per common share by \$0.02 to \$0.04.

Fee waivers are highly sensitive to changes in the Fed Funds effective rate. Assuming no change in client behavior, we expect to recover approximately 70% of

Results of Operations (continued)

the pre-tax income related to fee waivers with a 50 basis point increase in the Fed Funds effective rate,

inclusive of the 25 basis point increase in December 2015.

The following consolidating schedules show the contribution of our businesses to our overall profitability.

For the year ended Dec. 31, 2015 <i>(dollar amounts in millions)</i>	Investment Management	Investment Services	Other	Consolidated
Fee and other revenue	\$ 3,600 (a)	\$ 8,026	\$ 474	\$ 12,100 (a)
Net interest revenue	319	2,495	212	3,026
Total revenue	3,919 (a)	10,521	686	15,126 (a)
Provision for credit losses	—	—	160	160
Noninterest expense	2,869	7,383	543	10,795 (b)
Income (loss) before taxes	\$ 1,050 (a)	\$ 3,138	\$ (17)	\$ 4,171 (a)(b)
Pre-tax operating margin (c)	27%	30%	N/M	28%
Average assets	\$ 30,928	\$ 283,886	\$ 57,373	\$ 372,187
Excluding amortization of intangible assets:				
Noninterest expense	\$ 2,772	\$ 7,221	\$ 541	\$ 10,534
Income (loss) before taxes	1,147 (a)	3,300	(15)	4,432 (a)(b)
Pre-tax operating margin (c)	29%	31%	N/M	29%

(a) Both fee and other revenue and total revenue include the net income from consolidated investment management funds of \$18 million, representing \$86 million of income and noncontrolling interests of \$68 million. Income before taxes is net of noncontrolling interests of \$68 million.

(b) Includes a loss attributable to noncontrolling interest of \$4 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

For the year ended Dec. 31, 2014 <i>(dollar amounts in millions)</i>	Investment Management	Investment Services	Other	Consolidated
Fee and other revenue	\$ 3,672 (a)	\$ 7,719	\$ 1,337	\$ 12,728 (a)
Net interest revenue	274	2,339	267	2,880
Total revenue	3,946 (a)	10,058	1,604	15,608 (a)
Provision for credit losses	—	—	(48)	(48)
Noninterest expense	3,049	8,116	1,012	12,177
Income before taxes	\$ 897 (a)	\$ 1,942	\$ 640	\$ 3,479 (a)
Pre-tax operating margin (b)	23%	19%	N/M	22%
Average assets	\$ 37,655	\$ 266,495	\$ 68,416	\$ 372,566
Excluding amortization of intangible assets:				
Noninterest expense	\$ 2,931	\$ 7,941	\$ 1,007	\$ 11,879
Income before taxes	1,015 (a)	2,117	645	3,777 (a)
Pre-tax operating margin (b)	26%	21%	N/M	24%

(a) Both fee and other revenue and total revenue include the net income from consolidated investment management funds of \$79 million, representing \$163 million of income and noncontrolling interests of \$84 million. Income before taxes is net of noncontrolling interests of \$84 million.

(b) Income before taxes divided by total revenue.

Results of Operations (continued)

For the year ended Dec. 31, 2013 <i>(dollar amounts in millions)</i>	Investment Management		Investment Services		Other	Consolidated	
Fee and other revenue	\$	3,608 (a)	\$	7,640	\$	711	\$ 11,959 (a)
Net interest revenue		260		2,514		235	3,009
Total revenue		3,868 (a)		10,154		946	14,968 (a)
Provision for credit losses		—		1		(36)	(35)
Noninterest expense		2,903		7,398		1,005	11,306
Income (loss) before taxes	\$	965 (a)	\$	2,755	\$	(23)	\$ 3,697 (a)
Pre-tax operating margin (b)		25%		27%		N/M	25%
Average assets	\$	38,420	\$	247,431	\$	56,460	\$ 342,311
Excluding amortization of intangible assets:							
Noninterest expense	\$	2,760	\$	7,204	\$	1,000	\$ 10,964
Income (loss) before taxes		1,108 (a)		2,949		(18)	4,039 (a)
Pre-tax operating margin (b)		29%		29%		N/M	27%

(a) Both fee and other revenue and total revenue include net income from consolidated investment management funds of \$103 million, representing \$183 million of income and noncontrolling interests of \$80 million. Income before taxes is net of noncontrolling interests of \$80 million.

(b) Income before taxes divided by total revenue.

Investment Management business

				2015 vs. 2014	2014 vs. 2013
<i>(dollar amounts in millions)</i>					
	2015	2014	2013		
Revenue:					
Investment management fees:					
Mutual funds	\$ 1,208	\$ 1,231	\$ 1,194	(2)%	3 %
Institutional clients	1,425	1,466	1,428	(3)	3
Wealth management	630	624	583	1	7
Investment management fees	3,263	3,321	3,205	(2)	4
Performance fees	97	111	130	(13)	(15)
Investment management and performance fees	3,360	3,432	3,335	(2)	3
Distribution and servicing	152	157	167	(3)	(6)
Other (a)	88	83	106	N/M	N/M
Total fee and other revenue (a)	3,600	3,672	3,608	(2)	2
Net interest revenue	319	274	260	16	5
Total revenue	3,919	3,946	3,868	(1)	2
Noninterest expense (ex. amortization of intangible assets and the charge related to investment management funds, net of incentives)					
	2,772	2,827	2,748	(2)	3
Income before taxes (ex. amortization of intangible assets and the charge related to investment management funds, net of incentives)					
	1,147	1,119	1,120	3	—
Amortization of intangible assets	97	118	143	(18)	(17)
Charge related to investment management funds, net of incentives	—	104	12	N/M	N/M
Income before taxes	\$ 1,050	\$ 897	\$ 965	17 %	(7)%
Pre-tax operating margin	27%	23%	25%		
Adjusted pre-tax operating margin (b)	34%	34%	35%		
Average balances:					
Average loans	\$ 12,545	\$ 10,589	\$ 9,361	18 %	13 %
Average deposits	\$ 15,160	\$ 14,154	\$ 13,753	7 %	3 %

- (a) Total fee and other revenue includes the impact of the consolidated investment management funds, net of noncontrolling interests. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 125 for the reconciliation of Non-GAAP measures. Additionally, other revenue includes asset servicing, treasury services, foreign exchange and other trading revenue and investment and other income.
- (b) Excludes the net negative impact of money market fee waivers, amortization of intangible assets and the charge related to investment management funds, net of incentives, and is net of distribution and servicing expense. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 125 for the reconciliation of this Non-GAAP measure.

Results of Operations (continued)

AUM trends (a)					
<i>(dollar amounts in billions)</i>					
	2015	2014	2013	2012	2011
AUM at period end, by product type:					
Equity	\$ 224	\$ 260	\$ 272	\$ 232	\$ 208
Fixed income	216	204	200	188	164
Index	329	356	322	239	193
Liability-driven investments (b)	514	504	403	329	276
Alternative investments	63	65	61	59	57
Cash	279	297	299	302	328
Total AUM	\$ 1,625	\$ 1,686	\$ 1,557	\$ 1,349	\$ 1,226
AUM at period end, by client type:					
Institutional	\$ 1,127	\$ 1,164	\$ 1,047	\$ 864	\$ 730
Mutual funds	420	438	426	410	426
Private client	78	84	84	75	70
Total AUM	\$ 1,625	\$ 1,686	\$ 1,557	\$ 1,349	\$ 1,226
Changes in AUM:					
Beginning balance of AUM	\$ 1,686	\$ 1,557	\$ 1,349	\$ 1,226	\$ 1,135
Net inflows (outflows):					
Long-term:					
Equity	(31)	(13)	—	—	(10)
Fixed income	(1)	4	11	20	10
Index	(27)	5	20	9	29
Liability-driven investments (b)	35	46	65	25	52
Alternative investments	7	6	2	3	4
Total long-term inflows (outflows)	(17)	48	98	57	85
Short term:					
Cash	(18)	—	5	(20)	(14)
Total net inflows (outflows)	(35)	48	103	37	71
Net market/currency impact/acquisition	(26)	81	105	86	20
Ending balance of AUM	\$ 1,625	\$ 1,686	\$ 1,557	\$ 1,349	\$ 1,226

(a) Excludes securities lending cash management assets and assets managed in the Investment Services business. In 2015, prior periods' AUM was restated to reflect the reclassification of Meriten from the Investment Management business to the Other segment.

(b) Includes currency overlay AUM.

Business description

Our Investment Management business comprises the seventh largest global asset manager and the seventh largest U.S. wealth manager.

It encompasses 13 affiliated investment management boutiques that deliver a diversified portfolio of focused investment strategies over our distribution network to institutional and retail clients across North America, EMEA and Asia-Pacific. Our multi-boutique model is designed to deliver the best elements of investment focus and infrastructure scale to benefit clients.

The investment management boutiques offer a broad range of equity, fixed income, alternative/overlay and cash products. In addition to the investment subsidiaries, this business includes BNY Mellon Investment Management EMEA Limited, BNY Mellon Investment Management Hong Kong and BNY Mellon Investment Management Singapore,

which are responsible for managing and distributing locally registered investment products, and the Dreyfus Corporation and its affiliates, which are responsible for U.S. investment management and distribution of retail mutual funds, separately managed accounts and annuities.

BNY Mellon Wealth Management is ranked the seventh largest U.S. wealth manager in 2015 by Barron's. We offer private banking, discretionary portfolio management and tax, wealth and estate planning services to high and ultra-high net worth individuals, families and family offices as well as to charitable gift programs, endowments and foundations. We provide these services through an extensive network of more than 35 U.S. locations and offices in London, Hong Kong, Toronto and the Cayman Islands. Our client satisfaction rates are among the highest in our industry. BNY Mellon Wealth Management was named in 2015 by Family Wealth Report as the top National Private Asset Manager and top Private Bank serving family offices.

The results of the Investment Management business are driven by the period-end, average level and mix of assets managed and the level of activity in client accounts. The overall level of AUM for a given period is determined by:

- the beginning level of AUM;
- the net flows of new assets during the period resulting from new business wins and existing client enrichments, reduced by the loss of clients and withdrawals; and
- the impact of market price appreciation or depreciation, the impact of any acquisitions or divestitures and foreign exchange rates.

The mix of AUM is determined principally by client asset allocation decisions among equities, fixed income, index, liability-driven investments and alternative investments.

Managed equity assets typically generate higher percentage fees than liability-driven investments and fixed-income assets. Also, actively managed assets typically generate higher management fees than indexed or passively managed assets of the same type.

Management fees are typically subject to fee schedules based on the overall level of assets managed for a single client or by individual asset class and style. This is most prevalent for institutional assets where amounts we manage for individual clients are typically large.

A key driver of organic growth in investment management and performance fees is the amount of net new AUM flows. Overall market conditions are also key drivers, with a significant long-term economic driver being growth of global financial assets.

Performance fees are generally calculated as a percentage of a portfolio's performance in excess of a benchmark index or a peer group's performance.

Net interest revenue is determined by loan and deposit volumes and the interest rate spread between customer rates and internal funds transfer rates on loans and deposits. Expenses in this business are mainly driven by staffing costs, incentives and distribution and servicing expense.

Review of financial results

Investment management and performance fees are dependent on the overall level and mix of AUM and the management fees expressed in basis points (one-hundredth of one percent) charged for managing those assets. Assets under management were \$1.63 trillion at Dec. 31, 2015 compared with \$1.69 trillion at Dec. 31, 2014, a decrease of 4%. The decrease resulted from the unfavorable impact of a stronger U.S. dollar, net outflows and lower market values, partially offset by the January 2015 acquisition of Cutwater.

Net long-term outflows were \$17 billion in 2015 driven by equity and index investments, partially offset by continued strength in liability-driven investments. Net short-term outflows were \$18 billion in 2015.

Total revenue was \$3.9 billion in 2015, a decrease of 1% compared with 2014. The decrease primarily reflects the unfavorable impact of a stronger U.S. dollar, net outflows and lower performance fees, partially offset by higher net interest revenue, the impact of the Cutwater acquisition and strategic initiatives, and lower money market fee waivers.

Revenue generated in the Investment Management business included 42% from non-U.S. sources in 2015 compared with 44% in 2014.

Investment management fees in the Investment Management business were \$3.3 billion in 2015, a decrease of 2%, or an increase of 3% on a constant currency basis (Non-GAAP), compared with 2014. The increase primarily reflects lower money market fee waivers, the impact of the Cutwater acquisition and strategic initiatives, and higher equity market values, partially offset by net outflows.

In 2015, 37% of investment management fees in the Investment Management business were generated from managed mutual fund fees. These fees are based on the daily average net assets of each fund and the management fee paid by that fund. Managed mutual fund fee revenue decreased 2% in 2015 compared with 2014. The decrease primarily reflects net outflows and the unfavorable impact of a stronger U.S. dollar, partially offset by lower money market fee waivers.

Performance fees were \$97 million in 2015 compared with \$111 million in 2014. The decrease primarily reflects the unfavorable impact of a stronger U.S. dollar.

Distribution and servicing fees were \$152 million in 2015 compared with \$157 million in 2014. The decrease was primarily driven by the unfavorable impact of a stronger U.S. dollar, partially offset by lower money market fee waivers.

Other revenue was \$88 million in 2015 compared with \$83 million in 2014. The increase primarily reflects higher other trading revenue related to losses on hedging activities within a boutique recorded in 2014.

Net interest revenue was \$319 million in 2015 compared with \$274 million in 2014. The increase primarily resulted from higher average loans and deposits. Average loans increased 18% in 2015 compared with 2014, while average deposits increased 7% in 2015 compared with 2014.

Noninterest expense, excluding amortization of intangible assets and the charge related to investment management funds, net of incentives, was \$2.8 billion in 2015, a decrease of \$55 million, or 2%, compared with 2014. The decrease primarily reflects the favorable impact of a stronger U.S. dollar and lower incentives, partially offset by investments in strategic initiatives.

2014 compared with 2013

Income before taxes totaled \$897 million in 2014, a decrease of 7% compared with \$965 million in 2013. Income before taxes excluding amortization of intangible assets and the charge related to investment management funds, net of incentives, was \$1.1 billion in 2014, a decrease of \$1 million compared with 2013. Fee and other revenue increased \$64 million in 2014, or 2% compared with 2013, primarily resulting from higher investment management fees, partially offset by lower performance fees, distribution and servicing revenue and lower other trading revenue related to losses on hedging activities within a boutique. Net interest revenue increased \$14 million in 2014, or 5% compared with 2013 primarily resulting from higher average loans and deposits. Noninterest expense excluding amortization of intangible assets and the charge related to investment management funds, net of incentives, increased \$79 million in 2014, or 3% compared with 2013. The increase primarily resulted from higher staff, business development and purchased services expenses resulting from investments in strategic initiatives as well as the unfavorable impact of a weaker U.S. dollar.

Results of Operations (continued)

Investment Services business

				2015	2014
				vs.	vs.
<i>(dollars in millions, unless otherwise noted)</i>	2015	2014	2013	2014	2013
Revenue:					
Investment services fees:					
Asset servicing	\$ 4,084	\$ 3,968	\$ 3,800	3 %	4 %
Clearing services	1,370	1,329	1,258	3	6
Issuer services	976	966	1,087	1	(11)
Treasury services	546	555	544	(2)	2
Total investment services fees	6,976	6,818	6,689	2	2
Foreign exchange and other trading revenue	713	627	693	14	(10)
Other <i>(a)</i>	337	274	258	23	6
Total fee and other revenue	8,026	7,719	7,640	4	1
Net interest revenue	2,495	2,339	2,514	7	(7)
Total revenue	10,521	10,058	10,154	5	(1)
Provision for credit losses	—	—	1	N/M	N/M
Noninterest expense (ex. amortization of intangible assets)	7,221	7,941	7,204	(9)	10
Income before taxes (ex. amortization of intangible assets)	3,300	2,117	2,949	56	(28)
Amortization of intangible assets	162	175	194	(7)	(10)
Income before taxes	\$ 3,138	\$ 1,942	\$ 2,755	62 %	(30)%
Pre-tax operating margin	30%	19%	27%		
Pre-tax operating margin (ex. amortization of intangible assets)	31%	21%	29%		
Investment services fees as a percentage of noninterest expense <i>(b)</i>	98%	95%	93%		
Securities lending revenue	\$ 140	\$ 120	\$ 117	17 %	3 %
Metrics:					
Average loans	\$ 37,736	\$ 33,466	\$ 28,407	13 %	18 %
Average deposits	\$ 232,050	\$ 221,453	\$ 206,793	5 %	7 %
AUC/A at period end <i>(in trillions) (c)</i>	\$ 28.9	\$ 28.5	\$ 27.6	1 %	3 %
Market value of securities on loan at period end <i>(in billions) (d)</i>	\$ 277	\$ 289	\$ 235	(4)%	23 %
Asset servicing:					
Estimated new business wins (AUC/A) <i>(in billions) (e)</i>	\$ 1,191	\$ 554	\$ 639		
Depository Receipts:					
Number of sponsored programs	1,145	1,279	1,335	(10)%	(4)%
Clearing services:					
Global DARTS volume <i>(in thousands)</i>	\$ 245	\$ 222	\$ 214	10 %	4 %
Average active clearing accounts (U.S. platform) <i>(in thousands)</i>	\$ 6,023	\$ 5,788	\$ 5,602	4 %	3 %
Average long-term mutual fund assets (U.S. platform)	\$ 451,924	\$ 434,959	\$ 376,852	4 %	15 %
Average investor margin loans (U.S. platform)	\$ 11,627	\$ 9,687	\$ 8,538	20 %	13 %
Broker-Dealer:					
Average tri-party repo balances <i>(in billions)</i>	\$ 2,156	\$ 2,042	\$ 2,016	6 %	1 %

(a) Other revenue includes investment management fees, financing-related fees, distribution and servicing revenue and investment and other income.

(b) Noninterest expense excludes amortization of intangible assets and litigation expense.

(c) Includes the AUC/A of CIBC Mellon of \$1.0 trillion at Dec. 31, 2015, \$1.1 trillion at Dec. 31, 2014 and \$1.2 trillion at Dec. 31, 2013.

(d) Represents the total amount of securities on loan managed by the Investment Services business. Excludes securities for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, which totaled \$55 billion at Dec. 31, 2015, \$65 billion Dec. 31, 2014 and \$62 billion at Dec. 31, 2013.

(e) Beginning in 2015, estimated new business wins are determined based on finalization of the contract as compared to the prior methodology of receipt of a mandate. New business wins for 2014 have been restated for comparative purposes.

Business description

Our Investment Services business provides global custody and related services, government clearing, global collateral services, corporate trust and depositary receipt and clearing services, as well as global payment/working capital solutions to global financial institutional clients.

Our comprehensive suite of financial solutions includes: global custody, global fund services, securities lending, investment manager outsourcing, performance and risk analytics, alternative investment services, securities clearance, collateral management, corporate trust, American and global depositary receipt programs, cash management solutions, payment services, liquidity services and other linked revenues, principally foreign exchange, global clearing and execution, managed account services and global prime brokerage solutions. Our clients include corporations, public funds and government agencies, foundations and endowments; global financial institutions including banks, broker-dealers, asset managers, insurance companies and central banks; financial intermediaries and independent registered investment advisors; hedge fund managers; and funds that we manage through our Investment Management business. We help our clients service their financial assets through a network of offices and service delivery centers in 35 countries across six continents.

The results of this business are driven by a number of factors, which include: the level of transaction activity; the range of services provided, which may include custody, accounting, fund administration, daily valuations, performance measurement and risk analytics, securities lending, and investment manager back-office outsourcing; the number of accounts; and the market value of assets under custody and/or administration. Market interest rates impact both securities lending revenue and the earnings on client balances. Business expenses are driven by staff, technology investment, equipment and space required to support the services provided by the business and the cost of execution, clearance and custody of securities.

We are one of the leading global securities servicing providers with \$28.9 trillion of AUC/A at Dec. 31, 2015. We are one of the largest custodians for U.S. corporate and public pension plans and we service 50% of the top 50 endowments. We are a leading

custodian in the UK, servicing around a fifth of UK pensions that require a custodian, and with approximately 20% of such assets for the sector in our custody. Globalization tends to drive cross-border investment and capital flows, which increases the opportunity to provide solutions to our clients. The changing regulatory environment is also driving client demand for new solutions and services.

BNY Mellon is a leader in both global and U.S. Government securities clearance. We settle securities transactions in over 100 markets and handle most of the transactions cleared through the Federal Reserve Bank of New York for 18 of the 22 primary dealers. We are a leader in servicing tri-party collateral with approximately \$2.2 trillion serviced globally. We currently service approximately \$1.3 trillion, or approximately 85%, of the \$1.6 trillion tri-party repo market in the U.S.

Global Collateral Services serves broker-dealers and institutional investors facing expanding collateral management needs as a result of current and emerging regulatory and market requirements. Global Collateral Services brings together BNY Mellon's global capabilities in segregating, optimizing, financing and transforming collateral on behalf of clients, including its market leading broker-dealer collateral management, securities lending, collateral financing, liquidity and derivatives services teams.

In securities lending, we are one of the largest lenders of U.S. Treasury securities and depositary receipts and service a lending pool of approximately \$2.9 trillion in 33 markets.

We served as depositary for 1,145 sponsored American and global depositary receipt programs at Dec. 31, 2015, acting in partnership with leading companies from 64 countries - an estimated 58% global market share.

Pershing and its affiliates provide business solutions to approximately 1,500 financial organizations globally by delivering dependable operational support, robust trading services, flexible technology and an expansive array of investment solutions, practice management support and service excellence.

Role of BNY Mellon, as a trustee, for mortgage-backed securitizations

BNY Mellon acts as trustee and document custodian for certain mortgage-backed security (“MBS”) securitization trusts. The role of trustee for MBS securitizations is limited; our primary role as trustee is to calculate and distribute monthly bond payments to bondholders. As a document custodian, we hold the mortgage, note, and related documents provided to us by the loan originator or seller and provide periodic reporting to these parties. BNY Mellon, either as document custodian or trustee, does not receive mortgage underwriting files (the files that contain information related to the creditworthiness of the borrower). As trustee or custodian, we have no responsibility or liability for the quality of the portfolio; we are liable only for performance of our limited duties as described above and in the trust documents. BNY Mellon is indemnified by the servicers or directly from trust assets under the governing agreements. BNY Mellon may appear as the named plaintiff in legal actions brought by servicers in foreclosure and other related proceedings because the trustee is the nominee owner of the mortgage loans within the trusts.

BNY Mellon also has been named as a defendant in legal actions brought by MBS investors alleging that the trustee has expansive duties under the governing agreements, including to investigate and pursue claims against other parties to the MBS transaction. For additional information on our legal proceedings related to this matter, see Note 22 of the Notes to Consolidated Financial Statements.

Review of financial results

AUC/A totaled \$28.9 trillion, an increase from \$28.5 trillion at Dec. 31, 2014. The increase was primarily driven by net new business, partially offset by the unfavorable impact of a stronger U.S. dollar and lower market values. AUC/A consisted of 36% equity securities and 64% fixed income securities at both Dec. 31, 2015 and Dec. 31, 2014.

Investment services fees were \$7.0 billion, an increase of 2% compared with 2014, reflecting the following factors:

- Asset servicing fees (global custody, broker-dealer services and Global Collateral Services) were \$4.1 billion compared with \$4.0 billion in

the 2014. The increase primarily reflects growth in global collateral services, broker-dealer services and asset servicing, partially offset by the unfavorable impact of a stronger U.S. dollar.

- Clearing services fees were \$1.4 billion compared with \$1.3 billion in the 2014. The increase was primarily driven by higher mutual fund and asset-based fees, partially offset by lost business.
- Issuer services fees (Corporate Trust and Depository Receipts) were \$976 million compared with \$966 million in the 2014. The increase primarily reflects higher Corporate Trust fees, partially offset by lower fees in Depository Receipts driven by fewer corporate actions.
- Treasury services fees were \$546 million compared with \$555 million in the 2014. The decrease primarily reflects lower lockbox fees and higher compensating balance credits provided to clients, partially offset by higher payment volumes.

Foreign exchange and other trading revenue totaled \$713 million compared with \$627 million in 2014. The increase primarily reflects higher volatility and higher volumes.

Net interest revenue was \$2.5 billion compared with \$2.3 billion in 2014. The increase primarily reflects higher average deposits and loans, as well as higher internal crediting rates for deposits.

Noninterest expense, excluding amortization of intangible assets, was \$7.2 billion compared with \$7.9 billion in 2014. The decrease primarily reflects lower litigation, consulting and occupancy expenses, partially offset by higher staff expense.

2014 compared with 2013

Income before taxes totaled \$1.9 billion in 2014, a decrease of 30% compared with \$2.8 billion in the full-year of 2013. Excluding amortization of intangible assets, income before taxes decreased \$832 million, or 28% compared with the full-year of 2013. Fee and other revenue increased \$79 million, or 1%, compared with the full-year of 2013 primarily reflecting higher asset servicing fees reflecting organic growth, higher market values and net new business, partially offset by lower Corporate Trust revenue reflecting lower customer reimbursements, and lower corporate actions and dividend fees in Depository Receipt. The \$175 million, or 7%

decrease in net interest revenue primarily reflects lower yields and lower accretion, partially offset by higher average loans and deposits. Noninterest expense, excluding amortization of intangible assets, increased \$737 million, compared with 2013 primarily due to higher litigation expense, and higher

professional, legal and other purchased services expense primarily driven by increased expenses related to implementation of strategic platforms, partially offset by lower staff expense.

Other segment

<i>(dollars in millions)</i>	2015	2014	2013
Revenue:			
Fee and other revenue	\$ 474	\$ 1,337	\$ 711
Net interest revenue	212	267	235
Total revenue	686	1,604	946
Provision for credit losses	160	(48)	(36)
Noninterest expense (ex. amortization of intangible assets, M&I and restructuring charges (recoveries))	543	830	965
(Loss) income before taxes (ex. amortization of intangible assets, M&I and restructuring charges (recoveries))	(17)	822	17
Amortization of intangible assets	2	5	5
M&I and restructuring charges (recoveries)	(2)	177	35
(Loss) income before taxes	\$ (17)	\$ 640	\$ (23)
Average loans and leases	\$ 10,391	\$ 10,155	\$ 10,548

Business description

The Other segment primarily includes:

- credit-related services;
- the leasing portfolio;
- corporate treasury activities, including our investment securities portfolio;
- the derivatives business;
- our equity investment in Wing Hang prior to the sale in 2014;
- a 33.9% equity interest in ConvergEx;
- business exits, including the results of Meriten, and Newton's private client business in 2013; and
- corporate overhead.

Revenue primarily reflects:

- net interest revenue from the credit services and lease financing portfolios;
- interest revenue remaining after transfer pricing allocations;
- fee and other revenue from corporate and bank owned life insurance, credit-related financing revenue, Meriten, and Newton's private client business; and
- gains (losses) associated with the valuation of investment securities and other assets.

Expenses include:

- M&I expenses;
- restructuring charges recorded in 2015 and 2014 that relate to corporate-level initiatives and were therefore recorded in the Other segment. In the fourth quarter of 2013, restructuring charges were recorded in the businesses. Prior to the fourth quarter of 2013, restructuring charges were reported in the Other segment;
- direct expenses supporting credit-related services, leasing, investing, and funding activities; and
- certain corporate overhead not directly attributable to the operations of other businesses.

Review of financial results

The Other segment had a pre-tax loss of \$17 million in 2015 compared with pre-tax income of \$640 million in 2014.

Total fee and other revenue decreased \$863 million compared with 2014. The decrease primarily reflects the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, both recorded in 2014, and the impact of the July 2015 sale of Meriten, partially offset by the impact of hedging activity for foreign currency placements.

Net interest revenue decreased \$55 million compared with 2014. The decrease primarily reflects higher internal crediting rates to the businesses for deposits.

The provision for credit losses was \$160 million in 2015 reflecting the impairment charge related to a recent court decision.

Noninterest expense, excluding amortization of intangible assets, M&I and restructuring charges (recoveries), decreased \$287 million compared with 2014. The decrease primarily reflects lower litigation expense, the impact of curtailing the U.S. pension plan, and the impact of the July 2015 sale of Meriten.

2014 compared with 2013

Income before taxes in the Other segment was \$640 million in 2014 compared with a pre-tax loss of \$23 million in 2013. Total revenue increased \$658 million primarily resulting from the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, partially offset by lower equity investment revenue, lower securities gains and the impact of the sale of Newton's private client business. Noninterest expense, excluding amortization of intangible assets, M&I and restructuring charges (recoveries), decreased \$135 million primarily reflecting lower staff expense, lower business development expense as a result of discretionary expense control and the 2013 corporate branding campaign, and a decrease in the cost of generating certain tax credits, partially offset by higher litigation expense.

International operations

Our primary international activities consist of securities services and global payment services in our investment services business, and asset management in our investment management business.

Our clients include some of the world's largest asset managers, insurance companies, corporations, financial intermediaries, local authorities and pension funds. Through our global network of offices, we have developed a deep understanding of local requirements and cultural needs, and we pride ourselves in providing dedicated service through our multilingual sales, marketing and client service teams.

We conduct business through subsidiaries, branches, and representative offices in 35 countries. We have operational centers based in Brussels, Cork, Dublin, Wexford, Luxembourg, Singapore, Wroclaw, throughout the UK including London, Manchester, Brentwood, Edinburgh and Poole, and Chennai and Pune in India.

At Dec. 31, 2015, we had approximately 8,900 employees in EMEA, approximately 13,500 employees in APAC and approximately 700 employees in other global locations, primarily Brazil.

BNY Mellon Investment Management operates on a multi-boutique model, bringing investors the skills of our specialist boutique asset managers, which together manage investments spanning virtually all asset classes.

We are the seventh largest global asset manager. At Dec. 31, 2015, our international operations managed 46% of BNY Mellon's AUM compared with 44% at Dec. 31, 2014. The AUM at Dec. 31, 2014 was restated to reflect the reclassification of Meriten from the Investment Management business to the Other segment. The increase in international AUM primarily resulted from net new business, partially offset by the unfavorable impact of a stronger U.S. dollar.

In Europe, we maintain a significant presence in the Undertakings for Collective Investment in Transferable Securities Directives ("UCITS") servicing field. In Ireland, BNY Mellon is one of the largest administrators (by total net assets) for fund administration services across domiciled and non-domiciled funds. We offer a full range of tailored solutions for investment companies, financial institutions and institutional investors in Germany. We settle securities transactions in over 100 markets. We are a leader in servicing tri-party repo collateral with approximately \$2.2 trillion serviced globally.

We served as depository for 1,145 sponsored American and global depository receipt programs at Dec. 31, 2015, acting in partnership with leading companies from 64 countries - an estimated 58% global market share.

We have over 50 years of experience providing trade and cash services to financial institutions and central banks outside of the U.S. In addition, we offer a broad range of servicing and fiduciary products to

financial institutions, corporations and central banks depending on the state of market development. In emerging markets, we lead with global payments and issuer services, introducing other products as the markets mature. For more established markets, our focus is on global, not local, investment services.

We are also a full-service global provider of foreign exchange services, actively trading in over 100 of the world's currencies. We serve clients from trading desks located in Europe, Asia and North America.

Our financial results, as well as our level of AUM and AUC/A, are impacted by the translation of financial results denominated in foreign currencies to the U.S. dollar. We are primarily impacted by activities denominated in the British pound sterling and the euro. If the U.S. dollar depreciates against these currencies, the translation impact is a higher level of fee revenue, net interest revenue, noninterest expense and AUM and AUC/A. Conversely, if the U.S. dollar appreciates, the translated levels of fee revenue, net interest revenue, noninterest expense and AUM and AUC/A will be lower.

Foreign exchange rates vs. U.S. dollar	2015	2014	2013
Spot rate (at Dec. 31):			
British pound	\$ 1.4799	\$ 1.5609	\$ 1.6526
Euro	1.0883	1.2155	1.3767
Yearly average rate:			
British pound	\$ 1.5282	\$ 1.6475	\$ 1.5645
Euro	1.1100	1.3257	1.3281

International clients accounted for 36% of revenues in 2015 compared with 38% in 2014 and 37% in 2013. Net income from international operations was \$1.7 billion in 2015 compared with \$1.8 billion in 2014 and \$1.6 billion in 2013.

In 2015, revenues from EMEA were \$3.9 billion, compared with \$3.9 billion in 2014 and \$3.8 billion in 2013. Revenues from EMEA were flat for 2015 compared with 2014, primarily reflecting lower investment management and corporate trust fees, partially offset by higher asset servicing fees, treasury services and broker dealer services. Investment Services generated 66% and Investment Management generated 33% of EMEA revenues. Net income from EMEA was \$1.2 billion in 2015 compared with \$775 million in 2014 and \$822 million in 2013.

Revenues from APAC were \$904 million in 2015 compared with \$1.4 billion in 2014 and \$936 million in 2013. Revenues from APAC were down 35% for 2015 compared with 2014. The decrease in 2015 primarily reflects the gain on the sale of our investment in Wing Hang recorded in 2014, partially offset by higher asset servicing fees. Revenue from APAC in 2015 was generated by Investment Services 78% and Investment Management 22%. Net income from APAC was \$365 million in 2015 compared with \$719 million in 2014 and \$399 million in 2013.

For additional information regarding our International operations, including certain key subjective assumptions used in determining the results, see Note 25 of the Notes to Consolidated Financial Statements.

Country risk exposure

We have exposure to certain countries and territories that have had a heightened focus due to recent events. Where appropriate, we offset the risk associated with the exposure in these countries with collateral that has been pledged, which primarily consists of cash or marketable securities, or by transferring the risk to a third-party guarantor in another country or territory. Exposure described below reflects the country of operations and risk of the immediate counterparty. We continue to monitor our exposure to these and other countries as part of our Risk Management process. See "Risk management" for additional information on how our exposures are managed.

BNY Mellon has a limited economic interest in the performance of assets of consolidated investment management funds, and therefore they are excluded from this disclosure.

Ireland, Italy, Spain, Portugal and Greece

Over the past several years, there have been concerns about European sovereign debt and its impact on the European banking system, as a number of European countries, including Ireland, Italy, Spain, Portugal and Greece, experienced credit deterioration. We have total net exposure to Ireland, Italy and Spain of \$4.9 billion at Dec. 31, 2015 including \$1.3 billion to Ireland, \$1.6 billion to Italy and \$2.0 billion to Spain. The total net exposure was \$5.2 billion at Dec. 31, 2014, including \$1.4 billion to Ireland, \$1.6 billion to Italy and \$2.2 billion to Spain. Exposure to Ireland, Italy and Spain primarily consisted of investment grade sovereign debt and European Floating Rate

notes. At Dec. 31, 2015, investment securities exposure totaled \$895 million in Ireland, \$1.4 billion in Italy and \$2.0 billion in Spain. At Dec. 31, 2014, investment securities exposure totaled \$818 million in Ireland, \$1.5 billion in Italy and \$2.0 billion in Spain. At Dec. 31, 2015 and 2014, BNY Mellon had exposure of less than \$1 million to Portugal and Greece.

Brazil

Current conditions in Brazil have resulted in increased focus on its economic and political stability. We have operations in Brazil providing investment services and investment management services. In addition, we have total net exposure to Brazil of \$2.2 billion, including \$2.1 billion in loans, which are primarily short-term trade finance loans extended to large financial institutions, and \$95 million of investment grade sovereign debt.

Russia and Ukraine

Events in Russia and Ukraine significantly increased geopolitical tensions in Central and Eastern Europe. We provide investment services, including acting as a depositary receipt bank, for companies in Russia, and investment management services primarily through our noncontrolling interest in an asset manager. At Dec. 31, 2015 and 2014, our exposure to Russia was \$63 million and \$243 million, respectively, and our exposure to Ukraine was less than \$1 million. To date, our businesses with Russian exposure have not been materially impacted by the ongoing tensions, sanctions or impact of the decline in oil prices.

Puerto Rico

Recent concerns regarding financial conditions in Puerto Rico have resulted in increased focus on its

ability to repay its debt. At Dec. 31, 2015, BNY Mellon had margin loan exposure of approximately \$50 million where the collateral received has a concentration of Puerto Rican securities. We have increased our margin requirements and believe the impact of potential negative outcomes in Puerto Rico would not be material.

Cross-border risk

Cross-border outstandings are based on the Federal Financial Institutions Examination Council's ("FFIEC") regulatory guidelines for reporting cross-border risk. Cross-border outstandings in the table below include loans, acceptances, interest-bearing deposits with other banks, other interest-bearing investments, and other monetary assets which are denominated in U.S. dollars or other non-local currency. Also included are local currency outstandings not hedged or funded by local borrowings. Under the FFIEC guidelines, cross-border outstandings are reported based on the domicile of the counterparty, issuer of collateral or guarantor.

Foreign assets are subject to the general risks attendant on the conduct of business in each foreign country, including economic uncertainties and each foreign government's regulations. In addition, our foreign assets may be affected by changes in demand or pricing resulting from fluctuations in currency exchange rates or other factors.

The table below shows our cross-border outstandings at Dec. 31 of each of the last three years where cross-border exposure exceeds 1.00% of total assets (denoted with "**") or exceeds 0.75% but less than or equal to 1.00% of total assets (denoted with "***").

Results of Operations (continued)

Cross-border outstandings (in millions)	Banks and other financial institutions (a)		Public sector	Commercial, industrial and other	Total cross-border outstandings (b)
2015:					
United Kingdom*	\$	1,732	\$ 569	\$ 2,265	\$ 4,566
France*		968	2,855	120	3,943
Germany**		1,882	1,666	363	3,911
2014:					
France*	\$	410	\$ 3,770	\$ 183	\$ 4,363
United Kingdom**		2,583	544	655	3,782
China**		3,459	—	30	3,489
Germany**		1,207	1,505	569	3,281
Netherlands**		526	1,737	664 (c)	2,927
2013:					
China*	\$	5,668	\$ —	\$ 11	\$ 5,679
Netherlands*		2,116	2,154	829 (c)	5,099
Australia*		4,125	16	251	4,392
Germany*		1,885	2,020	196	4,101
France*		2,474	1,551	59	4,084
Japan**		3,710	—	6	3,716
United Kingdom**		2,859	45	641	3,545

(a) Primarily short-term interest-bearing deposits with banks. Also includes global trade finance loans.

(b) Excludes assets of consolidated investment management funds.

(c) Primarily European floating rate notes.

Emerging markets exposure

We determine our emerging markets exposures using the MSCI Emerging Markets (EM) IMI Index. Our emerging markets exposures totaled \$13 billion at both Dec. 31, 2015 and Dec. 31, 2014, primarily reflecting higher global trade finance loans to India, South Korea and Brazil, offset by lower global trade finance loans to China.

Critical accounting estimates

Our significant accounting policies are described in Note 1 of the Notes to Consolidated Financial Statements under “Summary of significant accounting and reporting policies”. Our critical accounting estimates are those related to the allowance for loan losses and allowance for lending-related commitments, fair value of financial instruments and derivatives, other-than-temporary impairment, goodwill and other intangibles, and pension accounting. Further information on policies related to the allowance for loan losses and allowance for lending-related commitments can be found under “Summary of significant accounting and reporting policies” in Note 1 of the Notes to Consolidated Financial Statements. Additionally, further information can be found in the Notes to Consolidated Financial Statements related to the following: the valuation of derivatives and securities where quoted market prices are not available can be

found under “Fair value measurement” in Note 20; information on other-than-temporary impairment can be found in “Securities” in Note 4; policies related to goodwill and intangible assets can be found in “Goodwill and intangible assets” in Note 6; and information on pensions can be found in “Employee benefit plans” in Note 18.

Allowance for loan losses and allowance for lending-related commitments

The allowance for loan losses and allowance for lending-related commitments represent management’s estimate of probable losses inherent in our credit portfolio. This evaluation process is subject to numerous estimates and judgments.

We utilize a quantitative methodology and qualitative framework for determining the allowance for loan losses and the allowance for lending-related commitments. Within this qualitative framework, management applies judgment when assessing internal risk factors and environmental factors to compute an additional allowance for each component of the loan portfolio.

The three elements of the allowance for loan losses and the allowance for lending-related commitments include the qualitative allowance framework. The three elements are:

- an allowance for impaired credits of \$1 million or greater;
- an allowance for higher risk-rated credits and pass-rated credits; and
- an allowance for residential mortgage loans.

Our lending is primarily to institutional customers. As a result, our loans are generally larger than \$1 million. Therefore, the first element, impaired credits, is based on individual analysis of all impaired loans of \$1 million or greater. The allowance is measured by the difference between the recorded value of impaired loans and their impaired value. Impaired value is either the present value of the expected future cash flows from the borrower, the market value of the loan, or the fair value of the collateral, if the loan is collateral dependent.

The second element, higher risk-rated credits and pass-rated credits, is based on our probable loss model. Individual credit analyses are performed on such loans before being assigned a credit rating. All borrowers are assigned to pools based on their credit rating. The probable loss inherent in each loan in a pool incorporates the borrower's credit rating, loss given default rating and maturity. The loss given default incorporates a recovery expectation and an estimate of the use of the facility at default (usage given default). The borrower's probability of default is derived from the associated credit rating. Borrower ratings are reviewed at least annually and are periodically mapped to third-party databases, including rating agency and default and recovery databases, to ensure ongoing consistency and validity. Higher risk-rated credits are reviewed quarterly.

The third element, the allowance for residential mortgage loans, is determined by segregating five mortgage pools into delinquency periods ranging from current through foreclosure. Each of these delinquency periods is assigned a probability of default. A specific loss given default is assigned for each mortgage pool. BNY Mellon assigns all residential mortgage pools, except home equity lines of credit, a probability of default and loss given default based on default and loss data derived from internal historical data related to our residential mortgage portfolio. The resulting probable loss factor (the probability of default multiplied by the loss given default) is applied against the loan balance to determine the allowance held for each pool. For home equity lines of credit, probability of default and loss given default are based on external data from

third-party databases due to the small size of the portfolio and insufficient internal data.

The qualitative framework is used to determine an additional allowance for each portfolio based on the factors below:

Internal risk factors:

- Nonperforming loans to total non-margin loans;
- Criticized assets to total loans and lending-related commitments;
- Borrower concentration; and
- Significant concentrations in high risk industries and countries.

Environmental risk factors:

- U.S. non-investment grade default rate;
- Unemployment rate; and
- Change in real GDP.

The objective of the qualitative framework is to capture incurred losses that may not have been fully captured in the quantitative reserve, which is based primarily on historical data. Management determines the qualitative allowance each period based on judgment informed by consideration of internal and external risk factors and other considerations that may be deemed relevant during the period. Once determined in the aggregate, our qualitative allowance is then allocated to each of our loan classes based on the respective classes' quantitative allowance balances with the allocations adjusted, when necessary, for class specific risk factors.

For each risk factor, we calculate the minimum and maximum values, and percentiles in-between, to evaluate the distribution of our historical experience. The distribution of historical experience is compared to the risk factor's current quarter observed experience to assess the current risk inherent in the portfolio and overall direction/trend of a risk factor relative to our historical experience.

Based on this analysis, we assign a risk level - no impact, low, moderate, high and elevated - to each risk factor for the current quarter. Management assesses the impact of each risk factor to determine an aggregate risk level. We do not quantify the impact of any particular risk factor. Management's assessment of the risk factors, as well as the trend in the quantitative allowance, supports management's judgment for the overall required qualitative allowance. A smaller qualitative allowance may be

required when our quantitative allowance has reflected incurred losses associated with the aggregate risk level. A greater qualitative allowance may be required if our quantitative allowance does not yet reflect the incurred losses associated with the aggregate risk level.

To the extent actual results differ from forecasts or management's judgment, the allowance for credit losses may be greater or less than future charge-offs.

The credit rating assigned to each credit is a significant variable in determining the allowance. If each credit were rated one grade better, the allowance would have decreased by \$70 million, while if each credit were rated one grade worse, the allowance would have increased by \$132 million. Similarly, if the loss given default were one rating worse, the allowance would have increased by \$46 million, while if the loss given default were one rating better, the allowance would have decreased by \$36 million. For impaired credits, if the net carrying value of the loans was 10% higher or lower, the allowance would have decreased or increased by less than \$1 million, respectively.

Fair value of financial instruments

The guidance related to *Fair Value Measurement* included in ASC 820 defines fair value, establishes a framework for measuring fair value, and expands disclosures about assets and liabilities measured at fair value. The standard also established a three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

Fair value - Securities

Level 1 - Securities - Recent quoted prices from exchange transactions are used for debt and equity securities that are actively traded on exchanges and for U.S. Treasury securities and U.S. Government securities that are actively traded in highly liquid over-the-counter markets.

Level 2 - Securities - For securities where quotes from recent transactions are not available for identical securities, we determine fair value primarily based on pricing sources with reasonable levels of price transparency. The pricing sources employ financial models or obtain comparisons to similar instruments to arrive at "consensus" prices.

Specifically, the pricing sources obtain recent transactions for similar types of securities (e.g., vintage, position in the securitization structure) and ascertain variables such as discount rate and speed of prepayment for the type of transaction and apply such variables to similar types of bonds. We view these as observable transactions in the current market place and classify such securities as Level 2.

In addition, we have significant investments in more actively traded agency RMBS and other types of securities such as sovereign debt. The pricing sources derive the prices for these securities largely from quotes they obtain from three major inter-dealer brokers. The pricing sources receive their daily observed trade price and other information feeds from the inter-dealer brokers.

For securities with bond insurance, the financial strength of the insurance provider is analyzed and that information is included in the fair value assessment for such securities.

The pricing sources discontinue pricing any specific security whenever they determine there is insufficient observable data to provide a good faith opinion on price. The pricing sources did not discontinue pricing for any securities in our investment securities portfolio at Dec. 31, 2015.

We obtain prices for our Level 1 and Level 2 securities from multiple pricing sources. We have designed controls to develop an understanding of the pricing sources' securities pricing methodology and have implemented specific internal controls over the valuation of securities.

As appropriate, we review the quality control procedures and pricing methodologies used by the pricing sources, including the process for obtaining prices provided by the pricing sources, their valuation methodology and controls for each class of security.

Prices received from pricing sources are subject to validation checks that help determine the completeness and accuracy of the prices. These validation checks are reviewed by management and, based on the results, may be subject to additional review and investigation. We also review securities with no price changes (stale prices) and securities with zero values.

We have a surveillance process in place to monitor the accuracy of prices provided by the pricing sources. We utilize a hierarchy that compares security prices obtained from multiple pricing sources against established thresholds. Discrepancies that fall outside of these thresholds are challenged with the pricing services and adjusted if necessary.

If further research is required, we review and validate these prices with the pricing sources. We also validate prices from pricing sources by comparing prices received to actual observed prices from actions such as purchases and sales, when possible.

Level 3 - Securities - Where we have used our own cash flow models, which included a significant input into the model that was deemed unobservable, to estimate the value of securities, we classify them in Level 3 of the ASC 820 hierarchy. All of our securities are valued by pricing sources with reasonable levels of price transparency. At Dec. 31, 2015, we have no instruments included in Level 3 of the fair value hierarchy.

See Note 20 of the Notes to Consolidated Financial Statements for details of our securities by ASC 820 hierarchy level.

Fair value - Derivative financial instruments

Level 1 - Derivative financial instruments - Includes derivative financial instruments that are actively traded on exchanges, principally listed equity options.

Level 2 - Derivative financial instruments - Includes the vast majority of our over-the-counter derivative financial instruments. Derivatives classified as Level 2 are valued utilizing discounted cash flow analysis and financial models for which the valuation inputs are observable or can be corroborated, directly or indirectly, for substantially the full term of the instrument. Valuation inputs include interest rate yield curves, foreign exchange rates, equity prices, credit curves, option volatilities and other factors. Where appropriate, valuation adjustments are made to account for various factors such as credit worthiness of the counterparty, credit worthiness of the Company and model and liquidity risks. Level 2 over-the-counter derivatives generally include interest rate swaps and options, foreign exchanges forwards, foreign exchange swaps and options, forward rate agreements, equity swaps and options, and credit default swaps.

Level 3 - Derivative financial instruments - Level 3 derivatives include derivatives for which valuations are based on inputs that are unobservable and significant to the overall fair value measurement, and may include certain long-dated or highly structured contracts. At Dec. 31, 2015, we have no derivatives included in Level 3 of the fair value hierarchy.

To test the appropriateness of the valuations, we subject the models to review and approval by an independent internal risk management function, benchmark the models against similar instruments and validate model estimates to actual cash transactions. In addition, we perform detailed reviews and analyses of profit and loss. Valuation adjustments are determined and controlled by a function independent of the area initiating the risk position. As markets and products develop and the pricing for certain products becomes more transparent, we refine our valuation methods. Any changes to the valuation models are reviewed by management to ensure the changes are justified.

To confirm that our valuation policies are consistent with exit prices as prescribed by ASC 820, observable inputs are utilized to determine pricing where available. In addition, where available, we review our derivative valuations using recent transactions in the marketplace, pricing services and the results of similar types of transactions.

For details of our derivative financial instruments by level of the valuation hierarchy, see Note 20 of the Notes to Consolidated Financial Statements.

Fair value option

ASC 825 provides the option to elect fair value as an alternative measurement basis for selected financial assets, financial liabilities, unrecognized firm commitments and written loan commitments which are not subject to fair value under other accounting standards. Under ASC 825, fair value is used for both the initial and subsequent measurement of the designated assets, liabilities and commitments, with the changes in fair value recognized in income. See Note 21 of the Notes to Consolidated Financial Statements for additional disclosure regarding the fair value option.

Fair value - Judgments

In times of illiquid markets and financial stress, actual prices and valuations may significantly diverge from results predicted by models. In addition, other factors can affect our estimate of fair value, including market dislocations, incorrect model assumptions, and unexpected correlations. These valuation methods could expose us to materially different results should the models used or underlying assumptions be inaccurate. See “Summary of significant accounting and reporting policies” in Note 1 to the Notes to Consolidated Financial Statements.

Other-than-temporary impairment

The guidance included in ASC 320 defines the OTTI model for investments in debt securities. Under this guidance, a debt security is considered impaired if its fair value is less than its amortized cost basis. An OTTI is triggered if (1) the intent is to sell the security; (2) the security will more likely than not have to be sold before the impairment is recovered, or (3) the amortized cost basis is not expected to be recovered. When an entity does not intend to sell the security before recovery of its cost basis, it will recognize the credit component of an OTTI of a debt security in earnings and the remaining portion in accumulated other comprehensive income.

The determination of whether a credit loss exists is based on best estimates of the present value of cash flows to be collected from the debt security. Generally, cash flows are discounted at the effective interest rate implicit in the debt security at the time of acquisition. For debt securities that are beneficial interests in securitized financial assets and are not high credit quality, ASC 325 provides that cash flows be discounted at the current yield used to accrete the beneficial interest.

For each security in the investment securities portfolio (including, but not limited to, those whose fair value is less than their amortized cost basis), an extensive, regular review is conducted to determine if an OTTI has occurred. For example, to determine if an unrealized loss on non-agency RMBS is other-than-temporary, we project total estimated defaults of the underlying assets (mortgages) and multiply that calculated amount by an estimate of realizable value upon sale of these assets in the marketplace (severity) in order to determine the projected collateral loss. We also evaluate the current credit enhancement

underlying the bond to determine the impact on cash flows. If we determine that a given non-agency RMBS will be subject to a write-down or loss, we record the expected credit loss as a charge to earnings.

In recent years, improving home prices helped to stabilize the credit performance of non-agency RMBS transactions. This in turn enabled us to maintain generally stable assumptions for these transactions with regard to estimated defaults and the amount we expect to receive to cover the value of the loans underlying the securities. See Note 4 of the Notes to Consolidated Financial Statements for projected weighted-average default rates and loss severities at Dec. 31, 2015 and 2014 for the 2007, 2006 and late-2005 non-agency RMBS and the securities previously held in the Grantor Trust we established in connection with the restructuring of our investment securities portfolio in 2009. If actual delinquencies, default rates and loss severity assumptions worsen, we would expect additional impairment losses to be recorded in future periods.

Net securities gains in 2015 were \$83 million compared with \$91 million in 2014. The low interest rate environment in 2015 and 2014 created the opportunity for us to realize gains as we rebalanced and managed the duration risk of the investment securities portfolio.

At Dec. 31, 2015, if we were to increase each of our projected loss severity and default rates by 100 basis points on each of the positions in our Alt-A, subprime and prime RMBS portfolios, including the securities previously held by the Grantor Trust, credit-related impairment charges on these securities would have increased by \$1 million (pre-tax). If we were to decrease each of our projected loss severity and default rates by 100 basis points on each of the positions, credit-related impairment charges on these securities would have decreased by less than \$1 million (pre-tax).

Goodwill and other intangibles

We initially record all assets and liabilities acquired in purchase acquisitions, including goodwill, indefinite-lived intangibles and other intangibles, in accordance with ASC 805 *Business Combinations*. Goodwill, indefinite-lived intangibles and other intangibles are subsequently accounted for in accordance with ASC 350 *Intangibles - Goodwill and*

Other. The initial measurement of goodwill and intangibles requires judgment concerning estimates of the fair value of the acquired assets and liabilities. Goodwill (\$17.6 billion at Dec. 31, 2015) and indefinite-lived intangible assets (\$2.7 billion at Dec. 31, 2015) are not amortized but subject to tests for impairment annually or more often if events or circumstances indicate it is more likely than not they may be impaired. Other intangible assets are amortized over their estimated useful lives and are subject to impairment if events or circumstances indicate a possible inability to realize the carrying amount.

BNY Mellon's three business segments include seven reporting units for which annual goodwill impairment testing is performed in accordance with ASC 350. The Investment Management segment is comprised of two reporting units; the Investment Services segment is comprised of four reporting units; and one reporting unit is included in the Other segment.

The goodwill impairment test is performed in two steps. The first step compares the estimated fair value of the reporting unit with its carrying amount, including goodwill. If the estimated fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. However, if the carrying amount of the reporting unit were to exceed its estimated fair value, a second step would be performed that would compare the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. An impairment loss would be recorded to the extent that the carrying amount of goodwill exceeds its implied fair value. A substantial goodwill impairment charge would not have a significant impact on our financial condition, but could have an adverse impact on our results of operations. In addition, due to regulatory restrictions, the Company's subsidiary banks could be restricted from distributing available cash to the Parent resulting in the Parent needing to issue additional long-term debt.

In the second quarter of 2015, we performed our annual goodwill test on all seven reporting units using an income approach to estimate the fair values of each reporting unit. Estimated cash flows used in the income approach were based on management's projections as of April 1, 2015. The discount rate applied to these cash flows ranged from 10.0% to 11.5% and incorporated a 7.0% market equity risk premium. Estimated cash flows extend far into the

future, and, by their nature, are difficult to estimate over such an extended time frame.

As of the date of the annual test, the fair values of six of the Company's reporting units were substantially in excess of the respective reporting units' carrying value. The fair value of the Asset Management reporting unit, which is one of the two reporting units in the Investment Management segment, exceeded its carrying value by approximately 16%. The Asset Management reporting unit had \$7.4 billion of allocated goodwill. For the Asset Management reporting unit, in the future, small changes in the assumptions could produce a non-cash goodwill impairment, which would have no effect on our regulatory capital ratios. In addition, certain money market fee waiver practices and changes in the level of AUM could have an effect on Asset Management broadly, as well as the fair value of this reporting unit.

Key judgments in accounting for intangibles include useful life and classification between goodwill and indefinite-lived intangibles or other intangibles requiring amortization.

Indefinite-lived intangible assets are evaluated for impairment at least annually by comparing their fair values, estimated using discounted cash flow analyses, to their carrying values. Other amortizing intangible assets (\$1.2 billion at Dec. 31, 2015) are evaluated for impairment if events and circumstances indicate a possible impairment. Such evaluation of other intangible assets is initially based on undiscounted cash flow projections.

See Notes 1 and 6 of the Notes to Consolidated Financial Statements for additional information regarding goodwill, intangible assets and the annual and interim impairment testing.

Pension accounting

BNY Mellon has defined benefit pension plans covering approximately 15,400 U.S. employees and approximately 13,200 non-U.S. employees.

BNY Mellon has two qualified and several non-qualified defined benefit pension plans in the U.S. and several pension plans overseas. As of Dec. 31, 2015, the U.S. plans accounted for 78% of the projected benefit obligation. The pension credit for BNY Mellon plans was \$10 million in 2015

compared with pension expense of \$68 million in 2014 and \$176 million in 2013.

On Jan. 29, 2015, the board of directors approved an amendment to freeze benefit accruals under the U.S. qualified and nonqualified defined benefit plans effective June 30, 2015. This change resulted in no additional benefits being earned by participants in those plans based on service or pay after June 30, 2015. These plans were previously closed to new participants effective Dec. 31, 2010 at which time a non-elective contribution was added to the Company's defined contribution plan for employees not eligible to join the pension plan. Employees previously participating in the pension plan received this non-elective contribution starting July 1, 2015.

A total net pension credit of \$44 million is expected to be recorded by BNY Mellon in 2016, assuming currency exchange rates at Dec. 31, 2015. The expected increase in the net pension credit in 2016 compared with 2015 is primarily driven by a decrease in pension costs due to higher discount rates and the freeze of benefit accruals for the U.S. plans, partially offset by an increase in pension costs due to a reduction in the expected long-term rate of return on plan assets for U.S. plans. The increase in the net pension credit compared with 2015 will be offset by a \$13 million increase in the expense related to our defined contribution plans for participants that began receiving the 2% non-elective annual contribution to The Bank of New York Mellon Corporation 401(k) Savings Plan as a result of freezing benefit accruals under the U.S. qualified and nonqualified defined benefit plans effective June 30, 2015.

A number of key assumption and measurement date values determine pension expense. The key elements include the long-term rate of return on plan assets, the discount rate, the market-related value of plan assets and the price used to value stock in the Employee Stock Ownership Plan. Since 2013, these key elements have varied as follows:

<i>(dollars in millions, except per share amounts)</i>	2016	2015	2014	2013
Domestic plans:				
Long-term rate of return on plan assets	7.00%	7.25%	7.25%	7.25%
Discount rate (a)	4.48%	4.13%	4.99%	4.25%
Market-related value of plan assets (b)	\$ 4,830	\$ 4,696	\$ 4,430	\$ 4,121
ESOP stock price (b)	\$ 41.66	\$ 39.18	\$ 32.81	\$ 24.60
Net U.S. pension credit/(expense)	N/A	\$ 52	\$ (34)	\$ (133)
All other net pension credit/(expense)	N/A	(42)	(34)	(43)
Total net pension credit/(expense)	N/A	\$ 10	\$ (68)	\$ (176)

(a) As a result of the amendment to the U.S. pension plans, liabilities for 2015 were re-measured as of Jan. 29, 2015 at a discount rate of 3.73%.

(b) Market-related value of plan assets and ESOP stock price are for the beginning of the plan year. See "Summary of significant accounting and reporting policies" in Note 1 of the Notes to Consolidated Financial Statements. The market-related value of plan assets was \$4,713 million as of the Jan. 29, 2015 re-measurement.

The discount rate for U.S. pension plans was determined after reviewing equivalent rates obtained by discounting the pension plans' expected cash flows using various high-quality, long-term corporate bond yield curves. We also reviewed the results of several models that matched bonds to our pension cash flows. After reviewing the various indices and models, we recommended a discount rate of 4.48% as of Dec. 31, 2015.

The discount rates for foreign pension plans are based on high-quality corporate bond rates in countries that have an active corporate bond market. In those countries without an active corporate bond market, discount rates are based on local government bond rates plus a credit spread.

Our expected long-term rate of return on plan assets is based on anticipated returns for each applicable asset class. Anticipated returns are weighted for the expected allocation for each asset class and are based on forecasts for prospective returns in the equity and fixed income markets, which should track the long-term historical returns for these markets. We also consider the growth outlook for U.S. and global economies, as well as current and prospective interest rates.

The market-related value of plan assets also influences the level of pension expense. Differences

between expected and actual returns are recognized over five years to compute an actuarially derived market-related value of plan assets.

Unrecognized actuarial gains and losses are amortized over the future service period of active employees if they exceed a threshold amount. As of Dec. 31, 2015, BNY Mellon had \$1.4 billion of unrecognized losses which are being amortized. As a result of the amendment to the U.S. pension plans described above, future unrecognized actuarial gains and losses for the U.S. pension plans that exceed a threshold amount will be amortized over the average future life expectancy of plan participants with a maximum of 15 years.

The annual impacts of hypothetical changes in the key assumptions on pension costs are shown in the table below.

Pension expense				
<i>(dollar amounts in millions, except per share amounts)</i>	Increase in pension expense		(Decrease) in pension expense	
Long-term rate of return on plan assets	(100) bps	(50) bps	50 bps	100 bps
Change in pension expense	\$ 57	\$ 29	\$ (29)	\$ (57)
Discount rate	(50) bps	(25) bps	25 bps	50 bps
Change in pension expense	\$ 28	\$ 14	\$ (13)	\$ (26)
Market-related value of plan assets	(20) %	(10) %	10 %	20 %
Change in pension expense	\$ 168	\$ 84	\$ (83)	\$ (161)
ESOP stock price	\$ (10)	\$ (5)	\$ 5	\$ 10
Change in pension expense	\$ 7	\$ 3	\$ (3)	\$ (6)

In addition to its pension plans, BNY Mellon has an ESOP. Benefits payable under The Bank of New York Mellon Corporation Pension Plan are offset by the equivalent value of benefits earned under the ESOP for employees who participated in the legacy Retirement Plan of The Bank of New York Company, Inc.

Consolidated balance sheet review

At Dec. 31, 2015, total assets were \$394 billion compared with \$385 billion at Dec. 31, 2014. Total assets averaged \$372 billion in 2015 compared with \$373 billion in 2014. Fluctuations in the period-end and average total assets were primarily driven by higher customer deposits, partially offset by the adoption of new accounting guidance related to

consolidations effective Jan. 1, 2015. Deposits totaled \$280 billion at Dec. 31, 2015 and \$266 billion at Dec. 31, 2014. Total deposits averaged \$251 billion in 2015 and \$243 billion in 2014. At Dec. 31, 2015, total interest-bearing deposits were 54% of total interest-earning assets, compared with 51% at Dec. 31, 2014.

At Dec. 31, 2015, we had \$39 billion of liquid funds (which include interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements) and \$120 billion of cash (including \$113 billion of overnight deposits with the Federal Reserve and other central banks) for a total of \$159 billion of available funds. This compares with available funds of \$143 billion at Dec. 31, 2014. The increase in available funds primarily reflects the increase of overnight deposits with the Federal Reserve and central banks, partially offset by our strategic effort to reduce our level of interbank deposits. Total available funds as a percentage of total assets was 40% at Dec. 31, 2015 compared with 37% at Dec. 31, 2014. Of the \$39 billion in liquid funds held at Dec. 31, 2015, \$15 billion was placed in interest-bearing deposits with large, highly-rated global financial institutions with a weighted-average life to maturity of approximately 39 days. Of the \$15 billion, \$3 billion was placed with banks in the Eurozone.

Investment securities were \$119.2 billion, or 30% of total assets, at Dec. 31, 2015, compared with \$119.3 billion, or 31% of total assets, at Dec. 31, 2014. The decrease primarily reflects lower unrealized gains and a decrease in sovereign debt/sovereign guaranteed and state and political subdivisions, partially offset by additional investments in Agency RMBS and U.S. Government agencies securities.

Loans were \$63.7 billion, or 16% of total assets, at Dec. 31, 2015, compared with \$59.1 billion, or 15% of total assets, at Dec. 31, 2014. The increase primarily reflects higher financial institution loans, wealth management loans and mortgages and commercial real estate loans, partially offset by lower overdrafts.

Long-term debt totaled \$21.5 billion at Dec. 31, 2015 and \$20.3 billion at Dec. 31, 2014. In 2015, the Parent issued \$5.0 billion of senior debt and \$3.05 billion of long-term debt matured. Additionally, the Parent called \$600 million of senior debt in 2015.

The Bank of New York Mellon Corporation total shareholders' equity increased to \$38.0 billion from \$37.4 billion at Dec. 31, 2014. The increase primarily reflects earnings retention, the issuance of \$1 billion of noncumulative perpetual preferred stock and approximately \$662 million resulting from stock awards, the exercise of stock options and stock issued for employee benefit plans. The increase was partially offset by share repurchases, foreign currency translation adjustments, and a decrease in the unrealized gain on our investment securities portfolio.

Investment securities

In the discussion of our investment securities portfolio, we have included certain credit ratings information because the information indicates the degree of credit risk to which we are exposed. Significant changes in ratings classifications for our investment securities portfolio could indicate increased credit risk for us and could be accompanied by a reduction in the fair value of our investment securities portfolio.

The following table presents the distribution of our total investment securities portfolio.

Investment securities portfolio (dollars in millions)	Dec. 31, 2014	2015 change in unrealized gain (loss)	Dec. 31, 2015		Fair value as a % of amortized cost (a)	Unrealized gain (loss)	Ratings				
	Fair value		Amortized cost	Fair value			AAA/AA-	A+/A-	BBB+/BBB-	BB+ and lower	Not rated
Agency RMBS	\$ 46,762	\$ (309)	\$ 49,585	\$ 49,464	100%	\$ (121)	100%	—%	—%	—%	—%
U.S. Treasury	24,857	(317)	24,019	23,920	100	(99)	100	—	—	—	—
Sovereign debt/sovereign guaranteed (b)	18,253	(26)	16,574	16,708	101	134	75	—	25	—	—
Non-agency RMBS (c)	2,214	(113)	1,435	1,789	81	354	—	1	1	90	8
Non-agency RMBS	1,113	(4)	900	914	94	14	7	5	18	69	1
European floating rate notes (d)	1,959	(16)	1,369	1,345	98	(24)	68	27	5	—	—
Commercial MBS	4,997	(81)	5,868	5,826	99	(42)	95	4	1	—	—
State and political subdivisions	5,271	6	3,988	4,065	102	77	80	17	—	—	3
Foreign covered bonds (e)	2,866	(37)	2,201	2,242	102	41	100	—	—	—	—
Corporate bonds	1,785	(26)	1,740	1,752	101	12	21	66	13	—	—
CLOs	2,111	(14)	2,363	2,351	99	(12)	100	—	—	—	—
U.S. Government agencies	684	(5)	1,817	1,810	100	(7)	100	—	—	—	—
Consumer ABS	3,240	(15)	2,909	2,893	99	(16)	100	—	—	—	—
Other (f)	3,032	38	3,654	3,700	101	46	45	—	51	—	4
Total investment securities	\$ 119,144 (g)	\$ (919)	\$ 118,422	\$ 118,779 (g)	100%	\$ 357 (g)(h)	90%	2%	6%	2%	—%

(a) Amortized cost before impairments.

(b) Primarily consists of exposure to UK, France, Germany, Spain, and Italy.

(c) These RMBS were included in the former Grantor Trust and were marked-to-market in 2009. We believe these RMBS would receive higher credit ratings if these ratings incorporated, as additional credit enhancements, the difference between the written-down amortized cost and the current face amount of each of these securities.

(d) Includes RMBS and commercial MBS. Primarily consists of exposure to UK and Netherlands.

(e) Primarily consists of exposure to Canada, UK and Netherlands.

(f) Includes commercial paper with a fair value of \$1.6 billion and \$1.9 billion and money market funds with a fair value of \$763 million and \$886 million at Dec. 31, 2014 and Dec. 31, 2015, respectively.

(g) Includes net unrealized losses on derivatives hedging securities available-for-sale of \$313 million at Dec. 31, 2014 and \$292 million at Dec. 31, 2015.

(h) Unrealized gains of \$465 million at Dec. 31, 2015 related to available-for-sale securities.

The fair value of our investment securities portfolio was \$118.8 billion at Dec. 31, 2015 compared with \$119.1 billion at Dec. 31, 2014. The decrease primarily reflects lower unrealized gains and a decrease in sovereign debt/sovereign guaranteed and state and political subdivisions, partially offset by additional investments in Agency RMBS and U.S. Government agencies securities.

At Dec. 31, 2015, the total investment securities portfolio had a net unrealized pre-tax gain of \$357 million compared with \$1.3 billion at Dec. 31, 2014, including the impact of related hedges. The decrease in the net unrealized pre-tax gain was primarily driven by an increase in interest rates. The unrealized gain net of tax on our available-for-sale investment securities portfolio included in accumulated other comprehensive income was \$329 million at Dec. 31, 2015, compared with \$675 million at Dec. 31, 2014.

Results of Operations (continued)

At both Dec. 31, 2015 and Dec. 31, 2014, 90% of the securities in our portfolio were rated AAA/AA-.

We routinely test our investment securities for OTTI. See "Critical accounting estimates" for additional information regarding OTTI.

The following table presents the amortizable purchase premium (net of discount) related to the investment securities portfolio and accretible discount related to the 2009 restructuring of the investment securities portfolio.

Net premium amortization and discount accretion of investment securities (a) <i>(dollars in millions)</i>	2015	2014	2013
Amortizable purchase premium (net of discount) relating to investment securities:			
Balance at period end	\$ 2,319	\$ 2,432	\$ 2,377
Estimated average life remaining at period end <i>(in years)</i>	4.7	4.8	5.2
Amortization	\$ 693	\$ 626	\$ 625
Accretible discount related to the prior restructuring of the investment securities portfolio:			
Balance at period end	\$ 355	\$ 413	\$ 642
Estimated average life remaining at period end <i>(in years)</i>	6.1	5.9	6.0
Accretion	\$ 126	\$ 163	\$ 218

(a) Amortization of purchase premium decreases net interest revenue while accretion of discount increases net interest revenue. Both were recorded on a level yield basis.

The following table presents pre-tax net securities gains (losses) by type.

Net securities gains (losses) <i>(in millions)</i>	2015	2014	2013
U.S. Treasury	\$ 45	\$ 25	\$ 60
Non-agency RMBS	7	17	(1)
Commercial MBS	5	1	16
State and political subdivisions	4	13	13
European floating rate notes	2	1	8
Other	20	34	45
Total net securities gains	\$ 83	\$ 91	\$ 141

The following table shows the fair value of the European floating rate notes by geographical location at Dec. 31, 2015. The unrealized loss on these securities was \$24 million at Dec. 31, 2015, compared with \$8 million at Dec. 31, 2014.

European floating rate notes at Dec. 31, 2015 (a)			
<i>(in millions)</i>	RMBS	Other	Total fair value
United Kingdom	\$ 772	\$ 71	\$ 843
Netherlands	379	—	379
Ireland	121	—	121
Other	2	—	2
Total fair value	\$ 1,274	\$ 71	\$ 1,345

(a) 68% of these securities are in the AAA to AA- ratings category.

See Note 20 of the Notes to Consolidated Financial Statements for details of securities by level in the fair value hierarchy.

Equity investments

Our equity in joint venture and other investments are primarily categorized as other assets. The following table presents the carrying values at Dec. 31, 2015 and 2014.

Equity in joint venture and other investments <i>(in millions)</i>	Dec. 31	
	2015	2014
Equity in joint venture and other investments:		
CIBC Mellon	\$ 473	\$ 550
Siguler Guff	262	272
ConvergEx	86	105
Other equity investments	218	203
Total equity in joint venture and other investments	1,039	1,130
Tax advantaged low income housing investments	918	853
Federal Reserve Bank stock	453	447
Seed capital	245	406
Renewable energy investments	640	383
Private equity investments	34	68
Total equity in joint venture and other investments	\$ 3,329	\$ 3,287

Dividends on the Federal Reserve Bank stock were paid quarterly at a 6% annual rate in 2015. Beginning in 2016, the dividend on the Federal Reserve Bank stock will be paid quarterly at the lesser of (a) the yield on the 10-year U.S. Treasury note at the last auction prior to the payment of the dividend, and (b) 6% annual rate.

For additional information on the fair value of certain seed capital investments and our private equity investments, see Note 7 of the Notes to Consolidated Financial Statements.

Private equity activities consist of investments in private equity funds, mezzanine financings, small business investment companies (“SBICs”) and direct equity investments. The carrying and fair value of our private equity investments was \$34 million at Dec. 31, 2015, a decrease of \$34 million from Dec. 31, 2014. At Dec. 31, 2015, all of our private equity investments are Volcker-compliant SBICs and totaled

\$34 million. Income on these investments was \$1 million in 2015.

At Dec. 31, 2015, we had \$58 million of unfunded investment commitments to Volcker-compliant SBICs. If unused, the commitments expire between 2022 and 2025.

Commitments to private equity limited partnerships may extend beyond the expiration period shown above to cover certain follow-on investments, claims and liabilities, and organizational and partnership expenses.

Loans

Total exposure – consolidated (in billions)	Dec. 31, 2015			Dec. 31, 2014		
	Loans	Unfunded commitments	Total exposure	Loans	Unfunded commitments	Total exposure
Non-margin loans:						
Financial institutions	\$ 15.9	\$ 36.0	\$ 51.9	\$ 13.3	\$ 15.5	\$ 28.8
Commercial	2.3	18.2	20.5	1.7	18.7	20.4
Subtotal institutional	18.2	54.2	72.4	15.0	34.2	49.2
Wealth management loans and mortgages	13.3	1.6	14.9	11.2	1.7	12.9
Commercial real estate	3.9	3.3	7.2	2.5	2.7	5.2
Lease financings	1.9	—	1.9	2.2	—	2.2
Other residential mortgages	1.1	—	1.1	1.2	—	1.2
Overdrafts	4.5	—	4.5	5.9	—	5.9
Other	1.2	—	1.2	1.1	—	1.1
Subtotal non-margin loans	44.1	59.1	103.2	39.1	38.6	77.7
Margin loans	19.6	0.6	20.2	20.0	0.7	20.7
Total	\$ 63.7	\$ 59.7	\$ 123.4	\$ 59.1	\$ 39.3	\$ 98.4

At Dec. 31, 2015, total exposures were \$123.4 billion, an increase of 25% from \$98.4 billion at Dec. 31, 2014. The increase in total exposure primarily reflects higher unfunded commitments in the financial institutions portfolio related to secured intraday credit provided to dealers in connection with their tri-party repo activity.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 59% of our total lending exposure at Dec. 31, 2015 and 50% at Dec. 31, 2014. The increase reflects higher unfunded commitments related to secured intraday credit provided to dealers in connection with their tri-party repo activity. Additionally, a substantial portion of our overdrafts relate to financial institutions.

Financial institutions

The diversity of the financial institutions portfolio is shown in the following table.

Financial institutions portfolio exposure (dollar amounts in billions)	Dec. 31, 2015						Dec. 31, 2014		
	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr	Loans	Unfunded commitments	Total exposure	
Securities industry	\$ 3.1	\$ 20.6	\$ 23.7	99%	99%	\$ 3.1	\$ 1.1	\$ 4.2	
Banks	9.4	2.1	11.5	86	91	7.6	1.7	9.3	
Asset managers	2.0	5.6	7.6	99	83	2.0	4.8	6.8	
Insurance	0.2	4.5	4.7	99	16	0.1	4.0	4.1	
Government	0.1	1.9	2.0	94	64	0.1	2.9	3.0	
Other	1.1	1.3	2.4	98	22	0.4	1.0	1.4	
Total	\$ 15.9	\$ 36.0	\$ 51.9	96%	82%	\$ 13.3	\$ 15.5	\$ 28.8	

The financial institutions portfolio exposure was \$51.9 billion at Dec. 31, 2015 compared with \$28.8 billion at Dec. 31, 2014. The increase primarily reflects higher unfunded commitments in the securities industry portfolio related to secured intraday credit provided to dealers in connection with their tri-party repo activity.

In April 2015, we reduced the amount of secured intraday credit we provide to dealers in connection with dealers' tri-party repo activity by fully converting the secured intraday credit from uncommitted credit to committed credit. The committed credit requires dealers to fully secure the outstanding intraday credit with high-quality liquid assets having a market value in excess of the amount of the outstanding credit. At Dec. 31, 2015, the secured intraday credit provided to dealers in connection with their tri-party repo activity totaled \$19.6 billion and was primarily included in the securities industry portfolio.

Moving forward, BNY Mellon will continue to invest in and enhance its tri-party repo capabilities, including working closely with market participants to improve the process for settling Interbank General Collateral Finance repo trades.

Financial institution exposures are high-quality, with 96% of the exposures meeting the investment grade equivalent criteria of our internal credit rating

classification at Dec. 31, 2015. Each customer is assigned an internal credit rating, which is mapped to an equivalent external rating agency grade based upon a number of dimensions which are continually evaluated and may change over time. The exposure to financial institutions is generally short-term. Of these exposures, 82% expire within one year and 20% expire within 90 days. In addition, 62% of the financial institutions exposure is secured. For example, securities industry and asset managers often borrow against marketable securities held in custody.

For ratings of non-U.S. counterparties, as a conservative measure, our internal credit rating is generally capped at a rating equivalent to the sovereign rating of the country where the counterparty resides regardless of the internal credit rating assigned to the counterparty or the underlying collateral.

Our bank exposure primarily relates to our global trade finance and U.S. dollar-clearing businesses. These exposures are predominately to investment grade counterparties and are short term in nature.

The asset manager portfolio exposures are high-quality with 99% of the exposures meeting our investment grade equivalent ratings criteria as of Dec. 31, 2015. These exposures are generally short-term liquidity facilities, with the vast majority to regulated mutual funds.

Commercial

The diversity of the commercial portfolio is presented in the following table.

Commercial portfolio exposure <i>(dollar amounts in billions)</i>	Dec. 31, 2015					Dec. 31, 2014			
	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr	Loans	Unfunded commitments	Total exposure	
Manufacturing	\$ 0.6	\$ 6.3	\$ 6.9	92%	13%	\$ 0.3	\$ 5.7	\$ 6.0	
Services and other	0.8	5.5	6.3	94	17	0.8	5.9	6.7	
Energy and utilities	0.6	4.9	5.5	97	14	0.5	5.6	6.1	
Media and telecom	0.3	1.5	1.8	93	—	0.1	1.5	1.6	
Total	\$ 2.3	\$ 18.2	\$ 20.5	94%	13%	\$ 1.7	\$ 18.7	\$ 20.4	

The commercial portfolio exposure increased slightly to \$20.5 billion at Dec. 31, 2015 from \$20.4 billion at Dec. 31, 2014, primarily reflecting an increase in exposure in the manufacturing and media and telecom portfolios, partially offset by a decrease in exposure to the energy and utilities and services and other portfolios. Utilities-related exposure represents approximately three-quarters of the energy and utilities portfolio. The remaining exposure in the energy and utilities portfolio, which includes exposure to refining, integrated companies, exploration and production companies and pipelines, was 94% investment grade at Dec. 31, 2015.

The table below summarizes the percentage of the financial institutions and commercial portfolio exposures that are investment grade.

Percentage of the portfolios that are investment grade	Dec. 31,		
	2015	2014	2013
Financial institutions	96%	93%	93%
Commercial	94%	94%	94%

Our credit strategy is to focus on investment grade names to support cross-selling opportunities. The execution of our strategy has resulted in 96% of our financial institutions portfolio and 94% of our commercial portfolio rated as investment grade at Dec. 31, 2015.

Wealth management loans and mortgages

Our wealth management exposure was \$14.9 billion at Dec. 31, 2015 compared with \$12.9 billion at Dec. 31, 2014. Wealth management loans and mortgages primarily consist of loans to high-net-worth individuals, which are secured by marketable securities and/or residential property. Wealth management mortgages are primarily interest-only

adjustable rate mortgages with a weighted-average loan-to-value ratio of 61% at origination. In the wealth management portfolio, less than 1% of the mortgages were past due at Dec. 31, 2015.

At Dec. 31, 2015, the wealth management mortgage portfolio consisted of the following geographic concentrations: California - 23%; New York - 21%; Massachusetts - 13%; Florida - 8%; and other - 35%.

Commercial real estate

Our income producing commercial real estate facilities are focused on experienced owners and are structured with moderate leverage based on existing cash flows. Our commercial real estate lending activities also include construction and renovation facilities. Our client base consists of experienced developers and long-term holders of real estate assets. Loans are approved on the basis of existing or projected cash flows, and supported by appraisals and knowledge of local market conditions. Development loans are structured with moderate leverage, and in many instances, involve some level of recourse to the developer. Our commercial real estate exposure totaled \$7.2 billion at Dec. 31, 2015 compared with \$5.2 billion at Dec. 31, 2014.

At Dec. 31, 2015, 61% of our commercial real estate portfolio was secured. The secured portfolio is diverse by project type, with 53% secured by residential buildings, 27% secured by office buildings, 14% secured by retail properties and 6% secured by other categories. Approximately 98% of the unsecured portfolio consists of real estate investment trusts ("REITs"), which are predominantly investment grade, and real estate operating companies.

At Dec. 31, 2015, our commercial real estate portfolio consists of the following concentrations: New York metro - 41%; REITs and real estate operating companies - 39%; and other - 20%.

Lease financings

The leasing portfolio exposure totaled \$1.9 billion at Dec. 31, 2015, compared with \$2.2 billion at Dec. 31, 2014. At Dec. 31, 2015, approximately 86% of the leasing portfolio exposure was investment grade, or investment grade equivalent.

At Dec. 31, 2015, the lease financing portfolio consisted of exposures backed by well-diversified assets, primarily large-ticket transportation equipment. The largest component is rail, consisting of both passenger and freight train cars. Assets are both domestic and foreign-based, with primary concentrations in the United States and Germany. Approximately 46% of this portfolio is additionally secured by highly rated securities and/or letters of credit from investment grade issuers. Counterparty rating equivalents at Dec. 31, 2015 were as follows:

- 39% of the counterparties were A, or equivalent;
- 47% were BBB; and
- 14% were non-investment grade.

The lease financing portfolio is part of our tax management strategy.

Other residential mortgages

The other residential mortgages portfolio primarily consists of 1-4 family residential mortgage loans and totaled \$1.1 billion at Dec. 31, 2015 and \$1.2 billion at Dec. 31, 2014. Included in this portfolio at Dec. 31, 2015 are \$283 million of mortgage loans purchased in 2005, 2006 and the first quarter of 2007

that are predominantly prime mortgage loans, with a small portion of Alt-A loans. As of Dec. 31, 2015, the purchased loans in this portfolio had a weighted-average loan-to-value ratio of 76% at origination and 16% of the serviced loan balance was at least 60 days delinquent. The properties securing the prime and Alt-A mortgage loans were located (in order of concentration) in California, Florida, Virginia, the tri-state area (New York, New Jersey and Connecticut) and Maryland.

To determine the projected loss on the prime and Alt-A mortgage portfolios, we calculate the total estimated defaults of these mortgages and multiply that amount by an estimate of realizable value upon sale in the marketplace (severity).

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients. Overdrafts occur on a daily basis in the custody and securities clearance business and are generally repaid within two business days.

Other loans

Other loans primarily include loans to consumers that are fully collateralized with equities, mutual funds and fixed income securities.

Margin loans

Margin loans are collateralized with marketable securities and borrowers are required to maintain a daily collateral margin in excess of 100% of the value of the loan. Margin loans included \$7.8 billion of loans at Dec. 31, 2015 and \$8.7 billion at Dec. 31, 2014 related to a term loan program that offers fully collateralized loans to broker-dealers.

Loans by category

The following table shows trends in the loans outstanding at year-end over the last five years.

Loans by category – at year-end <i>(in millions)</i>	2015	2014	2013	2012	2011
Domestic:					
Financial institutions	\$ 6,640	\$ 5,603	\$ 4,511	\$ 5,455	\$ 4,606
Commercial	2,115	1,390	1,534	1,306	752
Wealth management loans and mortgages	13,247	11,095	9,743	8,796	7,342
Commercial real estate	3,899	2,524	2,001	1,677	1,449
Lease financings	1,007	1,282	1,322	1,329	1,558
Other residential mortgages	1,055	1,222	1,385	1,632	1,923
Overdrafts	911	1,348	1,314	2,228	2,958
Other	1,137	1,113	768	639	623
Margin loans	19,340	20,034	15,652	13,397	12,760
Total domestic	49,351	45,611	38,230	36,459	33,971
Foreign:					
Financial institutions	9,259	7,716	9,848	5,833	6,538
Commercial	227	252	113	111	528
Wealth management loans and mortgages	100	89	75	68	—
Commercial real estate	46	6	9	63	—
Lease financings	850	889	945	1,025	1,051
Other (primarily overdrafts)	3,637	4,569	2,437	3,070	1,891
Margin loans	233	—	—	—	—
Total foreign	14,352	13,521	13,427	10,170	10,008
Total loans (a)	\$ 63,703	\$ 59,132	\$ 51,657	\$ 46,629	\$ 43,979

(a) Net of unearned income of \$674 million at Dec. 31, 2015, \$866 million at Dec. 31, 2014, \$1,020 million at Dec. 31, 2013, \$1,135 million at Dec. 31, 2012 and \$1,343 million at Dec. 31, 2011, primarily on domestic and foreign lease financings.

Maturity of loan portfolio

The following table shows the maturity structure of our loan portfolio at Dec. 31, 2015.

Maturity of loan portfolio at Dec. 31, 2015 (a)				
<i>(in millions)</i>	Within 1 year	Between 1 and 5 years	After 5 years	Total
Domestic:				
Financial institutions	\$ 5,279	\$ 693	\$ 668	\$ 6,640
Commercial	389	1,606	120	2,115
Commercial real estate	598	2,064	1,237	3,899
Overdrafts	911	—	—	911
Other	1,137	—	—	1,137
Margin loans	18,840	500	—	19,340
Subtotal	27,154	4,863	2,025	34,042
Foreign	12,650	596	156	13,402
Total	\$ 39,804	\$ 5,459	(b) \$ 2,181	(b) \$ 47,444

(a) Excludes loans collateralized by residential properties, lease financings and wealth management loans and mortgages.

(b) Variable rate loans due after one year totaled \$7.4 billion and fixed rate loans totaled \$79 million.

International loans

We have credit relationships in the international markets, particularly in areas associated with our securities servicing and trade finance activities. Excluding lease financings, these activities resulted in outstanding international loans of \$13.5 billion at Dec. 31, 2015 and \$12.6 billion at Dec. 31, 2014. The increase primarily resulted from higher loans to financial institutions and margin loans, partially offset by lower overdrafts.

Asset quality and allowance for credit losses

Over the past several years, we have improved our risk profile through greater focus on clients who are active users of our non-credit services, de-emphasizing broad-based loan growth. Our primary exposure to the credit risk of a customer consists of funded loans, unfunded formal contractual commitments to lend, standby letters of credit and overdrafts associated with our custody and securities clearance businesses.

Results of Operations (continued)

The role of credit has shifted to one that complements our other services instead of as a lead product. We believe credit solidifies customer relationships and,

through a disciplined allocation of capital, can earn acceptable rates of return as part of an overall relationship.

The following table details changes in our allowance for credit losses.

Allowance for credit losses activity <i>(dollar amounts in millions)</i>	2015	2014	2013	2012	2011
Margin loans	\$ 19,573	\$ 20,034	\$ 15,652	\$ 13,397	\$ 12,760
Non-margin loans	43,708	39,077	36,005	33,232	31,219
Total loans	\$ 63,281	\$ 59,111	\$ 51,657	\$ 46,629	\$ 43,979
Average loans outstanding	\$ 60,672	\$ 54,210	\$ 48,316	\$ 43,060	\$ 40,919
Balance, Jan. 1					
Domestic	\$ 236	\$ 288	\$ 339	\$ 439	\$ 511
Foreign	44	56	48	58	60
Total allowance at Jan. 1	280	344	387	497	571
Charge-offs:					
Commercial	—	(12)	(4)	(2)	(6)
Commercial real estate	—	(2)	(1)	—	(4)
Financial institutions	(170)	—	—	(13)	(8)
Wealth management loans and mortgages	—	(1)	(1)	(1)	(1)
Other residential mortgages	(2)	(2)	(8)	(22)	(56)
Foreign	—	(3)	(3)	—	(8)
Total charge-offs	(172)	(20)	(17)	(38)	(83)
Recoveries:					
Commercial	—	1	1	2	3
Financial institutions	1	1	4	—	2
Other residential mortgages	6	2	4	6	3
Total recoveries	7	4	9	8	8
Net charge-offs	(165)	(16)	(8)	(30)	(75)
Provision for credit losses	160	(48)	(35)	(80)	1
Balance, Dec. 31,					
Domestic	240	236	288	339	439
Foreign	35	44	56	48	58
Total allowance, Dec. 31,	\$ 275	\$ 280	\$ 344	\$ 387	\$ 497
Allowance for loan losses	\$ 157	\$ 191	\$ 210	\$ 266	\$ 394
Allowance for lending-related commitments	118	89	134	121	103
Net charge-offs to average loans outstanding	0.27%	0.03%	0.02%	0.07%	0.18%
Net charge-offs to total allowance for credit losses	60.00	5.71	2.33	7.75	15.09
Allowance for loan losses as a percentage of total loans	0.25	0.32	0.41	0.57	0.90
Allowance for loan losses as a percentage of non-margin loans	0.36	0.49	0.58	0.80	1.26
Total allowance for credit losses as a percentage of total loans	0.43	0.47	0.67	0.83	1.13
Total allowance for credit losses as a percentage of non-margin loans	0.63	0.72	0.96	1.16	1.59

Net charge-offs of \$165 million in 2015 were primarily reflected in the financial institution portfolios and included a portion of the unsecured loan to Sentinel that was reestablished in December 2015. Net charge-offs of \$16 million in 2014 were primarily reflected in the commercial loan and foreign loan portfolios. Net charge-offs of \$8 million in 2013 were primarily reflected in the other residential mortgages, commercial loan and foreign loan portfolios.

The provision for credit losses was \$160 million in 2015, a credit of \$48 million in 2014 and a credit of \$35 million in 2013.

The total allowance for credit losses was \$275 million at Dec. 31, 2015, \$280 million at Dec. 31, 2014 and \$344 million at Dec. 31, 2013. The ratio of the total allowance for credit losses to non-margin loans was 0.63% at Dec. 31, 2015, 0.72% at Dec. 31, 2014 and 0.96% at Dec. 31, 2013. The ratio of the allowance for loan losses to non-margin loans was 0.36% at Dec. 31, 2015 compared with 0.49% at Dec. 31, 2014 and 0.58% at Dec. 31, 2013. The decrease in the total allowance for credit losses and the lower ratios at Dec. 31, 2015 compared with Dec. 31, 2014 primarily reflects an improvement in the credit quality in the loan portfolio.

Results of Operations (continued)

We had \$19.6 billion of secured margin loans on our balance sheet at Dec. 31, 2015 compared with \$20.0 billion at Dec. 31, 2014 and \$15.7 billion at Dec. 31, 2013. We have rarely suffered a loss on these types of loans and do not allocate any of our allowance for credit losses to them. As a result, we believe that the ratio of total allowance for credit losses as a percentage of non-margin loans is a more appropriate metric to measure the adequacy of the reserve.

The allowance for loan losses and allowance for lending-related commitments represent management's estimate of probable losses inherent in our credit portfolio. This evaluation process is subject to numerous estimates and judgments.

Based on an evaluation of the allowance for credit losses as discussed in "Critical accounting estimates" and Note 1 of the Notes to Consolidated Financial Statements, we have allocated our allowance for credit losses as follows.

Nonperforming assets

The following table shows the distribution of nonperforming assets at the end of each of the last five years.

Nonperforming assets (dollars in millions)	Dec. 31,				
	2015	2014	2013	2012	2011
Loans:					
Financial institutions	\$ 171	\$ —	\$ —	\$ 3	\$ 23
Other residential mortgages	102	112	117	158	203
Wealth management loans and mortgages	11	12	11	30	32
Commercial real estate	2	1	4	18	40
Commercial	—	—	15	27	21
Foreign	—	—	6	9	10
Total nonperforming loans	286	125	153	245	329
Other assets owned	6	3	3	4	12
Total nonperforming assets (a)	\$ 292	128	\$ 156	\$ 249	\$ 341
Nonperforming assets ratio	0.46%	0.22%	0.30%	0.53%	0.78%
Nonperforming assets ratio, excluding margin loans	0.7	0.3	0.4	0.7	1.1
Allowance for loan losses/nonperforming loans	54.9	152.8	137.3	108.6	119.8
Allowance for loan losses/nonperforming assets	53.8	149.2	134.6	106.8	115.5
Total allowance for credit losses/nonperforming loans	96.2	224.0	224.8	158.0	151.1
Total allowance for credit losses/nonperforming assets	94.2	218.8	220.5	155.4	145.7

(a) Loans of consolidated investment management funds are not part of BNY Mellon's loan portfolio. Included in the loans of consolidated investment management funds are nonperforming loans of \$53 million at Dec. 31, 2014, \$16 million at Dec. 31, 2013, \$174 million at Dec. 31, 2012, and \$101 million at Dec. 31, 2011. These loans are recorded at fair value and therefore do not impact the provision for credit losses and allowance for loan losses, and accordingly are excluded from the nonperforming assets table above. In the second quarter of 2015, BNY Mellon adopted the new accounting guidance included in ASU 2015-02, Consolidations. As a result, we deconsolidated substantially all of the loans of consolidated investment management funds retrospectively to Jan. 1, 2015.

Allocation of allowance	Dec. 31,				
	2015	2014	2013	2012	2011
Commercial	30%	21%	24%	27%	18%
Commercial real estate	22	18	12	8	7
Foreign	13	16	16	12	12
Other residential mortgages	12	14	16	23	31
Financial institutions	11	11	14	9	13
Wealth management (a)	7	8	7	8	6
Lease financing	5	12	11	13	13
Total	100%	100%	100%	100%	100%

(a) Includes the allowance for wealth management mortgages.

The allocation of the allowance for credit losses is inherently judgmental, and the entire allowance for credit losses is available to absorb credit losses regardless of the nature of the loss.

Results of Operations (continued)

Nonperforming assets activity <i>(in millions)</i>	2015	2014
Balance at beginning of period	\$ 128	\$ 156
Additions	360	35
Return to accrual status	(3)	(14)
Charge-offs	(172)	(9)
Paydowns/sales	(21)	(40)
Balance at end of period	\$ 292	\$ 128

Nonperforming assets were \$292 million at Dec. 31, 2015, an increase of \$164 million compared with \$128 million at Dec. 31, 2014. The increase in nonperforming loans primarily reflect the addition of an unsecured loan in the financial institutions portfolio related to Sentinel.

The following table shows loans past due 90 days or more and still accruing interest.

Past due loans >90 days still accruing interest at year-end <i>(in millions)</i>	2015	2014	2013	2012	2011
Domestic:					
Consumer	\$ 5	\$ 6	\$ 7	\$ 6	\$ 13
Commercial	—	—	—	—	—
Total domestic	5	6	7	6	13
Foreign	—	—	—	—	—
Total past due loans	\$ 5	\$ 6	\$ 7	\$ 6	\$ 13

Loans past due 90 days or more at Dec. 31, 2015 primarily consisted of other residential mortgage loans. See Note 5 of the Notes to Consolidated Financial Statements for additional information on our past due loans. See “Nonperforming assets” in Note 1 of the Notes to Consolidated Financial Statements for our policy for placing loans on nonaccrual status.

Deposits

We receive client deposits through a variety of investment management and investment servicing businesses and we rely on those deposits as a low-cost and stable source of funding.

Total deposits were \$279.6 billion, an increase of 5% compared with \$265.9 billion at Dec. 31, 2014. The increase in deposits primarily reflects higher interest-bearing deposits in non-U.S. offices primarily driven by higher client deposits in our Investment Services business.

Noninterest-bearing deposits were \$96.3 billion at Dec. 31, 2015 compared with \$104.3 billion at Dec.

31, 2014. Interest-bearing deposits were \$183.3 billion at Dec. 31, 2015 compared with \$161.6 billion at Dec. 31, 2014.

The aggregate amount of deposits by foreign customers in domestic offices was \$28.1 billion and \$28.3 billion at Dec. 31, 2015 and 2014, respectively.

Deposits in foreign offices totaled \$138.8 billion at Dec. 31, 2015 and \$116.7 billion at Dec. 31, 2014. The majority of these deposits were in amounts in excess of \$100,000 and were primarily overnight foreign deposits.

The following table shows the maturity breakdown of domestic time deposits of \$100,000 or more at Dec. 31, 2015.

Domestic time deposits > \$100,000 at Dec. 31, 2015			
<i>(in millions)</i>	Certificates of deposit	Other time deposits	Total
3 months or less	\$ 26	\$ 41,595	\$ 41,621
Between 3 and 6 months	6	—	6
Between 6 and 12 months	14	—	14
Over 12 months	3	1	4
Total	\$ 49	\$ 41,596	\$ 41,645

Short-term borrowings

We fund ourselves primarily through deposits and, to a lesser extent, other short-term borrowings and long-term debt. Short-term borrowings consist of federal funds purchased and securities sold under repurchase agreements, payables to customers and broker-dealers and other borrowed funds. Certain other borrowings, for example, securities sold under repurchase agreements, require the delivery of securities as collateral.

See “Liquidity and dividends” below for a discussion of long-term debt and liquidity metrics that we monitor.

Information related to federal funds purchased and securities sold under repurchase agreements is presented below.

Results of Operations (continued)

Federal funds purchased and securities sold under repurchase agreements

<i>(dollars in millions)</i>	2015	2014	2013
Maximum daily balance during the year	\$30,238	\$ 29,522	\$ 23,022
Average daily balance	\$16,452	\$ 18,631	\$ 10,942
Weighted-average rate during the year	(0.04)%	(0.07)%	(0.15)%
Ending balance at Dec. 31	\$15,002	\$ 11,469	\$ 9,648
Weighted-average rate at Dec. 31	0.10 %	(0.02)%	(0.11)%

Federal funds purchased and securities sold under repurchase agreements

<i>(dollars in millions)</i>	Quarter ended		
	Dec. 31, 2015	Sept. 30, 2015	Dec. 31, 2014
Maximum daily balance during the quarter	\$ 30,238	\$ 26,813	\$ 26,777
Average daily balance	\$ 20,349	\$ 14,796	\$ 20,285
Weighted-average rate during the quarter	(0.03)%	(0.04)%	(0.05)%
Ending balance	\$ 15,002	\$ 8,824	\$ 11,469
Weighted-average rate at period end	0.10 %	(0.08)%	(0.02)%

Fluctuations of federal funds purchased and securities sold under repurchase agreements between periods resulted from overnight borrowing opportunities. The weighted-average rates in all periods presented reflect revenue earned on securities sold under repurchase agreements related to certain securities for which we were able to charge for lending them.

Information related to payables to customers and broker-dealers is presented below.

Payables to customers and broker-dealers

<i>(dollars in millions)</i>	2015	2014	2013
Maximum daily balance during the year	\$ 26,988	\$ 25,224	\$ 17,290
Average daily balance (a)	\$ 22,062	\$ 17,950	\$ 15,365
Weighted-average rate during the year (a)	0.06%	0.09%	0.09%
Ending balance at Dec. 31	\$ 21,900	\$ 21,181	\$ 15,707
Weighted-average rate at Dec. 31	0.07%	0.09%	0.07%

(a) The weighted-average rate is calculated based on, and is applied to, the average interest-bearing payables to customers and broker-dealers, which were \$11,649 million in 2015, \$9,502 million in 2014 and \$9,038 million in 2013.

Payables to customers and broker-dealers

<i>(dollars in millions)</i>	Quarter ended		
	Dec. 31, 2015	Sept. 30, 2015	Dec. 31, 2014
Maximum daily balance during the quarter	\$ 24,736	\$ 24,135	\$ 22,112
Average daily balance (a)	\$ 22,654	\$ 21,941	\$ 20,707
Weighted-average rate during the quarter (a)	0.06%	0.06%	0.08%
Ending balance	\$ 21,900	\$ 22,236	\$ 21,181
Weighted-average rate at period end	0.07%	0.06%	0.09%

(a) The weighted-average rate is calculated based on, and is applied to, the average interest-bearing payables to customers and broker-dealers, which were \$12,904 million in the fourth quarter of 2015, \$11,504 million in the third quarter of 2015 and \$10,484 million in the fourth quarter of 2014.

Payables to customers and broker-dealers represent funds awaiting re-investment and short sale proceeds payable on demand. Payables to customers and broker-dealers are driven by customer trading activity levels and market volatility.

Information related to commercial paper is presented below.

Commercial paper

<i>(dollars in millions)</i>	2015	2014	2013
Maximum daily balance during the year	\$ 4,849	\$ 5,003	\$ 4,873
Average daily balance	\$ 1,549	\$ 2,546	\$ 690
Weighted-average rate during the year	0.10%	0.08%	0.06%
Ending balance at Dec. 31	\$ —	\$ —	\$ 96
Weighted-average rate at Dec. 31	—%	—%	0.03%

Commercial paper

<i>(dollars in millions)</i>	Quarter ended		
	Dec. 31, 2015	Sept. 30, 2015	Dec. 31, 2014
Maximum daily balance during the quarter	\$ —	\$ 4,801	\$ 4,800
Average daily balance	\$ —	\$ 2,195	\$ 4,400
Weighted-average rate during the quarter	—%	0.11%	0.09%
Ending balance	\$ —	\$ —	\$ —
Weighted-average rate at period end	—%	—%	—%

The Parent's commercial paper program was terminated in August 2015.

Information related to other borrowed funds is presented below.

Other borrowed funds			
<i>(dollars in millions)</i>	2015	2014	2013
Maximum daily balance during the year	\$ 3,821	\$ 2,413	\$ 7,383
Average daily balance	\$ 814	\$ 1,027	\$ 1,177
Weighted-average rate during the year	1.12%	0.61%	0.55%
Ending balance	\$ 523	\$ 786	\$ 663
Weighted-average rate at Dec. 31	0.97%	1.15%	0.81%

Other borrowed funds	Quarter ended		
	Dec. 31, 2015	Sept. 30, 2015	Dec. 31, 2014
<i>(dollars in millions)</i>			
Maximum daily balance during the quarter	\$ 1,687	\$ 1,065	\$ 2,413
Average daily balance	\$ 733	\$ 628	\$ 870
Weighted-average rate during the quarter	1.13%	1.18%	1.06%
Ending balance	\$ 523	\$ 648	\$ 786
Weighted-average rate at period end	0.97%	1.15%	1.15%

Other borrowed funds primarily include overdrafts of sub-custodian account balances in our Investment Services businesses and borrowings under lines of credit by our Pershing subsidiaries. Overdrafts typically relate to timing differences for settlements. Fluctuations in other borrowed funds balances primarily reflect changes in overdrafts of sub-custodian account balances in our Investment Services businesses.

Liquidity and dividends

BNY Mellon defines liquidity as the ability of the Parent and its subsidiaries to access funding or convert assets to cash quickly and efficiently, or to rollover or issue new debt, especially during periods of market stress and in order to meet its short-term (up to one year) obligations. Liquidity risk is the risk that BNY Mellon cannot meet its cash and collateral obligations at a reasonable cost for both expected and unexpected cash flows, without adversely affecting daily operations or our financial condition. Liquidity risk can arise from cash flow mismatches, market constraints from the inability to convert assets to cash, inability to raise cash in the markets, deposit run-off, or contingent liquidity events. We also manage liquidity risks on an intra-day basis, in a

manner designed to ensure that we can access required funds during the business day to make payments or settle immediate obligations, often in real time. Changes in economic conditions or exposure to credit, market, operational, legal, and reputational risks also can affect BNY Mellon's liquidity risk profile and are considered in our liquidity risk framework.

For additional information on our liquidity policy, see "Risk Management - Liquidity risk".

Our overall approach to liquidity management is to ensure that sources of liquidity are sufficient in amount and diversity such that changes in funding requirements at the Parent and at our significant bank and broker-dealer subsidiaries can be accommodated routinely without material adverse impact on earnings, daily operations or our financial condition.

BNY Mellon seeks to maintain an adequate liquidity cushion in both normal and stressed environments and seeks to diversify funding sources by line of business, customer and market segment. In addition, we monitor and control liquidity exposures and funding needs within and across significant legal entities, branches, currencies and business lines, taking into account, among other factors, any applicable restrictions on the transfer of liquidity among entities.

Additionally, we seek to maintain liquidity ratios within approved limits and liquidity risk tolerance, maintain a liquid asset buffer that can be liquidated, financed and/or pledged as necessary, and control the levels and sources of wholesale funds. Moreover, BNY Mellon also manages potential intraday liquidity risks, which are the risks that the firm cannot fund or settle obligations during the business day. Sources of intraday liquidity risks include timing mismatches of inflows and outflows, inability to hold or raise intraday cash, and unexpected market or idiosyncratic events. We monitor and manage intraday liquidity against existing and expected intraday liquid resources (such as cash balances, remaining intraday credit capacity, intraday contingency funding, and available collateral) to enable BNY Mellon to meet its obligations under normal and reasonably severe stressed conditions.

Potential uses of liquidity include withdrawals of customer deposits and client drawdowns on unfunded credit or liquidity facilities. We actively monitor

unfunded lending-related commitments, thereby reducing unanticipated funding requirements.

When monitoring liquidity, we evaluate multiple metrics in order to have ample liquidity for expected and unexpected events. Metrics include cash flow mismatches, asset maturities, debt spreads, peer ratios, liquid assets, unencumbered collateral, funding sources and balance sheet liquidity ratios. We also maintain various internal liquidity limits as part of our standard analysis to monitor depositor and market funding concentration, liability maturity profile and potential liquidity draws due to off-balance sheet exposure.

U.S. regulators have established a liquidity coverage ratio (“LCR”) that requires certain banking organizations, including BNY Mellon, to maintain a minimum amount of unencumbered high-quality liquid assets (“HQLA”) sufficient to withstand the net cash outflow under a hypothetical standardized acute liquidity stress scenario for a 30-day time horizon.

The following table presents the Company’s consolidated HQLA and LCR as of Dec. 31, 2015.

Consolidated HQLA and LCR <i>(in billions)</i>	Dec. 31, 2015
Securities <i>(a)</i>	\$ 108
Cash <i>(b)</i>	110
Total consolidated HQLA <i>(c)</i>	\$ 218
Liquidity coverage ratio <i>(d)</i>	106%

- (a) Primarily includes U.S. Treasury, U.S. agency, sovereign securities, securities of U.S. Government-sponsored enterprises, investment-grade corporate debt and publicly traded common equity.*
- (b) Primarily includes cash on deposit with central banks.*
- (c) Consolidated HQLA presented before haircuts. After haircuts, consolidated HQLA totaled \$196 billion.*
- (d) Based on our interpretation of the final rule issued by the U.S. federal banking agencies to implement the LCR in the U.S. (“Final LCR Rule”).*

Starting on Jan. 1, 2015, we and our domestic bank subsidiaries were required to meet an LCR of 80%, calculated monthly through June 30, 2015 and calculated daily since July 1, 2015. The required minimum LCR level will increase annually by 10% increments until Jan. 1, 2017, at which time, we will be required to meet an LCR of 100%. As of Dec. 31, 2015, based on our interpretation of the Final LCR

Rule, we believe we and our domestic bank subsidiaries are in compliance with applicable LCR requirements on a fully phased-in basis. We are evaluating the FDIC’s brokered deposits’ FAQ to determine the implications, if any, on our deposit balances relative to the LCR and other requirements. For additional information on the LCR, see “Supervision and Regulation - Liquidity Standards - Basel III and U.S. Proposals.”

We also perform liquidity stress tests to ensure the Company maintains sufficient liquidity resources under multiple stress scenarios. Stress tests are based on scenarios that measure liquidity risks under unlikely but plausible events. We perform these tests under various time horizons ranging from one day to one year in a base case, as well as supplemental tests to determine whether the Company’s liquidity is sufficient for severe market events and firm-specific events. Under our scenario testing program, the results of the tests indicate that the Company has sufficient liquidity.

Beginning on Jan. 1, 2015, BHCs with total consolidated assets of \$50 billion or more were subject to the Federal Reserve’s Enhanced Prudential Standards, which include liquidity standards, described under “Supervision and Regulation - Enhanced Prudential Standards”. BNY Mellon has taken actions to comply with these standards, including the adoption of various liquidity risk management standards and maintenance of a liquidity buffer of unencumbered highly liquid assets based on the results of internal liquidity stress testing.

We define available funds for internal liquidity management purposes as liquid funds (which include interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements), cash and due from banks, and interest-bearing deposits with the Federal Reserve and other central banks. The table below presents our total available funds including liquid funds at period-end and on an average basis. The increase in available funds at Dec. 31, 2015 compared with Dec. 31, 2014 primarily reflects an increase of overnight deposits with the Federal Reserve and other central banks, partially offset by our strategic effort to reduce our level of interbank deposits.

Results of Operations (continued)

Available and liquid funds (in millions)	Dec. 31, 2015	Dec. 31, 2014	Average		
			2015	2014	2013
Available funds:					
Liquid funds:					
Interest-bearing deposits with banks	\$ 15,146	\$ 19,495	\$ 20,531	\$ 35,588	\$ 41,222
Federal funds sold and securities purchased under resale agreements	24,373	20,302	23,384	14,704	8,412
Total liquid funds	39,519	39,797	43,915	50,292	49,634
Cash and due from banks	6,537	6,970	6,180	5,472	5,662
Interest-bearing deposits with the Federal Reserve and other central banks	113,203	96,682	83,029	86,594	67,073
Total available funds	\$ 159,259	\$ 143,449	\$ 133,124	\$ 142,358	\$ 122,369
Total available funds as a percentage of total assets	40%	37%	36%	38%	36%

On an average basis for 2015 and 2014, non-core sources of funds, such as money market rate accounts, federal funds purchased and securities sold under repurchase agreements, trading liabilities, commercial paper and other borrowings, were \$26.7 billion and \$30.0 billion, respectively. The decrease primarily reflects lower levels of securities sold under repurchase agreements and trading liabilities, partially offset by higher levels of money market rate accounts. Average foreign deposits, primarily from our European-based Investment Services business, were \$109.6 billion for 2015 compared with \$109.4 billion for 2014. The increase reflects growth in client deposits. Domestic savings, interest-bearing demand and time deposits averaged \$48.3 billion for 2015 compared with \$45.8 billion for 2014. The increase primarily reflects higher time deposits.

Average payables to customers and broker-dealers were \$11.6 billion for 2015 and \$9.5 billion for 2014. Payables to customers and broker-dealers are driven by customer trading activity and market volatility. Long-term debt averaged \$20.8 billion for 2015 and \$20.6 billion for 2014. Average noninterest-bearing deposits increased to \$86.3 billion for 2015 from \$81.7 billion for 2014, reflecting growth in client deposits. A significant reduction in our Investment Services business would reduce our access to deposits. See “Asset/liability management” for additional factors that could impact our deposit balances.

The Parent has three major sources of liquidity:

- cash on hand;
- dividends from its subsidiaries; and
- access to the debt and equity markets.

Subsequent to Dec. 31, 2015, our bank subsidiaries could declare dividends to the Parent of approximately \$3.1 billion, without the need for a

regulatory waiver. Currently, The Bank of New York Mellon, our primary subsidiary, is no longer paying regular dividends to the Parent in order to build capital in advance of implementing the SLR. In addition, at Dec. 31, 2015, non-bank subsidiaries of the Parent had liquid assets of approximately \$1.3 billion.

The Parent’s liquidity policy is to have sufficient unencumbered cash and cash equivalents on hand at each quarter-end to meet its forecasted debt redemptions, net interest payments and net tax payments over a minimum of the next 18 months without the need to receive dividends from its bank subsidiaries or issue debt. As of Dec. 31, 2015, the Parent was in compliance with this policy.

In 2015, BNY Mellon paid a quarterly common stock cash dividend of \$0.17 per common share. Our common stock dividend payout ratio was 25% for 2015. The Federal Reserve’s current guidance provides that, for large bank holding companies like us, dividend payout ratios exceeding 30% of after-tax net income will receive particularly close scrutiny.

Restrictions on our ability to obtain funds from our subsidiaries are discussed in more detail in “Supervision and Regulation - Capital Planning and Stress Testing - Payment of Dividends, Stock Repurchases and Other Capital Distributions” and in Note 19 of the Notes to Consolidated Financial Statements.

In 2015 and 2014, the Parent’s average commercial paper borrowings were \$1.5 billion and \$2.5 billion, respectively. The Parent’s commercial paper program ended in August 2015. There was no overnight commercial paper outstanding issued by the Parent at Dec. 31, 2014.

The Parent had cash of \$9.1 billion at Dec. 31, 2015, compared with \$7.4 billion at Dec. 31, 2014, an increase of \$1.7 billion primarily reflecting the issuance of long-term debt and preferred stock and a net increase in loans from subsidiaries, partially offset by maturities of long-term debt and net common share repurchases.

The Parent's major uses of funds are payment of dividends, repurchases of common stock, principal and interest payments on its borrowings, acquisitions

and additional investments in and loans to its subsidiaries.

In 2015, we repurchased 55.6 million common shares at an average price of \$42.35 per common share for a total cost of \$2.4 billion.

Our ability to access the capital markets on favorable terms, or at all, is partially dependent on our credit ratings, which are as follows:

Credit ratings	Moody's	S&P	Fitch	DBRS
Parent:				
Long-term senior debt	A1	A	AA-	AA (low)
Subordinated debt	A2	A-	A+	A (high)
Preferred stock	Baa1	BBB	BBB	A (low)
Trust preferred securities	A3	BBB	BBB+	A (high)
Outlook - Parent:	Stable	Stable	Stable	Stable
The Bank of New York Mellon:				
Long-term senior debt	Aa2	AA-	AA	AA
Long-term deposits	Aa1	AA-	AA+	AA
Short-term deposits	P1	A-1+	F1+	R-1 (high)
BNY Mellon, N.A.:				
Long-term senior debt	Aa2	AA-	AA ^(a)	AA
Subordinated debt	Aa3	A	A+	NR
Long-term deposits	Aa1	AA-	AA+	AA
Short-term deposits	P1	A-1+	F1+	R-1 (high)
Outlook - Banks:	Stable	Stable	Stable	Stable

(a) Represents senior debt issuer default rating.

NR - Not rated.

On Dec. 2, 2015, S&P removed the government support assumptions on the eight U.S. G-SIBs, including the Parent. The withdrawal of the assumed government support resulted in a one-notch downgrade of the Parent's long-term senior and subordinated debt as well as the subordinated debt of The Bank of New York Mellon. For further discussion on the impact of a credit rating downgrade, see Note 17 of the Notes to Consolidated Financial Statements and our Risk Factor - "Any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon or BNY Mellon, N.A., could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse

effect on our results of operations and financial condition and on the value of the securities we issue."

Long-term debt totaled \$21.5 billion at Dec. 31, 2015 and \$20.3 billion at Dec. 31, 2014. In 2015, the Parent issued \$5.0 billion of senior debt, partially offset by the maturity of \$3.05 billion of long-term debt. Additionally, the Parent called \$600 million of senior debt in 2015. The Parent has \$2.45 billion of long-term debt that will mature in 2016.

In February 2016, we issued \$1.0 billion of senior medium-term notes maturing in 2021 at an annual interest rate of 2.5%.

The following table presents the long-term debt issued by the Parent in 2015.

Debt issuances	
<i>(in millions)</i>	2015
Senior medium-term notes:	
1.6% senior medium-term notes due 2018	\$ 500
3-month LIBOR + 38 bps senior medium-term notes due 2018	300
2.15% senior medium-term notes due 2020	1,250
2.6% senior medium-term notes due 2020	1,100
3-month LIBOR + 87 bps senior medium-term notes due 2020	300
2.45% senior medium-term notes due 2020	800
3.0% senior medium-term notes due 2025	750
Total debt issuances	\$ 5,000

The double leverage ratio is the ratio of investment in the equity of our subsidiaries divided by our consolidated equity, which includes our noncumulative perpetual preferred stock plus trust preferred securities. Our double leverage ratio was 115.7% at Dec. 31, 2015 and 112.0% at Dec. 31, 2014. The double leverage ratio is monitored by regulators and rating agencies and is an important constraint on our ability to invest in our subsidiaries and expand our businesses.

Pershing LLC, an indirect subsidiary of BNY Mellon, has uncommitted lines of credit in place for liquidity purposes which are guaranteed by the Parent. Pershing LLC has eight separate uncommitted lines of credit amounting to \$1.5 billion in aggregate. Average daily borrowing under these lines was \$5 million, in aggregate, in 2015. Pershing Limited, an indirect UK-based subsidiary of BNY Mellon, has two separate uncommitted lines of credit amounting to \$250 million in aggregate in place for liquidity purposes, which are guaranteed by the Parent. Average borrowings under these lines were \$34 million, in aggregate, in 2015.

Statement of cash flows

Cash provided by operating activities was \$4.1 billion in 2015 compared with \$4.5 billion in 2014 and \$642 million used for operations in 2013. In 2015, cash flows from operations were principally the result of earnings. In 2014, cash flows from operations were principally the result of earnings and changes in

trading activities, partially offset by changes in accruals and other balances. In 2013, cash flows used for operations were principally the result of changes in trading activities and accruals, partially offset by earnings.

Cash used for investing activities was \$19.8 billion in 2015 compared with \$11.7 billion in 2014 and \$13.2 billion in 2013. In 2015, purchases of securities, an increase in interest-bearing deposits with the Federal Reserve and other central banks, changes in loans and changes in federal funds sold and securities purchased under resale agreements were significant uses of funds, partially offset by sales, paydowns and maturities of securities and a decrease in interest bearing deposits with banks. In 2014, purchases of securities, changes in federal funds sold and securities purchased under resale agreements and an increase in loans were significant uses of funds, partially offset by sales, paydowns and maturities of securities and decreases in deposits with banks and with the Federal Reserve and other central banks. In 2013, purchases of securities, changes in interest-bearing deposits with the Federal Reserve and other central banks, loans and federal funds sold and securities purchased under resale agreements were a significant use of funds, partially offset by sales, paydowns and maturities of securities and a decrease in interest-bearing deposits with banks.

Cash provided by financing activities was \$15.2 billion in 2015 compared with \$7.8 billion in 2014 and \$15.6 billion in 2013. In 2015, an increase in deposits, the issuance of long-term debt and changes in federal funds purchased and securities sold under repurchase agreements were significant sources of funds, partially offset by the repayment of long-term debt and common stock repurchases. In 2014, increases in payables to broker-dealers and the proceeds from the issuance of long-term debt were significant sources of funds, partially offset by the repayment of long-term debt and treasury stock repurchases. In 2013, an increase in deposits, the net proceeds from the issuance of long-term debt and changes in federal funds purchased and securities sold under repurchase agreements were significant sources of funds, partially offset by repayment of long-term debt and common stock repurchases.

Commitments and obligations

We have contractual obligations to make fixed and determinable payments to third parties as indicated in the table below. The table excludes certain obligations such as trade payables and trading liabilities, where the obligation is short-term or subject to valuation based on market factors. In

addition to the amounts shown in the table below, at Dec. 31, 2015, \$649 million of unrecognized tax benefits have been recorded as liabilities in accordance with ASC 740. Related to these unrecognized tax benefits, we have also recorded a liability for potential interest of \$194 million. At this point, it is not possible to determine when these amounts will be settled or resolved.

<i>(in millions)</i>	Total	Payments due by period			
		Less than 1 year	1-3 years	3-5 years	Over 5 years
Deposits without a stated maturity	\$ 110,230	\$ 110,230	\$ —	\$ —	\$ —
Term deposits	73,103	73,097	4	1	1
Federal funds purchased and securities sold under repurchase agreements	15,002	15,002	—	—	—
Payables to customers and broker-dealers	21,900	21,900	—	—	—
Other borrowed funds	523	523	—	—	—
Long-term debt (a)	24,225	2,981	5,818	8,868	6,558
Unfunded pension and post-retirement benefits	320	38	82	60	140
Capital leases	56	25	29	2	—
Investment commitments (b)	393	221	153	7	12
Total contractual obligations	\$ 245,752	\$ 224,017	\$ 6,086	\$ 8,938	\$ 6,711

(a) Includes interest.

(b) Includes Community Reinvestment Act commitments.

We have entered into fixed and determinable commitments as indicated in the table below:

<i>(in millions)</i>	Total	Amount of commitment expiration per period			
		Less than 1 year	1-3 years	3-5 years	Over 5 years
Securities lending indemnifications (a)	\$ 294,108	\$ 294,108	\$ —	\$ —	\$ —
Lending commitments	54,505	31,077	9,020	14,166	242
Standby letters of credit	4,915	2,771	1,900	244	—
Operating leases	2,073	343	551	406	773
Purchase obligations (b)	922	538	330	34	20
Commercial letters of credit	303	298	—	—	5
Private equity commitments	58	—	8	50	—
Total commitments	\$ 356,884	\$ 329,135	\$ 11,809	\$ 14,900	\$ 1,040

(a) Excludes the indemnifications for securities booked at BNY Mellon beginning in late 2013 resulting from the CIBC Mellon joint venture which totaled \$54 billion at Dec. 31, 2015.

(b) Purchase obligations are defined as agreements to purchase goods or services that are enforceable and legally binding and specify all significant terms.

See “Liquidity and dividends” and Note 22 of the Notes to Consolidated Financial Statements for a further discussion of the source of funds for our commitments and obligations and known material trends in our capital resources.

Off-balance sheet arrangements

Off-balance sheet arrangements discussed in this section are limited to guarantees, retained or contingent interests and obligations arising out of unconsolidated variable interest entities (“VIEs”).

For BNY Mellon, these items include certain credit guarantees and securitizations. Guarantees include lending-related guarantees issued as part of our corporate banking business and securities lending indemnifications issued as part of our Investment Services business. See Note 22 of the Notes to Consolidated Financial Statements for a further discussion of our off-balance sheet arrangements.

Capital

Capital data <i>(dollar amounts in millions except per share amounts; common shares in thousands)</i>	2015	2014
At period end:		
BNY Mellon shareholders' equity to total assets ratio – GAAP <i>(a)</i>	9.7%	9.7%
BNY Mellon common shareholders' equity to total assets ratio – GAAP <i>(a)</i>	9.0%	9.3%
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP <i>(a)</i>	6.5%	6.5%
Total BNY Mellon shareholders' equity – GAAP	\$ 38,037	\$ 37,441
Total BNY Mellon common shareholders' equity – GAAP	\$ 35,485	\$ 35,879
BNY Mellon tangible common shareholders' equity – Non-GAAP <i>(a)</i>	\$ 16,574	\$ 16,439
Book value per common share – GAAP <i>(a)</i>	\$ 32.69	\$ 32.09
Tangible book value per common share – Non-GAAP <i>(a)</i>	\$ 15.27	\$ 14.70
Closing stock price per common share	\$ 41.22	\$ 40.57
Market capitalization	\$ 44,738	\$ 45,366
Common shares outstanding	1,085,343	1,118,228
Full-year:		
Average common equity to average assets	9.6%	9.8%
Cash dividends per common share	\$ 0.68	\$ 0.66
Common dividend payout ratio	25%	31%
Common dividend yield <i>(annualized)</i>	1.6%	1.6%

(a) See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 125 for a reconciliation of GAAP to Non-GAAP.

The Bank of New York Mellon Corporation total shareholders' equity increased to \$38.0 billion at Dec. 31, 2015 from \$37.4 billion at Dec. 31, 2014. The increase primarily reflects earnings retention, the issuance of \$1 billion of noncumulative perpetual preferred stock and approximately \$662 million resulting from stock awards, the exercise of stock options and stock issued for employee benefit plans. The increase was partially offset by share repurchases, foreign currency translation adjustments, and a decrease in the unrealized gain on our investment securities portfolio.

The unrealized gain net of tax on our investment securities portfolio recorded in accumulated other comprehensive income was \$329 million Dec. 31, 2015 compared with \$675 million at Dec. 31, 2014. The decrease in the unrealized gain, net of tax, was primarily driven by an increase in interest rates.

In 2015, we repurchased 55.6 million common shares at an average price of \$42.35 per common share for a total cost of \$2.4 billion.

On Jan. 21, 2016, The Bank of New York Mellon Corporation declared a quarterly common stock dividend of \$0.17 per common share. This cash dividend was paid on Feb. 12, 2016 to shareholders of record as of the close of business on Feb. 2, 2016.

BNY Mellon's tangible common shareholders' equity to tangible assets of operations ratio (Non-GAAP) was 6.5% at both Dec. 31, 2015 and Dec. 31, 2014.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies and banks, including BNY Mellon and our bank subsidiaries, in accordance with established quantitative measurements. For the Parent to maintain its status as a financial holding company, our bank subsidiaries and BNY Mellon must, among other things, qualify as "well capitalized".

As of Dec. 31, 2015, and Dec. 31, 2014, BNY Mellon and our bank subsidiaries were considered "well capitalized" on the basis of the Tier 1 and Total capital ratios and, in the case of our bank subsidiaries, the CET1 ratio and the leverage capital ratio (Tier 1 capital to quarterly average assets as defined for regulatory purposes).

Failure to satisfy regulatory standards, including "well capitalized" status or capital adequacy rules more generally, could result in limitations on our activities and adversely affect our financial condition. See the discussion of these matters in "Supervision and Regulation - Regulated Entities of BNY Mellon and Ancillary Regulatory Requirements" and "Risk

Factors - Operational and Business Risk - Failure to satisfy regulatory standards, including “well capitalized” and “well managed” status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition.”

The U.S. banking agencies’ capital rules have been based on the framework adopted by the Basel Committee on Banking Supervision, as amended from time to time. For additional information on these capital requirements see “Supervision and Regulation.” BNY Mellon is subject to U.S. capital rules, which are being gradually phased-in over a multi-year period through 2018. Effective in the second quarter of 2014, BNY Mellon was approved to exit parallel run reporting for U.S. regulatory capital purposes related to the U.S. capital rules’ Advanced Approaches. In the first quarter of 2015, we implemented the Basel III Standardized Approach which replaced the Basel I-based calculation of RWA with a revised methodology using a broader array of more risk sensitive risk-weighting categories.

Our estimated CET1 ratios on a fully phased-in basis are based on our current interpretation of the U.S. capital rules. RWA at Dec. 31, 2014 for credit risk under the estimated fully phased-in Advanced Approach reflected the use of a simple VaR methodology for repo-style transactions (including agented indemnified securities lending transactions), eligible margin loans, and similar transactions. The estimated fully phased-in Advanced Approach RWA at Dec. 31, 2015 no longer assumes the use of this methodology.

Our risk-based capital adequacy is determined using the higher of RWA determined using the Advanced Approach and Standardized Approach. The consolidated and The Bank of New York Mellon ratios included in the table below are based on the Advanced Approach as the related RWA were higher using that framework at Dec. 31, 2015 and Dec. 31, 2014. Our consolidated and largest bank subsidiary, The Bank of New York Mellon, regulatory capital ratios are shown below.

Consolidated and largest bank subsidiary regulatory capital ratios	Dec. 31, 2015			Dec. 31, 2014
	Well capitalized	Minimum required	Capital ratios	
Consolidated regulatory capital ratios:				
CET1 ratio	N/A (a)	4.5%	10.8%	11.2%
Tier 1 capital ratio	6%	6%	12.3%	12.2%
Total (Tier 1 plus Tier 2) capital ratio	10%	8%	12.5%	12.5%
Leverage capital ratio	N/A (a)	4%	6.0%	5.6%
Selected regulatory capital ratios – fully phased-in – Non-GAAP:				
Estimated CET1 ratio:				
Standardized Approach	(b)	4.5%	10.2%	10.6%
Advanced Approach	(b)	4.5%	9.5%	9.8%
Estimated SLR	(b)	3%	4.9%	4.4%
The Bank of New York Mellon regulatory capital ratios:				
CET1 ratio	6.5% (c)	4.5%	11.8%	N/A
Tier 1 capital ratio	8% (c)	6%	12.3%	12.4%
Total (Tier 1 plus Tier 2) capital ratio	10% (c)	8%	12.5%	12.6%
Leverage capital ratio	5%	4%	5.9%	5.2%
Selected regulatory capital ratios – fully phased-in – Non-GAAP:				
Estimated SLR	6%	3%	4.8%	N/A

(a) The Federal Reserve’s regulations do not establish well-capitalized thresholds for these measures for bank holding companies.

(b) See page 61 for the capital ratios with the phase-in of the capital conservation buffer and the estimated U.S. G-SIB surcharge.

(c) On a fully phased-in basis, bank-level minimum capital ratio thresholds plus anticipated buffers are expected to exceed bank-level “well capitalized” thresholds.

Our estimated CET1 ratio (Non-GAAP) calculated under the Advanced Approach on a fully phased-in basis was 9.5% at Dec. 31, 2015 and 9.8% at Dec. 31, 2014. Our estimated CET1 ratio (Non-GAAP) calculated under the Standardized Approach on a fully phased-in basis was 10.2% at Dec. 31, 2015 and 10.6% at Dec. 31, 2014. The decrease in the estimated CET1 ratio (Non-GAAP) calculated under the Advanced Approach from Dec. 31, 2014 was primarily driven by higher RWA driven by an increase in operational risk and the negative impact of no longer using the simple VaR methodology, partially offset by the deconsolidation of certain consolidated investment management funds.

The estimated fully phased-in SLR (Non-GAAP) of 4.9% at Dec. 31, 2015 and 4.4% at Dec. 31, 2014 was based on our interpretation of the U.S. capital rules, as supplemented by the Federal Reserve's final rules on the SLR. We expect to be compliant with the SLR as we move closer to implementation in 2018.

For additional information on the U.S. capital rules, see "Supervision and Regulation - Capital Requirements - Generally."

The Basel III Advanced Approach capital ratios are significantly impacted by RWA for operational risk. Our operational loss risk model is informed by external losses, including fines and penalties levied against institutions in the financial services industry, particularly those that relate to businesses in which we operate, and as a result external losses have impacted and could in the future impact the amount of capital that we are required to hold.

Management views the estimated fully phased-in CET1 and other risk-based capital ratios and SLR as key measures in monitoring BNY Mellon's capital position and progress against future regulatory capital standards. Additionally, the presentation of the estimated fully phased-in CET1 and other risk-based capital ratios and SLR are intended to allow investors to compare these ratios with estimates presented by other companies.

Our capital ratios are necessarily subject to, among other things, BNY Mellon's further review of applicable rules, anticipated compliance with all necessary enhancements to model calibration, approval by regulators of certain models used as part of RWA calculations, further implementation guidance from regulators, market practices and

standards and any changes BNY Mellon may make to its businesses. As a consequence of these factors, our capital ratios may materially change, and may be volatile over time and from period to period.

Minimum capital ratios and capital buffers

The U.S. capital rules include a series of buffers and surcharges over required minimums that apply to bank holding companies, including BNY Mellon, which are being phased-in over time. Banking organizations with a risk-based ratio or SLR above the minimum required level, but with a risk-based ratio or SLR below the minimum level with buffers, will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall. Different regulatory capital minimums, buffers and surcharges apply to our banking subsidiaries.

The U.S. capital rules introduced a capital conservation buffer and countercyclical capital buffer that add to the minimum regulatory capital ratios presented above. The capital conservation buffer is designed to absorb losses during periods of economic stress and applies to all banking organizations. During periods of excessive growth, the capital conservation buffer may be expanded up to an additional 2.5% through the imposition of a countercyclical capital buffer. The countercyclical capital buffer, when applicable, applies only to Advanced Approach banking organizations. The countercyclical capital buffer is initially set to zero, but it could increase if the banking agencies determine that excessive credit in the broader markets could result in systemic disruption.

BNY Mellon is subject to an additional G-SIB surcharge, which will be implemented as an extension of the capital conservation buffer and must be satisfied with CET1 capital. On July 20, 2015, the Federal Reserve published final rules to implement the G-SIB surcharge. For 2016, the G-SIB surcharge applicable to BNY Mellon is 1.5%, subject to applicable phase-ins.

In addition, the U.S. capital rules include an SLR to become effective on Jan. 1, 2018, although commencing in January 2015 each Advanced Approach banking organization was required to calculate and report its SLR. BNY Mellon will be subjected to an enhanced SLR, which will require a buffer in excess of 2% over the minimum SLR of 3%.

Results of Operations (continued)

The insured depository institution subsidiaries of the U.S. G-SIBs, including those of BNY Mellon, must maintain a 6% SLR to be considered “well capitalized.”

These buffers, other than the SLR buffer, and surcharges will be phased in beginning on Jan. 1, 2016 until fully implemented on Jan. 1, 2019. The following table presents the minimum capital ratio

requirements with buffers and surcharges, as phased-in, applicable to the Parent. This table does not include the imposition of a countercyclical capital buffer. The U.S. capital rules also provide for transitional arrangements for qualifying instruments, deductions, and adjustments, which are not reflected in this table. Buffers and surcharges are not applicable to the leverage capital ratio.

Consolidated capital ratio requirements	Well capitalized	Minimum ratios	Minimum ratios with buffers, as phased-in				
			2015	2016	2017	2018	2019
Capital conservation buffer (CET1)			N/A	0.625%	1.25%	1.875%	2.5%
U.S. G-SIB surcharge (CET1) (a)			N/A	0.375%	0.75%	1.125%	1.5%
CET1 ratio	N/A	4.5%	4.5%	5.5%	6.5%	7.5%	8.5%
Tier 1 capital ratio	6.0%	6.0%	6.0%	7.0%	8.0%	9.0%	10.0%
Total capital ratio	10.0%	8.0%	8.0%	9.0%	10.0%	11.0%	12.0%
Enhanced SLR buffer (Tier 1 capital)	N/A		N/A	N/A	N/A	2.0%	2.0%
SLR	N/A	3.0%	N/A	N/A	N/A	5.0%	5.0%

(a) The U.S. G-SIB surcharge is subject to change.

The table below presents the factors that impacted fully phased-in CET1 (Non-GAAP).

Estimated CET1 generation presented on a fully phased-in basis – Non-GAAP		2015
<i>(in millions)</i>		
Estimated fully phased-in CET1 – Non-GAAP – Beginning of year		\$ 15,931
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP		3,053
Goodwill and intangible assets, net of related deferred tax liabilities		529
Gross CET1 generated		3,582
Capital deployed:		
Dividends		(762)
Common stock repurchased		(2,355)
Total capital deployed		(3,117)
Other comprehensive income (loss):		
Foreign currency translation		(563)
Unrealized (loss) on assets available-for-sale		(415)
Pension liabilities		4
Unrealized gain on cash flow hedges		8
Total other comprehensive (loss)		(966)
Additional paid-in capital (a)		636
Other additions (deductions):		
Net pension fund assets		(29)
Deferred tax assets		(2)
Cash flow hedges		—
Embedded goodwill		54
Other		(7)
Total other additions		16
Net CET1 generated		151
Estimated fully phased-in CET1 – Non-GAAP – End of year		\$ 16,082

(a) Primarily related to stock awards, the exercise of stock options and stock issued for employee benefit plans.

Results of Operations (continued)

The following table presents the components of our transitional and fully phased-in CET1, Tier 1 and Tier 2 capital, the RWA determined under both the Standardized and Advanced Approaches, the average assets used for leverage capital purposes and the total leverage exposure for estimated SLR purposes.

Capital components and ratios <i>(dollars in millions)</i>	Dec. 31, 2015		Dec. 31, 2014	
	Transitional Approach (a)	Fully phased-in - Non-GAAP	Transitional Approach (a)	Fully phased-in - Non-GAAP
CET1:				
Common shareholders' equity	\$ 36,067	\$ 35,485	\$ 36,326	\$ 35,879
Goodwill and intangible assets	(17,295)	(18,911)	(17,111)	(19,440)
Net pension fund assets	(46)	(116)	(17)	(87)
Equity method investments	(296)	(347)	(314)	(401)
Deferred tax assets	(8)	(20)	(4)	(18)
Other	(5)	(9)	4	(2)
Total CET1	18,417	16,082	18,884	15,931
Other Tier 1 capital:				
Preferred stock	2,552	2,552	1,562	1,562
Trust preferred securities	74	—	156	—
Disallowed deferred tax assets	(12)	—	(14)	—
Net pension fund assets	(70)	—	(69)	—
Other	(25)	(22)	(17)	(12)
Total Tier 1 capital	20,936	18,612	20,502	17,481
Tier 2 capital:				
Trust preferred securities	222	—	156	—
Subordinated debt	149	149	298	298
Allowance for credit losses	275	275	280	280
Other	(12)	(12)	(11)	(11)
Total Tier 2 capital - Standardized Approach	634	412	723	567
Excess of expected credit losses	37	37	13	24
Less: Allowance for credit losses	275	275	280	280
Total Tier 2 capital - Advanced Approach	\$ 396	\$ 174	\$ 456	\$ 311
Total capital:				
Standardized Approach	\$ 21,570	\$ 19,024	\$ 21,225	\$ 18,048
Advanced Approach	\$ 21,332	\$ 18,786	\$ 20,958	\$ 17,792
Risk-weighted assets:				
Standardized Approach (b)	\$ 159,893	\$ 158,015	\$ 125,562	\$ 150,881
Advanced Approach:				
Credit Risk	\$ 106,974	\$ 105,099	\$ 120,122	\$ 114,105
Market Risk	2,148	2,148	3,046	3,046
Operational Risk	61,262	61,262	45,112	45,112
Total Advanced Approach	\$ 170,384	\$ 168,509	\$ 168,280	\$ 162,263
Standardized Approach:				
CET1 ratio	11.5%	10.2%	15.0%	10.6%
Tier 1 capital ratio	13.1%	11.8%	16.3%	11.6%
Total (Tier 1 plus Tier 2) capital ratio	13.5%	12.0%	16.9%	12.0%
Advanced Approach:				
CET1 ratio	10.8%	9.5%	11.2%	9.8%
Tier 1 capital ratio	12.3%	11.0%	12.2%	10.8%
Total (Tier 1 plus Tier 2) capital ratio	12.5%	11.1%	12.5%	11.0%
Average assets for leverage capital purposes	\$ 351,435		\$ 368,140	
Total leverage exposure for estimated SLR purposes - Non-GAAP		\$ 382,810		\$ 398,813

(a) Reflects transitional adjustments to CET1, Tier 1 capital and Tier 2 capital required in 2015 and 2014 under the U.S. capital rules.

(b) RWA under the Standardized Approach at Dec. 31, 2014 was determined using a Basel I-based calculation. Effective Jan. 1, 2015, we implemented the Basel III Standardized Approach which used a broader array of more risk sensitive risk-weighting categories.

The following table presents the amount of capital by which BNY Mellon and our largest bank subsidiary, The Bank of New York Mellon, exceeded the capital thresholds determined under the transitional rules at Dec. 31, 2015.

Capital above thresholds at Dec. 31, 2015			
<i>(in millions)</i>	Consolidated		The Bank of New York Mellon <i>(b)</i>
CET1	\$	10,750 <i>(a)</i>	\$ 7,333
Tier 1 capital		10,713 <i>(b)</i>	5,837
Total capital		4,294 <i>(b)</i>	3,394
Leverage capital		6,879 <i>(a)</i>	2,464

(a) Based on minimum required standards.

(b) Based on well-capitalized standards.

The following table shows the impact of a \$1 billion increase or decrease in RWA, quarterly average assets or total leverage exposure, or a \$100 million increase or decrease in common equity on the consolidated capital ratios at Dec. 31, 2015.

Sensitivity of consolidated capital ratios at Dec. 31, 2015		
<i>(in basis points)</i>	Increase or decrease of	
	\$100 million in common equity	\$1 billion in RWA, quarterly average assets, or total leverage exposure
CET1:		
Standardized Approach	6 bps	7 bps
Advanced Approach	6	6
Tier 1 capital:		
Standardized Approach	6	8
Advanced Approach	6	7
Total capital:		
Standardized Approach	6	8
Advanced Approach	6	7
Leverage capital	3	2
Estimated CET1 ratio, fully phased-in – Non-GAAP:		
Standardized Approach	6	6
Advanced Approach	6	6
Estimated SLR, fully phased-in – Non-GAAP		
	3	1

At Dec. 31, 2015, we had \$296 million of outstanding trust preferred securities, of which 25% qualifies as Tier 1 capital in 2015 and none of which will qualify as Tier 1 capital in 2016, although a portion of the trust preferred securities are eligible for inclusion in Tier 2 capital. Any decision to take action with respect to these trust preferred securities will be based on several considerations including interest rates and the availability of cash and capital.

Capital ratios vary depending on the size of the balance sheet at quarter-end and the level and types of investments in assets. The balance sheet size fluctuates from quarter to quarter based on levels of customer and market activity. In general, when servicing clients are more actively trading securities, deposit balances and the balance sheet as a whole are higher. In addition, when markets experience significant volatility or stress, our balance sheet size may increase considerably as client deposit levels increase.

Supplementary Leverage Ratio

BNY Mellon has presented its consolidated and largest bank subsidiary estimated fully phased-in SLR based on its interpretation of the U.S. capital rules, which are being gradually phased-in over a multi-year period and on the application of such rules to BNY Mellon's businesses as currently conducted.

Results of Operations (continued)

The following table presents the components of our estimated SLR using fully phased-in components of capital.

Estimated fully phased-in SLR – Non-GAAP <i>(dollars in millions)</i>	Dec. 31, 2015	Dec. 31, 2014
Total estimated fully phased-in CET1 – Non-GAAP	\$ 16,082	\$ 15,931
Additional Tier 1 capital	2,530	1,550
Total Tier 1 capital	\$ 18,612	\$ 17,481
Total leverage exposure:		
Quarterly average total assets	\$ 368,590	\$ 385,232
Less: Amounts deducted from Tier 1 capital	19,403	19,947
Total on-balance sheet assets, as adjusted	349,187	365,285
Off-balance sheet exposures:		
Potential future exposure for derivatives contracts (plus certain other items)	7,158	11,376
Repo-style transaction exposures included in SLR	440	302
Credit-equivalent amount of other off-balance sheet exposures (less SLR exclusions)	26,025	21,850
Total off-balance sheet exposures	33,623	33,528
Total leverage exposure	\$ 382,810	\$ 398,813
Estimated fully phased-in SLR – Non-GAAP	4.9% (a)	4.4%

(a) The estimated SLR on a fully phased-in basis (Non-GAAP) for our largest bank subsidiary, The Bank of New York Mellon, was 4.8% at Dec. 31, 2015. At Dec. 31, 2015, total Tier 1 capital was \$15,142 million and total leverage exposure was \$316,270 million for The Bank of New York Mellon.

Issuer purchases of equity securities

Share repurchases - fourth quarter of 2015

<i>(dollars in millions, except per share information; common shares in thousands)</i>	Total shares repurchased	Average price per share	Total shares repurchased as part of a publicly announced plan or program	Maximum approximate dollar value of shares that may yet be purchased under the publicly announced plans or programs at Dec. 31, 2015
October 2015	5,096	\$ 42.56	5,096	\$ 1,315
November 2015	4	41.89	4	1,315
December 2015	5,014	42.66	5,014	1,101
Fourth quarter of 2015 (a)	10,114	42.61	10,114	1,101 (b)

(a) Includes 22 thousand shares repurchased at a purchase price of \$1 million from employees, primarily in connection with the employees' payment of taxes upon the vesting of restricted stock. The average price per share of open market purchases was \$42.61.

(b) Represents the maximum value of the shares authorized to be repurchased through the second quarter of 2016, including employee benefit plan repurchases, in connection with the Federal Reserve's non-objection to our 2015 capital plan.

On March 11, 2015, in connection with the Federal Reserve's non-objection to our 2015 capital plan, BNY Mellon announced a stock purchase program providing for the repurchase of an aggregate of \$3.1 billion of common stock, of which \$700 million was contingent on a prior issuance of \$1 billion of qualifying preferred stock. The Company completed the issuance of preferred stock on April 28, 2015.

The 2015 capital plan began in the second quarter of 2015 and continues through the second quarter of 2016.

Share repurchases may be executed through repurchase plans designed to comply with Rule 10b5-1 and through derivative, accelerated share repurchase and other structured transactions.

Trading activities and risk management

Our trading activities are focused on acting as a market-maker for our customers and facilitating customer trades in compliance with the Volcker Rule. The risk from market-making activities for customers is managed by our traders and limited in total exposure through a system of position limits, VaR methodology based on a Monte Carlo simulation, stop loss advisory triggers, and other market sensitivity measures. The calculation of our VaR used by management and presented below assumes a one-day holding period, utilizes a 99% confidence level, and incorporates the non-linear characteristics of options. See Note 23 of the Notes to Consolidated Financial Statements for additional information on the VaR methodology.

The following tables indicate the calculated VaR amounts for the trading portfolio for the designated periods.

VaR (a) (in millions)	2015			
	Average	Minimum	Maximum	Dec. 31,
Interest rate	\$ 5.1	\$ 3.6	\$ 8.0	\$ 5.2
Foreign exchange	1.0	0.5	1.9	1.2
Equity	1.0	0.5	1.9	0.6
Credit	—	—	0.3	0.3
Diversification	(1.9)	N/M	N/M	(2.2)
Overall portfolio	5.2	3.9	8.5	5.1

VaR (a) (in millions)	2014			
	Average	Minimum	Maximum	Dec. 31,
Interest rate	\$ 6.8	\$ 3.8	\$ 13.4	\$ 3.8
Foreign exchange	1.0	0.4	2.7	0.7
Equity	1.6	0.6	4.0	0.8
Diversification	(2.3)	N/M	N/M	(1.3)
Overall portfolio	7.1	4.0	13.0	4.0

(a) VaR figures do not reflect the impact of the CVA guidance in ASC 820. This is consistent with the regulatory treatment. VaR exposure does not include the impact of the Company's consolidated investment management funds and seed capital investments.

N/M - Because the minimum and maximum may occur on different days for different risk components, it is not meaningful to compute a minimum and maximum portfolio diversification effect.

The interest rate component of VaR represents instruments whose values predominantly vary with the level or volatility of interest rates. These instruments include, but are not limited to: debt securities, mortgage-backed securities, swaps, swaptions, forward rate agreements, exchange-traded

futures and options, and other interest rate derivative products.

The foreign exchange component of VaR represents instruments whose values predominantly vary with the level or volatility of currency exchange rates or interest rates. These instruments include, but are not limited to: currency balances, spot and forward transactions, currency options, exchange-traded futures and options, and other currency derivative products.

The equity component of VaR consists of instruments that represent an ownership interest in the form of domestic and foreign common stock or other equity-linked instruments. These instruments include, but are not limited to: common stock, exchange-traded funds, Depositary Receipts, listed equity options (puts and calls), OTC equity options, equity total return swaps, equity index futures and other equity derivative products.

The credit component of VaR represents instruments whose values predominantly vary with the credit worthiness of counterparties. These instruments include, but are not limited to credit derivatives (credit default swaps and exchange traded credit index instruments). Credit derivatives are used to hedge various credit exposures.

The diversification component of VaR is the risk reduction benefit that occurs when combining portfolios and offsetting positions, and from the correlated behavior of risk factor movements.

During 2015, interest rate risk generated 72% of average gross VaR, foreign exchange risk generated 14% of average gross VaR and equity risk accounted for 14% of average gross VaR. During 2015, our daily trading loss exceeded our calculated VaR amount of the overall portfolio on one occasion.

The following table of total daily trading revenue or loss illustrates the number of trading days in which our trading revenue or loss fell within particular ranges during the past five quarters. The year-over-year and sequential variances are driven by lower revenue volatility in interest rate derivatives.

Results of Operations (continued)

Distribution of trading revenue (loss) (a)					
(dollar amounts in millions)	Quarter ended				
	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015	March 31, 2015	Dec. 31, 2014
Revenue range:	Number of days				
Less than \$(2.5)	—	—	—	1	—
\$(2.5) - \$0	4	7	3	2	7
\$0 - \$2.5	23	27	27	18	28
\$2.5 - \$5.0	29	21	26	24	18
More than \$5.0	6	10	8	16	9

(a) Trading revenue (loss) includes realized and unrealized gains and losses primarily related to spot and forward foreign exchange transactions, derivatives, and securities trades for our customers and excludes any associated commissions, underwriting fees and net interest revenue.

Trading assets include debt and equity instruments and derivative assets, primarily interest rate and foreign exchange contracts, not designated as hedging instruments. Trading assets were \$7 billion at Dec. 31, 2015 and \$10 billion at Dec. 31, 2014.

Trading liabilities include debt and equity instruments and derivative liabilities, primarily interest rate and foreign exchange contracts, not designated as hedging instruments. Trading liabilities were \$5 billion at Dec. 31, 2015 and \$7 billion at Dec. 31, 2014.

Under our fair value methodology for derivative contracts, an initial “risk-neutral” valuation is performed on each position assuming time-discounting based on a AA credit curve. In addition, we consider credit risk in arriving at the fair value of our derivatives.

We reflect external credit ratings as well as observable credit default swap spreads for both ourselves as well as our counterparties when

measuring the fair value of our derivative positions. Accordingly, the valuation of our derivative positions is sensitive to the current changes in our own credit spreads, as well as those of our counterparties.

At Dec. 31, 2015, our OTC derivative assets of \$4.7 billion included a CVA deduction of \$46 million. Our OTC derivative liabilities of \$4.3 billion included a DVA of \$6 million related to our own credit spread. Net of hedges, the CVA increased by \$2 million and the DVA increased \$1 million in 2015. The net impact of these adjustments decreased foreign exchange and other trading revenue by \$1 million in 2015. During 2015, a \$2 million realized loss was charged off against CVA reserves.

At Dec. 31, 2014, our OTC derivative assets of \$6.2 billion included a CVA deduction of \$49 million. Our OTC derivative liabilities of \$7.2 billion included a DVA of \$6 million related to our own credit spread. Net of hedges, the CVA decreased \$8 million and DVA increased \$1 million in 2014. The net impact of these adjustments increased foreign exchange and other trading revenue by \$9 million in 2014. During 2014, a \$5 million realized loss was charged off against CVA reserves.

The table below summarizes the risk ratings for our foreign exchange and interest rate derivative counterparty credit exposure. This information indicates the degree of risk to which we are exposed. Significant changes in ratings classifications for our foreign exchange and other trading activity could result in increased risk for us.

Foreign exchange and other trading counterparty risk rating profile (a)	Quarter ended				
	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015	March 31, 2015	Dec. 31, 2014
Rating:					
AAA to AA-	43%	46%	41%	37%	37%
A+ to A-	42	38	42	47	46
BBB+ to BBB-	13	14	13	14	14
Non-investment grade (BB+ and lower)	2	2	4	2	3
Total	100%	100%	100%	100%	100%

(a) Represents credit rating agency equivalent of internal credit ratings.

Asset/liability management

Our diversified business activities include processing securities, accepting deposits, investing in securities, lending, raising money as needed to fund assets, and other transactions. The market risks from these activities are interest rate risk and foreign exchange risk. Our primary market risk is exposure to movements in U.S. dollar interest rates and certain foreign currency interest rates. We actively manage interest rate sensitivity and use earnings simulation and discounted cash flow models to identify interest rate exposures.

An earnings simulation model is the primary tool used to assess changes in pre-tax net interest revenue. The model incorporates management's assumptions regarding interest rates, balance changes on core deposits, market spreads, changes in the prepayment behavior of loans and securities and the impact of derivative financial instruments used for interest rate risk management purposes. These assumptions have been developed through a combination of historical analysis and future expected pricing behavior and are inherently uncertain. As a result, the earnings simulation model cannot precisely estimate net

interest revenue or the impact of higher or lower interest rates on net interest revenue. Actual results may differ from projected results due to timing, magnitude and frequency of interest rate changes, and changes in market conditions and management's strategies, among other factors.

These scenarios do not reflect strategies that management could employ to limit the impact as interest rate expectations change. The table below relies on certain critical assumptions regarding the balance sheet and depositors' behavior related to interest rate fluctuations and the prepayment and extension risk in certain of our assets. To the extent that actual behavior is different from that assumed in the models, there could be a change in interest rate sensitivity.

We evaluate the effect on earnings by running various interest rate ramp scenarios from a baseline scenario. The interest rate ramp scenarios are reviewed to examine the impact of large interest rate movements. Interest rate sensitivity is quantified by calculating the change in pre-tax net interest revenue between the scenarios over a 12-month measurement period.

The following table shows net interest revenue sensitivity for BNY Mellon.

Estimated changes in net interest revenue <i>(dollars in millions)</i>	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015	March 31, 2015	Dec. 31, 2014
up 200 bps parallel rate ramp vs. baseline (a)	\$ 179	\$ 275	\$ 224	\$ 210	\$ 363
up 100 bps parallel rate ramp vs. baseline (a)	191	290	245	262	326
Long-term up 50 bps, short-term unchanged (b)	33	20	28	14	28
Long-term down 50 bps, short-term unchanged (b)	(91)	(81)	(73)	(69)	(54)

(a) In the parallel rate ramp, both short-term and long-term rates move in four equal quarterly increments.

(b) Long-term is equal to or greater than one year.

The Dec. 31, 2015 calculations in the estimated changes in net interest revenue table above are based on a forecast that uses our year-end balance sheet and an updated forward yield curve to take into consideration significant market changes that occurred subsequent to year-end. The 100 basis point ramp scenario assumes rates increase 25 basis points above the forward yield curve in each of the next four quarters and the 200 basis point ramp scenario assumes a 50 basis point per quarter increase. Because it is our practice to utilize forward yield curves in this analysis, the estimated impact of rate changes that have occurred since the prior quarter is embedded in the starting point, or base forecast, of the current quarter calculation. For example, the

impact of the Federal Reserve's Dec. 16, 2015 rate hike is embedded in the Dec. 31, 2015 base forecast. As a result, the change in sensitivity is largely driven by an increase in the net interest revenue base forecast as well as higher outflows of noninterest-bearing deposits than previously forecasted.

Our net interest revenue sensitivity table above incorporates assumptions about the impact of changes in interest rates on depositor behavior based on historical experience. Given the current historically low interest rate environment and the potential change to implementation of monetary policy, the impact of depositor behavior is highly uncertain.

Growth or contraction of deposits could also be affected by the following factors:

- Monetary policy;
- Global economic uncertainty;
- Our ratings relative to other financial institutions' ratings; and
- Money market mutual fund and other regulatory reform.

Any of these events could change our assumptions about depositor behavior and have a significant impact on our balance sheet and net interest revenue.

We also project future cash flows from our assets and liabilities over a long-term horizon and then discount these cash flows using instantaneous parallel shocks to prevailing interest rates. This measure reflects the structural balance sheet interest rate sensitivity by discounting all future cash flows. The aggregation of these discounted cash flows is the economic value of equity ("EVE"). The following table shows how the EVE would change in response to changes in interest rates.

Estimated changes in EVE	Dec. 31, 2015
Rate change:	
up 200 bps vs. baseline	(8.0)%
up 100 bps vs. baseline	(3.5)%

The asymmetrical accounting treatment of the impact of a change in interest rates on our balance sheet may create a situation in which an increase in interest rates can adversely affect reported equity and regulatory capital, even though economically there may be no impact on our economic capital position. For example, an increase in rates will result in a decline in the value of our available-for-sale securities portfolio, which will be reflected through a reduction in accumulated other comprehensive income in our

shareholders' equity thereby affecting our tangible common equity ("TCE") ratios. Under current accounting rules, to the extent the fair value option provided in ASC 825 is not applied, there is no corresponding change on our fixed liabilities, even though economically these liabilities are more valuable as rates rise.

We project the impact of this change using the same interest rate shock assumptions described earlier and compare the projected mark-to-market on the investment securities portfolio at Dec. 31, 2015, under the higher rate environments versus a stable rate scenario. The table below shows the impact of a change in interest rates on the TCE ratio.

Estimated changes in TCE ratio (in basis points)	Dec. 31, 2015
up 200 bps vs. baseline	(70)
up 100 bps vs. baseline	(34)

These results do not reflect strategies that management could employ to limit the impact as interest rate expectations change.

To manage foreign exchange risk, we fund foreign currency-denominated assets with liability instruments denominated in the same currency. We utilize various foreign exchange contracts if a liability denominated in the same currency is not available or desired, and to minimize the earnings impact of translation gains or losses created by investments in foreign markets. The foreign exchange risk related to the interest rate spread on foreign currency-denominated asset/liability positions is managed as part of our trading activities. We use forward foreign exchange contracts to protect the value of our net investment in foreign operations. At Dec. 31, 2015, net investments in foreign operations totaled \$11 billion and were spread across 13 foreign currencies.

Risk management overview

Governance

Risk management and oversight begins with the board of directors and two key board committees: the Risk Committee and the Audit Committee.

The Risk Committee is comprised entirely of independent directors and meets on a regular basis to review and assess the control processes with respect to the Company's inherent risks. They also review and assess the risk management activities of the Company and the Company's fiduciary risk policies and activities. Policy formulation and day-to-day oversight of the Risk Management Framework is delegated to the Chief Risk Officer, who, together with the Chief Auditor and Chief Compliance Officer, helps ensure an effective risk management governance structure. The roles and responsibilities of the Risk Committee are described in more detail in its charter, a copy of which is available on our website, www.bnymellon.com.

The Audit Committee is also comprised entirely of independent directors, all of whom are financially literate within the meaning of the NYSE listing standards, and two of whom have been determined to be an audit committee financial expert as set out in the rules and regulations under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), with accounting or related financial management expertise within the meaning of the NYSE listing standards. All members of the Audit Committee have been determined to have banking and financial management expertise within the meaning of the FDIC rules. The Audit Committee meets on a regular basis to perform an oversight review of the integrity of the financial statements and financial reporting process, compliance with legal and regulatory requirements, our independent registered public accountant's qualifications and independence, and the performance of our registered public accountant and internal audit function. The Audit Committee also reviews management's assessment of the adequacy of internal controls. The functions of the Audit Committee are described in more detail in its charter, a copy of which is available on our website, www.bnymellon.com.

The Senior Risk Management Committee ("SRMC") is the most senior management body responsible for ensuring that emerging risks are weighed against the corporate risk appetite and that any material amendments to the risk appetite statement are properly vetted and recommended to the Executive Committee and the Board for approval. The SRMC also reviews any material breaches to our risk appetite and approves action plans required to remediate the issue. SRMC provides oversight for the risk management, compliance and ethics framework. The Chief Executive Officer, Chief Risk Officer and Chief Financial Officer are among SRMC's members.

Primary risk types

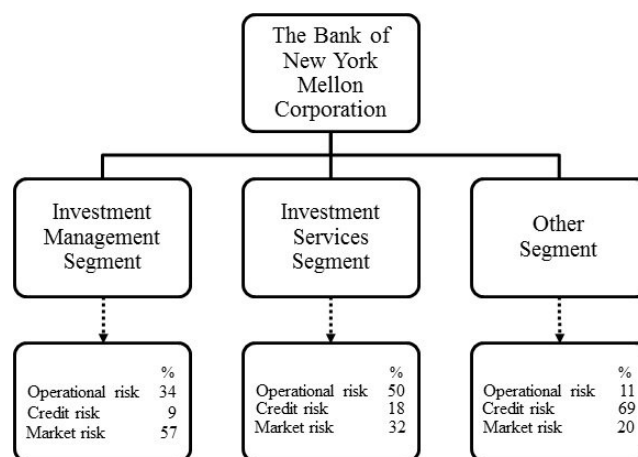
The understanding, identification and management of risk are essential elements for the successful management of BNY Mellon. Our primary risk categories are:

Type of risk	Description
Operational/business	The risk of loss resulting from inadequate or failed internal processes, human factors and systems, breaches of technology and information systems, or from external events. Also includes fiduciary risk, reputational risk, and litigation risk.
Market	The risk of loss due to adverse changes in the financial markets. Our market risks are primarily interest rate, foreign exchange, and equity risk. Market risk particularly impacts our exposures that are marked-to-market such as the securities portfolio, trading book, and equity investments.
Credit	The possible loss we would suffer if any of our borrowers or other counterparties were to default on their obligations to us. Credit risk is resident in the majority of our assets, but primarily concentrated in the loan and securities books, as well as off-balance sheet exposures such as lending commitments, letters of credit, and securities lending indemnifications.
Liquidity	The risk that BNY Mellon cannot meet its cash and collateral obligations at a reasonable cost for both expected and unexpected cash flows, without adversely affecting daily operations or financial conditions. Liquidity risk can arise from cash flow mismatches, market constraints from inability to convert assets to cash, inability to raise cash in the markets, deposit run-off, or contingent liquidity events. Thus, liquidity risk can be inherent in the majority of our balance sheet exposures.

The following table presents the primary types of risk typically embedded in on- and off-balance sheet instruments.

Risks of our on- and off-balance sheet instruments	
Assets:	
Interest-bearing deposits with banks	credit
Federal funds sold and securities purchased under resale agreements	market, credit
Securities	market, credit
Trading assets	market, credit
Loans	credit
Goodwill	operational/business, market
Intangible assets	operational/business, market
Liabilities:	
Deposits	liquidity
Federal funds purchased and securities sold under repurchase agreements	liquidity
Trading liabilities	market, liquidity
Payables to customers and broker-dealers	liquidity
Off-balance sheet instruments:	
Lending commitments	credit, liquidity
Standby letters of credit	credit, liquidity
Commercial letters of credit	credit, liquidity
Securities lending indemnifications	market, credit

The following chart provides a guide to the primary risks inherent in our businesses. Liquidity risk is managed on a stand-alone basis at the Consolidated and Bank levels. Management of liquidity risk is the responsibility of Corporate Treasury which is reported in the Other segment. The percentages below are based on the allocation of economic capital at Dec. 31, 2015 to protect against unexpected economic losses over a one-year period at a level consistent with the solvency of a target debt rating.



Operational/business risk

Overview

In providing a comprehensive array of products and services, we may be exposed to operational/business risk. Operational/business risk may result from, but is not limited to, errors related to transaction processing, breaches of internal control systems and compliance requirements, fraud by employees or persons outside BNY Mellon or business interruption due to system failures or other events. Operational/business risk may also include breaches of our technology and information systems resulting from unauthorized access to confidential information or from internal or external threats, such as cyber attacks. Operational/business risk also includes potential legal or regulatory actions that could arise as a result of noncompliance with applicable laws and/or regulatory requirements. In the case of an operational event, we could suffer a financial loss as well as damage to our reputation.

To address these risks, we maintain comprehensive policies and procedures and an internal control framework designed to provide a sound operational environment. These controls have been designed to manage operational/business risk at appropriate levels given our financial strength, the business environment and markets in which we operate, the nature of our businesses, and considering factors such as competition and regulation. Our internal auditors and internal control group monitor and test the overall effectiveness of our internal controls and financial reporting systems on an ongoing basis.

We have also established procedures that are designed to ensure compliance with generally accepted conduct, ethics and business practices which are defined in our corporate policies. These include training programs such as for our “Code of Conduct,” and “Know Your Customer” programs, and compliance training programs such as those regarding information protection, suspicious activity reporting, and operational risk.

Operational/business risk management

We have established operational/business risk management as an independent risk discipline. The organizational framework for operational/business risk is based upon a strong risk culture that incorporates both governance and risk management activities comprising:

- Board Oversight and Governance - The Risk Committee of the Board approves and oversees our operational/business risk management strategy in addition to credit and market risk. The Risk Committee meets regularly to review operational/business risk management initiatives, discuss key risk issues, and review the effectiveness of the risk management systems.
- Accountability of Businesses - Business managers are responsible for maintaining an effective system of internal controls commensurate with their risk profiles and in accordance with BNY Mellon policies and procedures.
- The Operational Risk Management Group is responsible for developing risk management policies and tools for assessing, measuring, monitoring and managing operational risk for BNY Mellon. The primary objectives of the Operational Risk Management Group are to promote effective risk management, identify emerging risks, create incentives for generating continuous improvement in controls, and to optimize capital.
- The Information Risk Management Group is responsible for developing policies, methods and tools for identifying, assessing, measuring, monitoring and governing information and technology risk for BNY Mellon. The Information Risk Management Group partners with the businesses to help maintain and protect the confidentiality, integrity, and availability of the firm’s information and technology assets from

internal and external threats such as cyber attacks.

Market risk

In addition to the Risk Committee and SRMC, oversight of market risk is performed by certain committees and through executive review meetings. Detailed reviews of derivative trading positions and stress tests results are conducted during the Markets Group Weekly Risk Review. Senior managers from Risk Management, Finance and Sales and Trading attend the review.

Regarding the Corporate Treasury function, oversight is provided by the Treasury Risk Committee, bi-weekly Portfolio Management Group risk meetings, Business Risk Committee, and numerous portfolio reviews.

The Business Risk Committee for the Markets Group business also provides a forum for market risk oversight. The goal of the Business Risk Committee meeting, which is held at least quarterly, is to review key risk and control issues and related initiatives facing all lines of business including the Markets Group. The following activities are also addressed during Business Risk Committee meetings:

- Reporting of all new Monitoring Limits and changes to existing limits; and
- Monitoring of trading exposures, VaR, market sensitivities and stress testing results.

The Markets Group Documentation Committee reviews and approves variations in the Company’s documentation standards as it relates to derivative transactions. In addition, this committee reviews all outstanding confirmations to identify potential exposure to the Company. Finally, the Risk Quantification and Modeling Committee reviews backtesting results for the Company’s VaR model.

Credit risk

To balance the value of our activities with the credit risk incurred in pursuing them, we set and monitor internal credit limits for activities that entail credit risk, most often on the size of the exposure and the quality of the counterparty. For credit exposures driven by changing market rates and prices, exposure measures include an add-on for such potential changes.

We manage credit risk at both the individual exposure level as well as the portfolio level. Credit risk at the individual exposure level is managed through our credit approval system and involves four approval levels up to and including the Chief Risk Officer of the Company. The requisite approvals are based upon the size and relative risk of the aggregate exposure under consideration. The Credit Risk Group is responsible for approving the size, terms and maturity of all credit exposures as well as the ongoing monitoring of the creditworthiness of the counterparty. In addition, they are responsible for assigning and maintaining the internal risk ratings on each exposure.

Credit risk management at the portfolio level is supported by the Basel & Capital Adequacy Group, within the Risk Management and Compliance Sector. The Basel & Capital Adequacy Group is responsible for calculating two fundamental credit measures. First, we project a statistically probable credit loss, used to help determine the appropriate loan loss reserve and to measure customer profitability. Credit loss considers three basic components: the estimated size of the exposure whenever default might occur, the probability of default before maturity and the severity of the loss we would incur, commonly called “loss given default.” For institutional lending, where most of our credit risk is created, unfunded commitments are assigned a usage given default percentage. Borrowers/Counterparties are assigned ratings by Credit Portfolio Managers on an 18-grade scale, which translate to a scaled probability of default. Additionally, transactions are assigned loss-given-default ratings (on a 7-grade scale) that reflect the transactions’ structures including the effects of guarantees, collateral, and relative seniority of position.

The second fundamental measurement of credit risk calculated by the Basel & Capital Adequacy Group is called economic capital. Our economic capital model estimates the capital required to support the overall credit risk portfolio. Using a Monte Carlo simulation engine and measures of correlation among borrower defaults, the economic model examines extreme and highly unlikely scenarios of portfolio credit loss in order to estimate credit-related capital, and then allocates that capital to individual borrowers and exposures. The credit-related capital calculation supports a second tier of policy standards and limits by serving as an input to both profitability analysis

and concentration limits of capital at risk with any one borrower, industry or country.

The Basel & Capital Adequacy Group is responsible for the calculation methodologies and the estimates of the inputs used in those methodologies for the determination of expected loss and economic capital. These methodologies and input estimates are regularly evaluated to ensure their appropriateness and accuracy. As new techniques and data become available, Basel & Capital Adequacy attempts to incorporate, where appropriate, those techniques or data.

Credit risk is intrinsic to much of the banking business. However, BNY Mellon seeks to limit both on- and off-balance sheet credit risk through prudent underwriting and the use of capital only where risk-adjusted returns warrant. We seek to manage risk and improve our portfolio diversification through syndications, asset sales, credit enhancements, credit derivatives, and active collateralization and netting agreements. In addition, we have a separate Credit Risk Review Group, which is part of Internal Audit, made up of experienced loan review officers who perform timely reviews of the loan files and credit ratings assigned to the loans.

Liquidity risk

Our overall approach to liquidity management is to ensure that sources of liquidity are sufficient in amount and diversity such that changes in funding requirements at the Parent and at the various bank subsidiaries can be accommodated routinely without material adverse impact on earnings, daily operations or our financial condition.

The board of directors is ultimately responsible for the liquidity risk of the Company and approves the liquidity risk tolerances. The Asset Liability Committee (“ALCO”) is the senior management committee responsible for the oversight of liquidity management. ALCO is responsible to ensure that Board approved strategies, policies, and procedures for managing liquidity are appropriately executed. Senior management is also responsible for regularly reporting the liquidity position of the Company to the board of directors. The Treasury Risk Committee is responsible for reviewing liquidity stress tests and various liquidity metrics including contractual cash flow gaps for liquidity, liquidity stress metrics and ratios, Liquidity Coverage Ratio, Net Stable Funding

Ratio and client deposit concentration. The Treasury Risk Committee approves and validates stress test methodologies and assumptions.

BNY Mellon seeks to maintain an adequate liquidity cushion in both normal and stressed environments and seeks to diversify funding sources by line of business, customer and market segment. Additionally, we seek to maintain liquidity ratios within approved limits and liquidity risk tolerance, maintain a liquid asset buffer that can be liquidated, financed and/or pledged as necessary, and control the levels and sources of wholesale funds.

Potential uses of liquidity include withdrawals of customer deposits and client drawdowns on unfunded credit or liquidity facilities. We actively monitor unfunded lending-related commitments, thereby reducing unanticipated funding requirements.

When monitoring liquidity, we evaluate multiple metrics to ensure ample liquidity for expected and unexpected events. Metrics include cash flow mismatches, asset maturities, debt spreads, peer ratios, liquid assets, unencumbered collateral, funding sources and balance sheet liquidity ratios. We monitor the LCR, as well as various internal liquidity limits as part of our standard analysis to monitor depositor and market funding concentration, liability maturity profile and potential liquidity draws due to off-balance sheet exposure.

We also perform liquidity stress tests to ensure the Company maintains sufficient liquidity resources under multiple stress scenarios, including stress tests required by rules adopted by the Federal Reserve under the Dodd-Frank Act. Stress tests are based on scenarios that measure liquidity risks under unlikely but plausible events. The Company performs these tests under various time horizons ranging from one day to one year in a base case, as well as supplemental tests to determine whether the Company's liquidity is sufficient for severe market events and firm-specific events. Under our scenario testing program, the results of the tests indicate that the Company has sufficient liquidity.

Stress Testing

It is the policy of the Company to perform Enterprise-wide Stress Testing at regular intervals as part of its Internal Capital Adequacy Assessment Process ("ICAAP"). Additionally, the Company performs an

analysis of capital adequacy in a stressed environment in its Enterprise-Wide Stress Test Framework, as required by the enhanced prudential standards issued pursuant to the Dodd-Frank Act.

Enterprise-Wide Stress Testing performs analyses across the Company's lines of business, products, geographic areas, and risk types incorporating the results from the different underlying models and projections given a certain stress-test scenario. It is an important component of assessing the adequacy of capital (as in the ICAAP) as well as identifying any high risk touch points in business activities. Furthermore, by integrating enterprise-wide stress testing into the Company's capital planning process, the results provide a forward-looking evaluation of the ability to complete planned capital actions in a more-adverse-than-anticipated economic environment.

Economic capital required

BNY Mellon has implemented a methodology to quantify economic capital. We define economic capital as the capital required to protect against unexpected economic losses over a one-year period at a level consistent with the solvency of a target debt rating. We quantify economic capital requirements for the risks inherent in our business activities using statistical modeling techniques and then aggregate them at the consolidated level. A capital reduction, or diversification benefit, is applied to reflect the unlikely event of experiencing an extremely large loss in each type of risk at the same time. Economic capital requirements are directly related to our risk profile. As such, they have become a part of our ICAAP and, along with regulatory capital, are a key component to ensuring that the actual level of capital is commensurate with our risk profile and sufficient to provide the financial flexibility to undertake future strategic business initiatives.

The framework and methodologies to quantify each of our risk types have been developed by the Basel & Capital Adequacy Group and are designed to be consistent with our risk management principles. The framework has been approved by senior management and has been reviewed by the Risk Committee of the board of directors. Due to the evolving nature of quantification techniques, we expect to continue to refine the methodologies used to estimate our economic capital requirements.

The following table presents our economic capital required at Dec. 31, 2015, on a consolidated basis.

Economic capital required at Dec. 31, 2015	
<i>(in millions)</i>	
Credit	\$ 5,018
Market	2,504
Operational	5,271
Other <i>(a)</i>	540
Economic capital required - consolidated	\$ 13,333
CET1	\$ 18,417
Capital cushion	\$ 5,084

(a) Includes interest rate risk, reputational risk and diversification benefit.

Global compliance

Our global compliance function provides leadership, guidance, and oversight to help our businesses identify applicable laws and regulations and implement effective measures to meet the specific requirements. Compliance takes a proactive approach by anticipating evolving regulatory standards and remaining aware of industry best

practices, legislative initiatives, competitive issues, and public expectations and perceptions. The function uses its global reach to disseminate information about compliance-related matters throughout BNY Mellon. The Chief Compliance and Ethics Officer reports to the Chief Risk Officer, is a member of key committees of BNY Mellon and provides regular updates to the Risk Committee of the board of directors.

Internal audit

Internal Audit is an independent, objective assurance function that reports directly to the Audit Committee of the Company's Board of Directors. It assists the Company in accomplishing its objectives by bringing a systematic, disciplined, risk-based approach to evaluate and improve the effectiveness of the Company's risk management, control, and governance processes. The scope of Internal Audit's work includes the review and evaluation of the adequacy, effectiveness, and sustainability of risk management procedures, internal control systems, information systems and governance processes.

Evolving Regulatory Environment

BNY Mellon engages in banking, investment advisory and other financial activities in the U.S. and 34 other countries, and is subject to extensive regulation in the jurisdictions in which it operates. Global supervisory authorities generally are charged with ensuring the safety and soundness of financial institutions, protecting the interests of customers, including depositors in banking entities and investors in mutual funds and other pooled vehicles, safeguarding the integrity of securities and other financial markets and promoting systemic resiliency and financial stability in the relevant country. They are not, however, generally charged with protecting the interests of our shareholders or non-deposit creditors. This discussion outlines the material elements of selected laws and regulations applicable to us. Changes in these standards, or in their application, cannot be predicted, but may have a material effect on our businesses and results of operations.

The financial services industry has been the subject of enhanced regulatory scrutiny in recent years globally, and we expect this trend to continue in the future. Our businesses have been subject to a significant number of new global reform measures. In particular, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”) and its implementing regulations are significantly restructuring the financial regulatory regime in the United States and enhancing supervision and prudential standards for large BHCs like BNY Mellon. The implications of the Dodd-Frank Act for our businesses depend to a large extent on the manner in which its implementing regulations are established and interpreted by the primary U.S. financial regulatory agencies - the Federal Reserve, the FDIC, the OCC, the SEC and the CFTC. The implications are also dependent on changes in market practices and structures in response to the requirements of the Dodd-Frank Act and financial reforms in other jurisdictions. Certain aspects of the Dodd-Frank Act remain subject to further rulemaking, take effect over various transition periods, or contain other elements that make it difficult to precisely anticipate their full impact. In addition, other national and global reform measures that have been adopted by various policy makers or are being considered may materially impact us. Relevant regulatory initiatives are discussed further below.

Enhanced Prudential Standards and Large Exposures

Sections 165 and 166 of the Dodd-Frank Act direct the Federal Reserve to enact heightened prudential standards and early remediation requirements applicable to BHCs with total consolidated assets of \$50 billion or more, such as BNY Mellon, and certain designated nonbank financial companies (generally referred to as “SIFIs”). The Dodd-Frank Act mandates that the requirements applicable to SIFIs be more stringent than those applicable to other financial companies. In December 2011, the Federal Reserve issued for public comment a notice of proposed rulemaking, which we refer to as the “Proposed SIFI Rules,” establishing enhanced prudential standards for:

- risk-based capital requirements and leverage limits;
- liquidity requirements;
- single-counterparty credit exposure limits;
- stress testing of capital;
- overall risk management requirements; and
- remedial actions that SIFIs must take during the early stages of financial distress if specified trigger events occur (referred to as the “early remediation provisions”).

In addition, in the release accompanying the Proposed SIFI Rules, the Federal Reserve indicated it would consider whether to institute limits on short-term debt.

The Federal Reserve has adopted rules (“Final SIFI Rules”) to implement the liquidity, stress testing of capital and risk management requirements of the Proposed SIFI Rules. Beginning Jan. 1, 2015, BNY Mellon has been required to comply with enhanced liquidity and overall risk management standards, which include maintenance of a buffer of highly liquid assets based on projected funding needs for 30 days. The liquidity buffer is in addition to the U.S. banking agencies’ rules regarding the LCR, discussed below and is described by the Federal Reserve as being “complementary” to those liquidity standards.

The Final SIFI Rules do not address single-counterparty credit limits or early remediation provisions. The Federal Reserve noted that it is still developing the single-counterparty credit limit rule, and that, in finalizing that rule, it would take into account the Basel Committee's framework for large exposure limits.

The Basel Committee's framework for large exposures scheduled to become effective on Jan. 1, 2019:

- Limits exposures between a banking organization and a single counterparty or a group of connected counterparties to 25% of Tier 1 capital;
- Limits exposures between G-SIBs to 15% of Tier 1 capital;
- Excludes from the limit intraday interbank exposures and sovereign and central bank exposures; and
- Requires actions that SIFIs must take during the early stages of financial distress if specified trigger events occur (referred to as the "early remediation provisions").

The framework is conceptually analogous to the single-counterparty credit limits in the Proposed SIFI Rules. It will become binding on U.S. banking organizations only to the extent that the U.S. banking agencies implement the framework, including through the Federal Reserve's adoption of final single counterparty credit limits implementing section 165(e) of the Dodd-Frank Act.

The Basel Committee's large exposures framework does not specify a methodology to measure exposures from securities financing transactions ("SFTs"), such as securities lending and repurchase agreements. Instead, the Basel Committee expects to use the forthcoming revised comprehensive approach and supervisory haircuts or an equivalent method that does not rely on internal models to measure SFT exposures. The Basel Committee expects to finish its review of this revised approach before the 2019 deadline, but in the event of a delay, banks may continue to use the method they currently use to calculate their risk-based capital requirements for SFTs.

Capital Planning and Stress Testing

Payment of Dividends, Stock Repurchases and Other Capital Distributions

The Parent is a legal entity separate and distinct from its bank and other subsidiaries. Dividends and interest from its subsidiaries are the Parent's principal sources of funds to make capital contributions or loans to its subsidiaries, to service its own debt, to honor its guarantees of debt issued by its subsidiaries or of trust preferred securities issued by a trust or to make its own capital distributions. Various federal and state laws and regulations limit the amount of dividends that may be paid to the Parent by our bank subsidiaries without regulatory consent. If, in the opinion of the applicable federal regulatory agency, a depository institution under its jurisdiction is engaged in or is about to engage in an unsafe or unsound practice (which, depending on the financial condition of the bank, could include the payment of dividends), the regulator may require, after notice and hearing, that the bank cease and desist from such practice. The OCC, the Federal Reserve and the FDIC have indicated that the payment of dividends would constitute an unsafe and unsound practice if the payment would reduce a depository institution's capital to an inadequate level. Moreover, under the Federal Deposit Insurance Act, as amended (the "FDI Act"), an insured depository institution may not pay any dividends if the institution is undercapitalized or if the payment of the dividend would cause the institution to become undercapitalized. In addition, the federal bank regulatory agencies have issued policy statements which provide that FDIC-insured depository institutions and their holding companies should generally pay dividends only out of their current operating earnings.

In general, the amount of dividends that may be paid by our U.S. banking subsidiaries, including to the Parent, is limited to the lesser of the amounts calculated under a "recent earnings" test and an "undivided profits" test. Under the recent earnings test, a dividend may not be paid if the total of all dividends declared and paid by the entity in any calendar year exceeds the current year's net income combined with the retained net income of the two preceding years, unless the entity obtains prior regulatory approval. Under the undivided profits test, a dividend may not be paid in excess of the entity's "undivided profits" (generally, accumulated net profits that have not been paid out as dividends or

transferred to surplus). The ability of our bank subsidiaries to pay dividends to the Parent may also be affected by various minimum capital requirements for banking organizations.

BNY Mellon's capital distributions are subject to Federal Reserve oversight. The major component of that oversight is the Federal Reserve's CCAR, implementing its capital plan rule. That rule requires BHCs having \$50 billion or more in total consolidated assets (including BNY Mellon) to submit annual capital plans to their respective Federal Reserve Bank. We are also required to collect and report certain related data on a quarterly basis to allow the Federal Reserve to monitor progress against the annual capital plans. BNY Mellon and other affected BHCs may pay dividends, repurchase stock, and make other capital distributions only in accordance with a capital plan that has been reviewed by the Federal Reserve and as to which the Federal Reserve has not objected. The Federal Reserve may object to a capital plan if the plan does not show that the covered BHC will meet, for each quarter throughout the nine-quarter planning horizon covered by the capital plan, all minimum regulatory capital ratios under applicable capital rules as in effect for that quarter on a *pro forma* basis under the base case and stressed scenarios (including a severely adverse scenario provided by the Federal Reserve). The capital plan rule also stipulates that a covered BHC may not make a capital distribution unless after giving effect to the distribution it will meet all minimum regulatory capital ratios.

The purpose of CCAR is to ensure that these BHCs have robust, forward-looking capital planning processes that account for their unique risks and that permit continued operations during times of economic and financial stress. The 2016 CCAR instructions, consistent with prior Federal Reserve guidance, provide that capital plans contemplating dividend payout ratios exceeding 30% of projected after-tax net income will receive particularly close scrutiny. BNY Mellon's common stock dividend payout ratio was 25% for 2015.

In March 2015, BNY Mellon received confirmation that the Federal Reserve did not object to our 2015 CCAR. The board of directors subsequently approved the repurchase of up to \$3.1 billion worth of common stock for a five-quarter period beginning in the second quarter of 2015 and continuing through the second quarter of 2016, including employee

benefit plan repurchases. Of the \$3.1 billion authorization, common stock repurchases of \$700 million were contingent on a prior issuance of \$1 billion of qualifying preferred stock, which issuance was completed in April 2015. We repurchased 45.3 million common shares for \$2.0 billion in 2015 under the current program, which began in the second quarter of 2015 and continues through the second quarter of 2016. We expect to continue to repurchase shares in the first half of 2016 under the 2015 capital plan.

In October 2014, the Federal Reserve revised aspects of its rules pertaining to CCAR and Dodd Frank Act stress tests ("DFAST"). These revisions include, among other changes, an adjusted timeline for the submission of capital plans and stress tests for BHCs subject to CCAR and the limitations on capital distributions to the extent that actual capital issuances are less than the amounts indicated in the capital plan. Beginning in 2016, BHCs, including BNY Mellon, are required to submit their capital plans and stress testing results to the Federal Reserve on or before April 5.

On Nov. 25, 2015, the Federal Reserve modified certain aspects of the CCAR and DFAST regulations, including the following:

- Removing the requirement to calculate a 5% Tier 1 common ratio;
- Delaying, for purposes of the DFAST and CCAR, implementation of the SLR as a quantitative measure until the 2017 stress-testing cycle; and
- Indefinitely deferring the use of the U.S. capital rules' Advanced Approach RWA framework in CCAR and DFAST.

In December 2015 the Federal Reserve issued guidance that consolidates capital planning expectations, including expectations for CCAR. The guidance makes explicit that the Federal Reserve maintains heightened expectations regarding capital planning by large BHCs such as BNY Mellon. In particular, the Federal Reserve expects firms such as BNY Mellon to exceed the minimum expectations set forth in the Federal Reserve's guidance and maintain highly sophisticated, comprehensive, and robust capital planning practices.

Regulatory Stress-Testing Requirements

In addition to the CCAR stress testing requirements, Federal Reserve regulations also include DFAST. The CCAR and DFAST requirements substantially overlap, and the Federal Reserve implements them at the BHC level on a coordinated basis. Under these DFAST regulations, we are required to undergo regulatory stress tests conducted by the Federal Reserve annually, and to conduct our own internal stress tests pursuant to regulatory requirements twice annually. In addition, The Bank of New York Mellon is required to conduct its own annual internal stress test (although this bank is permitted to combine certain reporting and disclosure of its stress test results with the results of BNY Mellon). These requirements involve both company-run and supervisory-run testing of capital under various scenarios, including baseline, adverse and severely adverse scenarios provided by the appropriate banking regulator. Results from our annual company-run stress tests are reported to the appropriate regulators and published. We published the results of our most recent company-run annual stress test on March 11, 2015, and the results of our company-run mid-year stress test on July 13, 2015.

Capital Requirements - Generally

As a BHC, we are subject to U.S. capital rules, administered by the Federal Reserve. Our bank subsidiaries are subject to similar capital requirements administered by the Federal Reserve in the case of The Bank of New York Mellon and by the OCC in the case of our national bank subsidiaries, BNY Mellon, N.A. and The Bank of New York Mellon Trust Company, National Association. These requirements are intended to ensure that banking organizations have adequate capital given the risk levels of their assets and off-balance sheet exposures.

The U.S. capital rules are largely based on the Basel Committee's December 2010 final capital framework for strengthening international capital standards, now officially identified by the Basel Committee as "Basel III", and also implement, through the new "Standardized Approach" discussed below, a revised calculation of RWA, effective Jan. 1, 2015. Notwithstanding the detailed U.S. capital rules, the federal banking agencies retain significant discretion to set higher capital requirements for categories of banks or for an individual bank as situations warrant.

The U.S. capital rules, among other matters:

- define the components of capital in the numerator of regulatory capital ratios in a more narrow way than previous capital standards;
- introduce a minimum CET1 risk-based capital ratio and increase the minimum required Tier 1 risk-based capital ratio;
- designate their new "Standardized Approach" as the "generally applicable risk-based capital" standard;
- change the calculation of risk-weighted assets in the denominator of the risk-based capital ratios in the Advanced Approaches rules (defined below);
- establish a capital conservation buffer;
- introduce a countercyclical capital buffer for banking organizations subject to the Advanced Approaches ("Advanced Approaches banking organizations"); and
- establish an SLR for Advanced Approaches banking organizations.

The U.S. capital rules allow a graduated implementation schedule and will be substantially phased-in by 2019. BNY Mellon began using the new Standardized Approach risk-weightings on Jan. 1, 2015. In addition, BNY Mellon began meeting the minimum ratios for the capital conservation buffer and countercyclical capital buffer, including the G-SIB surcharge, during the transition period beginning on Jan. 1, 2016 and must begin compliance with the SLR on Jan. 1, 2018.

U.S. Capital Rules - New Minimum Capital Ratios and Capital Buffers

Consistent with the terms of the Basel III framework and the Dodd-Frank Act, the U.S. capital rules require Advanced Approaches banking organizations, such as BNY Mellon, to satisfy three minimum risk-based capital ratios using both the new Standardized Approach risk-weightings on Jan. 1, 2015 (during 2014, the U.S. capital rules used the Basel I-based risk weightings in lieu of the Standardized Approach) and the Advanced Approaches:

- a CET1 ratio of 4.5% beginning Jan. 1, 2015;
- a Tier 1 capital ratio of 6.0% beginning Jan. 1, 2015; and

- a Total capital ratio of 8.0% (unchanged from the earlier general risk-based capital rules).

In addition, these minimum ratios will be supplemented by a new capital conservation buffer required threshold that began being phased in on Jan. 1, 2016, in increments of 0.625% per year until it reaches 2.5% on Jan. 1, 2019. The capital conservation buffer required threshold can only be satisfied with CET1 capital.

The capital conservation buffer required threshold is designed to enable a banking organization to absorb losses during periods of economic stress and applies to all banking organizations that are subject to the U.S. capital rules. Banking organizations with a CET1 ratio above the minimum but below the conservation buffer required threshold (or below the combined capital conservation buffer and countercyclical capital buffer, when the latter is applied) will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall.

During periods of excessive growth, the capital conservation buffer may be expanded up to an additional 2.5% through the imposition of a countercyclical capital buffer. For internationally active banks such as BNY Mellon, the countercyclical capital buffer required threshold is a weighted average of the countercyclical capital buffers deployed in each of the jurisdictions in which the bank has private sector credit exposures. In December 2015, the Federal Reserve issued a proposed policy statement outlining the framework for calculating the countercyclical capital buffer applicable to banks' U.S. exposures. Under the proposed policy statement, the countercyclical capital buffer is designed to increase the resilience of large banking organizations when the Federal Reserve sees an elevated risk of above-normal losses and supplements existing capital requirements to account for various financial system vulnerabilities and quantitative indicators. The Federal Reserve, in consultation with the OCC and FDIC, also voted to affirm the current countercyclical capital buffer level for U.S. exposures of 0% and noted that any future modifications to the buffer would generally be subject to a 12-month phase-in period. Any countercyclical capital buffer required threshold arising from exposures outside the United States will also generally be subject to a 12-month phase-in period.

The U.S. capital rules' buffers are also supplemented by a risk-based capital surcharge on G-SIBs. On July 20, 2015, the Federal Reserve published final rules to implement the G-SIB surcharge (the "Final U.S. G-SIB Rule"). The final rule requires G-SIBs to calculate their surcharges under two methods (referred to as "method 1" and "method 2") and use the higher of the two surcharges. The first method is based on the Basel Committee's framework and considers a G-SIB's size, interconnectedness, cross-jurisdictional activity, substitutability, and complexity. The second method uses similar inputs, but is calibrated to result in significantly higher surcharges and replaces substitutability with a measure of reliance on short-term wholesale funding. The Final U.S. G-SIB Rule does not add the G-SIB surcharge to post-stress minimum risk-based capital ratios for purposes of DFAST or CCAR. Consistent with the phase-in of the capital conservation buffer, the G-SIB capital surcharge began to be phased-in beginning on Jan. 1, 2016 and will become fully effective on Jan. 1, 2019. For 2016, the G-SIB surcharge applicable to BNY Mellon is 1.5%, subject to applicable phase-ins.

At Dec. 31, 2015, calculated on a transitionally phased-in basis and under the Advanced Approach, BNY Mellon's CET1 ratio was 10.8%, the Tier 1 capital ratio was 12.3%, the Total capital ratio was 12.5% and its leverage ratio was 6.0%.

At Dec. 31, 2015, our estimated fully phased-in CET 1 ratio was 9.5% under the Advanced Approach and 10.2% under the Standardized Approach, based on our current interpretations of the U.S. capital rules and the final market risk rules.

U.S. Capital Rules - Deductions from and Adjustments to Capital Elements

The U.S. capital rules, like Basel III, provide for a number of deductions from and adjustments to CET1 capital. These include, for example, providing that unrealized gains and losses on all available-for-sale debt securities may *not* be filtered out for regulatory capital purposes, and the requirement that mortgage servicing rights, deferred tax assets dependent upon future taxable income and significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category

exceeds 10% of CET1 or all such categories in the aggregate exceed 15% of CET1.

The U.S. capital rules redefine regulatory capital elements resulting in, among other things, trust preferred instruments no longer qualifying as Tier 1 capital, subject to a phase-out schedule. At Dec. 31, 2015, BNY Mellon had \$296 million of outstanding trust preferred securities, of which 25% qualifies as Tier 1 capital in 2015 and none of which will qualify as Tier 1 capital in 2016, although a portion of the trust preferred securities are eligible for inclusion in Tier 2 capital.

U.S. Capital Rules - Advanced Approach Risk-Based Capital Rules

The U.S. capital rules' Advanced Approach asset risk-weighting framework (the "Advanced Approach") is based on Basel II's Advanced Approach. Under the U.S. capital rule's Advanced Approaches framework, credit risk risk-weightings are generally based on risk-sensitive approaches that largely rely on the use of internal credit models and parameters, whereas under the Standardized Approach credit risk risk-weightings are generally based on supervisory risk-weightings which vary primarily by counterparty type and asset class. BNY Mellon is required to comply with Advanced Approach reporting and public disclosures commencing on June 30, 2014. Under the U.S. capital rules, this means, among other things, for purposes of determining whether we meet minimum risk-based capital requirements, starting with the second quarter of 2014 our CET1 ratio, Tier 1 capital ratio, and total capital ratio is the lower of that calculated under the generally applicable risk-based capital standard and under the Advanced Approach rule.

U.S. Capital Rules - New Generally Applicable Risk-Based Capital Rules: Standardized Approach

The agencies' generally applicable risk-based capital rules calculate risk-weighted assets in the denominator of capital ratios using a broad array of risk weighting categories that are intended to be risk sensitive (the "Standardized Approach"). The risk-weights for the Standardized Approach generally range from 0% to 1,250%. Higher risk-weights under the Standardized Approach apply to a variety of exposures, including certain securitization exposures, equity exposures, claims on securities firms and

exposures to counterparties on over-the-counter derivatives.

Concerning securities finance transactions, including transactions in which we serve as agent and provide securities replacement indemnification to a securities lender, the U.S. capital rules do not permit a banking organization to use a simple VaR approach to calculate exposure amounts for repo-style transactions or to use internal models to calculate the exposure amount for the counterparty credit exposure for repo-style transactions under the Standardized Approach (although these methodologies are included in the Advanced Approach). Under the Standardized Approach, a banking organization may use a collateral haircut approach to recognize the credit risk mitigation benefits of financial collateral that secures a repo-style transaction, including an agented securities lending transaction, among other transactions. To apply the collateral haircut approach, a banking organization must determine the exposure amount and the relevant risk weight for the counterparty or guarantor. Banking organizations may calculate market price volatility and foreign exchange volatility using their own internal estimates with prior written approval of their primary Federal supervisor.

In December 2015, the Basel Committee issued a consultative document proposing revisions to the Standardized Approach. Among other things, the proposal maintains external credit ratings as the primary basis for determining risk weights for financial institution and corporate exposures, but requires additional due diligence by firms to confirm the credit risk exposure. The new proposal offers alternative approaches for jurisdictions that do not allow the use of credit ratings, such as the United States. The new proposal also includes a framework for credit risk mitigation and for commitments. The U.S. banking agencies, including the Federal Reserve, have issued a joint statement stating that they intend to consider the new Basel Committee proposal with the goal of developing a stronger and more transparent risk-based capital framework for the largest financial institutions.

Leverage Ratios

The U.S. capital rules require a minimum 4% leverage ratio for all banking organizations. At Dec. 31, 2015, the Tier 1 leverage ratio for the Parent was 6.0% and the Tier 1 leverage ratio for our primary

banking subsidiary, The Bank of New York Mellon, was 5.9%.

The U.S. capital rules also implement a new 3% Basel III-based SLR for Advanced Approach banking organizations, including BNY Mellon, to become effective Jan. 1, 2018. Unlike the Tier 1 leverage ratio, the SLR includes certain off-balance sheet exposures in the denominator, including the potential future credit exposure of derivative contracts and 10% of the notional amount of unconditionally cancelable commitments.

The U.S. G-SIBs (including BNY Mellon) and their insured depository institution subsidiaries are subject to an enhanced SLR, which requires BNY Mellon and other U.S. G-SIBs to maintain an SLR of greater than 5% (composed of the current minimum requirement of 3% plus a greater than 2% buffer) and requires bank subsidiaries of those bank holding companies to maintain at least a 6% SLR in order to qualify as “well capitalized” under the prompt corrective action regulations discussed below. The final enhanced SLR rule for U.S. G-SIBs, like the SLR more generally applicable to all Advanced Approach banking organizations, will become effective on Jan. 1, 2018.

Interest Rate Risk in the Banking Book

On June 8, 2015, the Basel Committee issued a consultative document on the risk management, capital treatment, and supervision of interest rate risk in the banking book (“IRRBB”). This IRRBB proposal expands upon and is intended to replace the Basel Committee’s 2004 Principles for the Management and Supervision of Interest Rate Risk. The proposal presents two options for the capital treatment of IRRBB: a uniform quantitative measure that imposes minimum capital requirements, and a supervisory approach that includes quantitative calculation and disclosure. Historically, IRRBB has been regulated under a supervisory approach. The Basel Committee has not yet finalized IRRBB or proposed an implementation timeline.

Fundamental Review of the Trading Book

The Basel Committee released revised minimum capital requirements for market risk in January 2016. The purpose of the revised market risk framework is to ensure that the standardized and internal model approaches to market risk deliver credible capital outcomes and promote consistent implementation of

the standards across jurisdictions. BNY Mellon is assessing the final framework but does not expect any material business issues or compliance matters should the framework be implemented in the U.S.

Total Loss-Absorbing Capacity

On Oct. 30, 2015, the Federal Reserve issued a notice of proposed rulemaking (the “Proposed TLAC Rules”) to establish external total loss-absorbing capacity (“TLAC”) and related requirements for U.S. G-SIBs at the top-tier holding company level, including BNY Mellon. Except as stated below, the proposed requirements would be effective on Jan. 1, 2019. Under the proposal, U.S. G-SIBs would be required to maintain a minimum external TLAC of the greater of 16% of risk-weighted assets and 9.5% of the denominator of the SLR in 2019, increasing to the greater of 18% of risk-weighted assets and 9.5% of the denominator of the SLR in 2022. The external TLAC requirement would be met using a combination of Tier 1 capital and eligible external long-term debt (“ELTD”). The proposal would apply an additional buffer to the external TLAC requirement consisting of the sum of 2.5% of risk-weighted assets, the G-SIB surcharge calculated under method 1, and any applicable countercyclical buffer to be met using CET1. Separately, ELTD would be required to be maintained in an amount equal to the greater of 6% of risk-weighted assets plus the G-SIB surcharge (calculated using the greater of method 1 and method 2), and 4.5% of the denominator of the SLR. In order to qualify as ELTD, debt instruments must be unsecured, not be structured notes, be governed by U.S. law and have a remaining maturity of more than one year. In addition, the proposal requires that ELTD generally not have acceleration rights, other than in the event of non-payment or the bankruptcy or insolvency of the issuer. Instruments that have a maturity of less than two years but more than one year would be subject to a 50% haircut. Further, the top-tier holding companies of U.S. G-SIBs would not be permitted to issue certain guarantees of subsidiary liabilities, incur certain liabilities guaranteed by subsidiaries, issue short-term debt to third parties, or enter into derivatives and certain other financial contracts with external counterparties. Finally, under the proposal, certain liabilities of the top-tier holding companies of U.S. G-SIBs that are junior to or pari passu with ELTD would be capped at 5% of the value of the U.S. G-SIB’s eligible external TLAC instruments.

The Proposed TLAC Rules would disqualify from ELTD, among other instruments, senior debt securities that permit acceleration for reasons other than an issuer insolvency or payment default. The currently outstanding senior long-term debt of U.S. G-SIBs, including BNY Mellon, typically permits acceleration for reasons other than an issuer insolvency or payment default and, as a result, neither such outstanding senior long-term debt, nor any subsequently issued senior long-term debt with similar terms would qualify as ELTD under the Proposed TLAC Rules. The steps that the U.S. G-SIBs, including BNY Mellon, may need to take to come into compliance with the final TLAC rules, including the amount and form of long-term debt that must be refinanced or issued, will depend in substantial part on the ultimate eligibility requirements for senior long-term debt and any grandfathering provisions included in the final TLAC rules.

The Proposed TLAC Rules could have a materially negative impact on BNY Mellon, unless modified prior to becoming final. Please see the Risk Factor - “We are subject to extensive government regulations and supervision and have been impacted by the significant amount of rulemaking since the 2008 financial crisis. These rules and regulations have, and in the future may, compel us to change how we manage our businesses, which could have a material adverse effect on our business, financial condition, and results of operations. In addition, these rules and regulations have increased our compliance and operational risks and costs.”

The Financial Stability Board (“FSB”) has also issued a final TLAC standard on Nov. 9, 2015. There are several important differences between the final FSB TLAC standard and the Proposed TLAC Rules:

- The Federal Reserve proposal and the FSB standard have the same minimum external TLAC requirement using risk-weighted assets, but the Federal Reserve proposal has a higher leverage ratio backstop of 9.5% as opposed to the FSB’s 6.75%.
- The Federal Reserve proposal has a minimum ELTD requirement, as described above, which is not required by the FSB.
- The final FSB standard sets an “internal” TLAC requirement requiring material sub-groups of G-SIBs that are not themselves resolution entities to

maintain 75-90% of the external TLAC minimum. Under the U.S. Proposed TLAC Rules, the Federal Reserve is considering requiring internal TLAC at domestic subsidiaries of U.S. G-SIBs, but has not yet proposed rules implementing such internal TLAC requirements.

Prompt Corrective Action

The FDI Act, as amended by the Federal Deposit Insurance Corporation Improvement Act of 1991 (“FDICIA”), requires the federal banking agencies to take “prompt corrective action” in respect of depository institutions that do not meet specified capital requirements. FDICIA establishes five capital categories for FDIC-insured banks: “well capitalized,” “adequately capitalized,” “undercapitalized,” “significantly undercapitalized,” and “critically undercapitalized.” The FDI Act imposes progressively more restrictive constraints on operations, management and capital distributions the less capital the institution holds.

Effective Jan. 1, 2015, the U.S. capital rules established revised “well capitalized” thresholds for insured depository institutions under the federal banking agencies’ prompt corrective action framework. Under the U.S. capital rules, an insured depository institution is deemed to be “well capitalized” if it has:

- a CET1 of at least 6.5%;
- a Tier 1 capital ratio of at least 8%;
- a Total capital ratio of at least 10%; and
- a Tier 1 leverage ratio of at least 5%.

Effective Jan. 1, 2018, the U.S. capital rules also require an Advanced Approach banking organization to maintain a SLR of at least 3% to qualify for the “adequately capitalized” status.

In addition, as noted above, the U.S. federal banking agencies’ revisions to the enhanced SLR establish a SLR “well capitalized” threshold of 6% for covered insured depository institutions, including The Bank of New York Mellon and BNY Mellon N.A.

FDICIA’s prompt corrective action provisions only apply to depository institutions and not to BHCs. The Federal Reserve’s regulations applicable to BHCs separately define “well capitalized” for BHCs to require maintaining a total risk-based capital ratio of at least 10.0% and a Tier 1 risk-based capital ratio of

at least 6.0% (but not a leverage measure). A financial holding company that is not well capitalized and well managed (or whose bank subsidiaries are not well capitalized and well managed under applicable prompt corrective action standards) may be restricted in certain of its activities and ultimately may lose financial holding company status.

At Dec. 31, 2015, BNY Mellon and all of its bank subsidiaries were “well capitalized” based on the ratios and rules applicable to them noted above. A bank’s capital category, however, is determined solely for the purpose of applying the prompt corrective action rules and may not be an accurate representation of the bank’s overall financial condition or prospects.

Liquidity Standards - Basel III and U.S. Rules and Proposals

Historically, regulation and monitoring of bank and BHC liquidity principally have been addressed as a supervisory matter, both in the U.S. and internationally, without required quantitative measures. The Basel III framework requires banks and BHCs to measure their liquidity against specific liquidity tests that, although similar in some respects to liquidity measures historically applied on a discretionary basis by banks and regulators for management and supervisory purposes, are now mandatory. One test, the LCR, is designed to ensure that the banking entity maintains an adequate level of unencumbered high-quality liquid assets equal to the entity’s expected net cash outflow for a 30-day time horizon under an acute liquidity stress scenario. The other, referred to as the NSFR, is designed to promote more medium- and long-term funding of the assets and activities of banking entities over a one-year time horizon. The Basel Committee issued the final LCR document in January 2013 and the final NSFR document in October 2014. The Basel III liquidity framework, as modified in January 2013, contemplates that the NSFR will be subject to an observation period through mid-2016 and, subject to any revisions resulting from the analyses conducted and data collected during the observation period, implemented as a minimum standard by Jan. 1, 2018. The U.S. banking agencies finalized rules implementing the LCR (as discussed below) but have not yet proposed rules implementing the NSFR.

The U.S. banking agencies issued a final rule (the “Final LCR Rule”) to implement the Basel III LCR in

the U.S. The Final LCR Rule is more stringent than the Basel III LCR in several respects, including additional restrictions on the eligibility of HQLA and an accelerated implementation timeline.

Since Jan. 1, 2015, covered companies, including BNY Mellon, The Bank of New York Mellon and BNY Mellon, N.A., have been required to meet an LCR of 80%, calculated monthly for a six month period, after which the LCR was required to be calculated daily. The required minimum LCR level will increase annually by 10% increments until Jan. 1, 2017, at which time covered companies would be required to meet an LCR of 100%. As of Dec. 31, 2015, based on our current interpretation of the Final LCR Rule, we believe that we and our domestic bank subsidiaries are in compliance with applicable LCR requirements on a fully phased in basis.

Separately, as noted above, the Final SIFI Rules address liquidity requirements for BHCs with \$50 billion or more in total assets, including BNY Mellon. These enhanced liquidity requirements became effective on Jan. 1, 2015 and include an independent review of liquidity risk management; establishment of cash flow projections; a contingency funding plan, and liquidity risk limits; liquidity stress testing under multiple stress scenarios and time horizons tailored to the specific products and profile of the company; and maintenance of a liquidity buffer of unencumbered highly liquid assets sufficient to meet projected net cash outflows over 30 days under a range of stress scenarios. In the release accompanying those rules, the Federal Reserve states that these enhanced liquidity requirements are designed to complement the LCR. The LCR would provide a standardized measure to allow comparison across BHCs, while the Final SIFI Rules’ internal stress test requirements provide a view of the BHC under various scenarios and time horizons which is tailored to the profile of the company. The Federal Reserve has also issued a proposed rule that would require BNY Mellon and other BHCs subject to the LCR to publicly disclose on quarterly basis quantitative and qualitative information regarding their LCR calculations beginning in the third quarter of 2016.

Volcker Rule

The Dodd-Frank Act imposed broad prohibitions and restrictions on proprietary trading and investments in or sponsorship of hedge funds and private equity

funds by banking organizations and their affiliates, commonly referred to as the “Volcker Rule.”

Banking organizations, including BNY Mellon, and their affiliates generally were required to conform their covered activities and investments with the final Volcker Rule regulations by July 21, 2015. The Federal Reserve extended this conformance period by one year (until July 21, 2016) for investments in and relationships with covered funds and foreign funds that were in place prior to Dec. 31, 2013. The Federal Reserve also stated that it intends to act to grant an additional one-year extension of this conformance period until July 21, 2017. We are expected to engage in good-faith efforts that will result in conformance of all of our covered activities and investments by no later than the end of this conformance period. The final Volcker Rule regulations also require us to develop and maintain an extensive compliance program, subject to CEO attestation, addressing proprietary trading and covered fund activities.

The Volcker Rule, subject to certain exceptions, prohibits “banking entities,” including BNY Mellon, from engaging in proprietary trading and limits our sponsorship of, and investments in, private equity and hedge funds (“covered funds”), including our ability to own or provide seed capital to covered funds and the ability for a covered fund to share the same or similar name with a BNY Mellon affiliate. In addition, the Volcker Rule restricts us from engaging in certain transactions with covered funds (including, without limitation, certain U.S. funds for which BNY Mellon acts as both sponsor/manager and custodian).

The restrictions concerning proprietary trading do not contain a broad exemption for asset-liability management functions, but contain more limited exceptions for, among other things, bona fide liquidity risk management and risk-mitigating hedging activities, as well as certain classes of exempted instruments, including government securities. Ownership interests in covered funds that banking organizations organize and offer are generally limited to 3% of the total number or value of the outstanding ownership interests of any individual fund at any time more than one year after the date of its establishment, and with respect to the aggregate value of all such ownership interests in covered funds (when combined with ownership interests in covered funds held under the Volcker Rule’s ABS issuer exemption and underwriting and

market-making exemption), 3% of the banking organization’s Tier 1 capital. Moreover, a banking entity relying on the final Volcker Rule’s exemption for sponsoring covered funds must deduct from its Tier 1 capital, the value of related ownership interests, calculated in accordance with the final rule.

Derivatives

U.S., EU and APAC regulators are in the process of implementing comprehensive rules governing the supervision, structure, trading and regulation of cleared and over-the-counter derivatives markets and participants. The Dodd-Frank Act, the European regulation on OTC derivatives, central counterparties and trade repositories, and APAC regulations each require or impose, or are in the process of formulating, as the case may be, a large number of requirements in this area, not all of which are final. However, increasingly, these regulatory regimes, individually and collectively, tend to affect the way various BNY Mellon subsidiaries operate, including where and with whom they transact, and therefore any such changes may impact business models and profitability of certain BNY Mellon subsidiaries.

In October 2015 the U.S. prudential regulators adopted joint final rules establishing minimum margin requirements for the uncleared swap transactions engaged in by those dealers subject to their jurisdiction (each, a “Covered Swap Entity”). The effective date of these new rules is April 2016, with compliance requirements set to begin in September 2016. From this latter point forward, variation margin requirements will be phased in over a six month period while initial margin requirements will be phased in over a four year period. In each instance, the higher a Covered Swap Entity’s derivatives exposure, the earlier in the phase-in period it will be required to comply. In addition, the new rules will require the initial margin posted to or by a Covered Swap Entity be segregated at a third-party custodian. Based on its current derivatives exposure, BNY Mellon does not expect to be required to comply with these requirements in 2016.

Money Market Fund Reforms

In July 2014, the SEC finalized rules (the “MMF Rules”) that will require institutional prime money market funds (including institutional municipal money market funds) to maintain a floating NAV

based on the current market value of the securities in their portfolios rounded to the fourth decimal place.

Previously, such funds could maintain a stable NAV of \$1.00. Government MMFs and retail MMFs are exempt from these requirements and may continue to maintain a stable NAV, provided each type of fund continues to satisfy certain definitional requirements under the new rule. The MMF Rules also provide new tools to MMFs' boards of directors to address high net redemption activity during periods of market stress. In particular the MMF Rules allow a MMF's board of directors to impose liquidity fees or temporarily suspend redemptions if a MMF's level of weekly liquid assets falls below certain thresholds. Government MMFs are not required to adopt the liquidity fees and redemption gates provision, but they may opt to do so. In addition, there is a two year transition period before implementation of the floating NAV and fees and gating structures is required.

Beyond these primary reforms, the MMF Rules also expand disclosure requirements, tighten the diversification requirements and impose additional stress testing requirements. There is a transition period concluding in April 2016 before mandatory implementation is required. The MMF Rules also introduce a new Form N-CR, which will require MMFs to disclose certain events (for example, the imposition or removal of fees or gates, the primary consideration or factors taken into account by a board of directors, in its decision related to fees and gates, and portfolio security defaults). The MMF Rules requiring reporting on Form N-CR went into effect in July 2015.

The final MMF Rules are highly complex, and we are continuing to evaluate their impact. The compliance date for the amendments related to the fundamental reforms (floating NAV and liquidity fees and sales etc.) is Oct. 14, 2016. It is possible that the MMF Rules could result in changes to the size and composition of our AUM, AUC/A, and total deposits.

The European Union's proposed Money Market Funds Regulation ("MMFR") continues its progression through the EU legislative process. Under the version of MMFR proposed by the European Parliament, constant value net asset value MMFs would be available only in a very limited number of circumstances, and low volatility net asset

value MMFs would be subject to a sunset clause. Other significant restrictions would apply, such as the need for MMFs to apply liquidity fees and redemption gates, to diversify asset portfolios, extensive valuation and reporting requirements and limits on external support. During 2016, we expect the Council of the European Union to continue work developing its own version of the MMFR proposal.

Tri-Party Repo Reform

BNY Mellon offers tri-party collateral agency services to dealers and cash investors active in the tri-party repurchase, or repo, market and currently has approximately 85% of the market share of the U.S. tri-party repo market. As agent, we facilitate settlement between sellers (cash borrowers) and buyers (cash lenders). Our involvement in a transaction commences after a seller and buyer agree to a tri-party repo trade and send instructions to us. We settle the trade, maintain custody of the collateral (the subject securities of the repo), monitor the eligibility and sufficiency of the collateral, and execute the payment and delivery instructions agreed to and provided by the principles.

Regulatory agencies worldwide have re-examined systemic risks in various financial markets, including the tri-party repo market. The Payment Risk Committee of the Federal Reserve Bank of New York sponsored a Task Force on Tri-Party Repo Infrastructure Reform to examine the risks in the tri-party repo market and to decide what changes should be implemented so that such risks may be mitigated or avoided in the future. The Task Force issued its final report regarding the tri-party repo market in 2012.

BNY Mellon has reduced the amount of secured intraday credit it provides to sellers in connection with their tri-party repo trades in a number of ways. Moving forward, BNY Mellon will continue to invest in and enhance its tri-party repo capabilities, including working closely with market participants to improve the process for settling Interbank General Collateral Finance repo trades.

Recovery and Resolution

As required by the Dodd-Frank Act, the Federal Reserve and FDIC have jointly issued a final rule requiring certain organizations, including each BHC with consolidated assets of \$50 billion or more, such

as BNY Mellon, to submit annually to the Federal Reserve and the FDIC a plan for its rapid and orderly resolution in the event of material financial distress or failure. In addition, the FDIC has issued a final rule that requires insured depository institutions with \$50 billion or more in total assets, such as The Bank of New York Mellon, to submit annually to the FDIC a plan for resolution in the event of the institution's failure.

The two resolution plan rules are complementary, and we have been submitting our resolution plans in conformity with both rules since 2012. Most recently, BNY Mellon and The Bank of New York Mellon filed their 2015 resolution plan on July 1, 2015. A public portion of our resolution plan is available on the Federal Reserve's and FDIC's websites.

If the Federal Reserve and FDIC jointly determine that a covered BHC's resolution plan is not credible and the covered BHC fails to address the deficiencies in a timely manner, the FDIC and the Federal Reserve may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on a covered BHC's growth, activities or operations. If the covered BHC continues to fail to adequately remedy any deficiencies, it could be required to divest assets or operations that the regulators determine necessary to facilitate its orderly resolution.

BNY Mellon is also subject to heightened supervisory expectations for recovery and resolution preparedness. These expectations, issued by the Federal Reserve in January 2014, apply to eight domestic bank holding companies designated by the Federal Reserve, including BNY Mellon, and relate to capabilities critical to operational resilience and contingency planning, including: effective processes for managing, identifying, and valuing collateral; a comprehensive understanding of obligations and exposures associated with payment, clearing, and settlement activities; the ability to analyze liquidity and funding sources, uses, and risks; demonstrated management information systems capabilities on a legal entity basis; and robust arrangements for the continued provision of shared and outsourced services. The Federal Reserve incorporates reviews of these key capabilities as part of its ongoing supervision of BNY Mellon.

The European Union Bank Recovery and Resolution Directive ("BRRD") was required to be transposed

into national law by Member States of the European Union by Dec. 31, 2014 and applied from Jan. 1, 2015. The BRRD includes bail-in provisions, which are required to be adopted from Jan. 1, 2016, at the latest. The implementing legislation in respect of the BRRD applies to various subsidiaries and branches of BNY Mellon.

This directive provides for recovery and resolution planning and a set of harmonized powers to resolve or implement recovery of relevant institutions, including branches of non-European Economic Area ("EEA") banks operating within the EEA. The directive includes the preparation of recovery and resolution plans, giving relevant EEA regulators powers to impose requirements on an institution before resolution actions become necessary; a set of resolution tools and powers to facilitate the resolution of failing entities, such as the power to "bail-in" the debt of an institution (including certain deposit obligations); and the power to require a firm to change its structure to remove impediments to resolvability.

BRRD provides for a "multiple points of entry" approach coupled with intra-group bail-in requirements. The BRRD also includes a minimum requirement for own funds, defined as regulatory capital, and eligible liabilities ("MREL") to ensure that institutions maintain enough capital capable of being written down and/or bailed-in. Following the final proposals of the European Banking Authority ("EBA") in regard to MREL, the European Union institutions intend to finalize their legislative proposal for MREL during 2016. It is expected that MREL will be set on a case-by-case basis for each institution subject to the BRRD, based on six criteria: resolvability, capital, exclusions from bail-in, deposit guarantee schemes, institution-specific risk, and systemic risk. MREL is the EU equivalent of TLAC, and is generally aligned with the FSB's TLAC proposals. In contrast with TLAC, MREL will apply to all institutions subject to the BRRD (not only G-SIBs).

In addition, BRRD requires EU-domiciled credit institutions, and certain other firms, to prepare recovery plans. We submitted recovery plans in respect of the following EMEA entities during 2015: The Bank of New York Mellon SA/NV, The Bank of New York Mellon (Luxembourg) SA, BNY Mellon Holdings (UK) Limited (a UK group recovery plan encompassing The Bank of New York Mellon

(International) Limited), and BNY Mellon Capital Markets EMEA Limited. We will submit our first group recovery plan for Pershing Holdings (UK) Limited during 2016. We will submit updated recovery plans during 2016 as required under applicable timescales.

The FSB is also focused on cross-border resolution and measures to promote resolvability. On Nov. 3, 2015, the FSB published a consultative document on Arrangements to Support Operational Continuity in Resolution and a separate consultative document on Temporary Funding Needed to Support the Orderly Resolution of a Global Systemically Important Bank. The proposed guidance on operational continuity sets out arrangements to ensure the continuity of critical shared services that are necessary to maintain a firm's critical functions in resolution. The proposed guidance on funding addresses the risk of G-SIBs not having sufficient liquidity to maintain critical operations during resolution, and proposes principles to ensure that temporary funding is available to allow the effective resolution of G-SIBs.

The FSB consultation on operational continuity is closely linked with similar efforts in the UK. In October and December 2015, the UK Prudential Regulation Authority ("PRA") published a consultation paper and addendum regarding "Ensuring Operational Continuity in Resolution." Under the UK proposals, BNY Mellon may be required to review and update intra-group services agreements and service levels in order to support operational continuity. BNY Mellon may be required to hold additional financial resources to support the provision of shared services under the "financial resilience" criteria of operational continuity proposals.

The EU proposals also require each EU Member State (either individually, or collectively with other EU Member States) to establish a resolution fund, which is to be funded by the banking industry. Most EU Member States will participate in a Single Resolution Fund ("SRF"), under the control of a Single Resolution Board ("SRB"). The SRB commenced operation on Jan. 1, 2015, and has broad powers in case of bank resolution. Contributions to the SRF start in 2016, and the SRF will build up over eight years, to a target level of 1% of covered deposits. Certain BNY Mellon entities will be subject to contributions to the SRF, most notably The Bank of New York Mellon SA/NV. The Bank of New York

Mellon SA/NV believes that its contributions to the SRF will constitute a meaningful cost for The Bank of New York Mellon SA/NV during the calendar years 2016 to 2023. The UK is not participating in the SRB or SRF. The Bank of England is the equivalent resolution authority in the UK, with similarly broad powers in case of bank resolution.

BNY Mellon agreed to adhere to the 2015 Resolution Stay Protocol developed by the International Swaps and Derivatives Association, Inc. The Resolution Stay Protocol provides for the contractual recognition of cross-border stays under various statutory resolution regimes and a contractual stay on certain cross-default rights. BNY Mellon entities that currently engage in relevant transactions have adhered to the Protocol.

Insolvency of an Insured Depository Institution or a Bank Holding Company; Orderly Liquidation Authority

If the FDIC is appointed as conservator or receiver for an insured depository institution such as The Bank of New York Mellon or BNY Mellon, N.A., upon its insolvency or in certain other circumstances, the FDIC has the power to:

- Transfer any of the depository institution's assets and liabilities to a new obligor, including a newly formed "bridge" bank without the approval of the depository institution's creditors;
- Enforce the terms of the depository institution's contracts pursuant to their terms without regard to any provisions triggered by the appointment of the FDIC in that capacity; or
- Repudiate or disaffirm any contract or lease to which the depository institution is a party, the performance of which is determined by the FDIC to be burdensome and the disaffirmance or repudiation of which is determined by the FDIC to promote the orderly administration of the depository institution.

In addition, under federal law, the claims of holders of domestic deposit liabilities and certain claims for administrative expenses against an insured depository institution would be afforded a priority over other general unsecured claims against such an institution, including claims of debt holders of the institution, in the "liquidation or other resolution" of such an institution by any receiver. As a result, whether or

not the FDIC ever sought to repudiate any debt obligations of The Bank of New York Mellon or BNY Mellon, N.A., the debt holders would be treated differently from, and could receive, if anything, substantially less than, the depositors of the bank.

The Dodd-Frank Act created a new resolution regime (known as the “orderly liquidation authority”) for systemically important financial companies, including BHCs and their affiliates. Under the orderly liquidation authority, the FDIC may be appointed as receiver for the systemically important institution, and its failed non-bank subsidiaries, for purposes of liquidating the entity if, among other conditions, it is determined at the time of the institution’s failure that it is in default or in danger of default and the failure poses a risk to the stability of the U.S. financial system.

If the FDIC is appointed as receiver under the orderly liquidation authority, then the powers of the receiver, and the rights and obligations of creditors and other parties who have dealt with the institution, would be determined under the Dodd-Frank Act’s orderly liquidation authority provisions, and not under the insolvency law that would otherwise apply. The powers of the receiver under the orderly liquidation authority were based on the powers of the FDIC as receiver for depository institutions under the FDI Act. However, the provisions governing the rights of creditors under the orderly liquidation authority were modified in certain respects to reduce disparities with the treatment of creditors’ claims under the U.S. Bankruptcy Code as compared to the treatment of those claims under the new authority. Nonetheless, substantial differences in the rights of creditors exist as between these two regimes, including the right of the FDIC to disregard the strict priority of creditor claims in some circumstances, the use of an administrative claims procedure to determine creditors’ claims (as opposed to the judicial procedure utilized in bankruptcy proceedings), and the right of the FDIC to transfer claims to a “bridge” entity.

In December 2013, the FDIC released a notice outlining the single point of entry (“SPOE”) strategy and soliciting comments on how a SPOE resolution approach would be implemented in the U.S. A SPOE approach would replace a distressed BHC with a bridge holding company, which could then continue subsidiary bank operations.

Depositor Preference

Under U.S. federal law, certain deposits and certain claims for administrative expenses and employee compensation against an insured depository institution are afforded a priority over other general unsecured claims against such an institution, including federal funds and letters of credit, in the “liquidation or other resolution” of such an institution by any receiver.

In September 2014, the UK PRA, as the successor to the prudential functions of the FSA, published “Supervisory Statement SS10/14 - Supervising international banks: the PRA’s approach to branch supervision”. In SS10/14, the PRA expressed concern with non-EEA national depositor preference regimes, and stated that the PRA would consider a range of options, such as liaising with non-EEA regulatory authorities in regard to the non-EEA institution’s recovery plan and the adequacy of the recovery plan from the perspective of the UK branch, or to require certain non-EEA institutions to convert their UK branch into a UK subsidiary.

Transactions with Affiliates

Transactions between BNY Mellon’s banking subsidiaries, on the one hand, and the Parent and its non-bank subsidiaries and affiliates, on the other, are subject to certain restrictions, limitations and requirements, which include limits on the types and amounts of transactions (including extensions of credit and asset purchases by our banking subsidiaries) that may take place and generally require those transactions to be on arm’s-length terms. In general, extensions of credit by a BNY Mellon banking subsidiary to any nonbank affiliate, including the Parent, must be secured by designated amounts of specified collateral and are limited in the aggregate to 10% of the relevant bank’s capital and surplus for transactions with a single affiliate and to 20% of the relevant bank’s capital and surplus for transactions with all affiliates. There are also limitations on affiliate credit exposures arising from derivative transactions and securities lending and borrowing transactions.

Deposit Insurance

Our U.S. banking subsidiaries, including The Bank of New York Mellon and BNY Mellon, N.A., accept deposits, and those deposits have the benefit of FDIC

insurance up to the applicable limit. The current limit for FDIC insurance for deposit accounts is \$250,000 for each depositor account. Under the FDI Act, insurance of deposits may be terminated by the FDIC upon a finding that the insured depository institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations or has violated any applicable law, regulation, rule, order or condition imposed by a bank's federal regulatory agency.

The FDIC's Deposit Insurance Fund (the "DIF") is funded by assessments on insured depository institutions. The FDIC assesses DIF premiums based on a bank's average consolidated total assets, less the average tangible equity of the insured depository institution during the assessment period. For larger institutions, such as The Bank of New York Mellon and BNY Mellon, N.A., assessments are determined based on CAMELS ratings and forward-looking financial measures to calculate the assessment rate, which is subject to adjustments by the FDIC, and the assessment base.

The Dodd-Frank Act also directed the FDIC to determine whether and to what extent adjustments to the assessment base are appropriate for custody banks. Under the FDIC's regulations, a custody bank may deduct 100% of cash and balances due from depository institutions, securities, federal funds sold, and securities purchased under agreement to resell with a Standardized Approach risk-weight of 0% and may deduct 50% of such asset types with a Standardized Approach risk-weight of greater than 0% and up to and including 20%. This assessment base deduction may not exceed the average value of deposits that are classified as transaction accounts and are identified by the bank as being directly linked to a fiduciary or custodial and safekeeping account.

On Oct. 22, 2015, the FDIC issued a proposed rule that would implement an increase in the reserve ratio of the DIF from 1.15% to 1.35% of total insured deposits. The FDIC would increase the reserve ratio by imposing a surcharge on the quarterly assessments of insured depository institutions with \$10 billion or more in total consolidated assets, including The Bank of New York Mellon and BNY Mellon, N.A. The annual 4.5 basis point surcharge would take effect in the first calendar quarter after the reserve ratio reaches 1.15% or the quarter in which the final rule becomes effective (whichever occurs later) and continue through the quarter in which the reserve

ratio reaches or exceeds 1.35%. FDIC staff estimate that the reserve ratio will reach 1.15% in the first quarter of 2016 or earlier, and project that the proposed surcharges are sufficient to raise the reserve ratio to 1.35% before the end of 2018. If the ratio does not reach 1.35% by Dec. 31, 2018, the proposed rule would impose a further "shortfall assessment" on institutions with \$10 billion or more in total consolidated assets. Based on Dec. 31, 2015 assets, we estimate the annualized FDIC expense would increase by approximately \$35 million if the proposed rule were finalized as proposed.

Source of Strength and Liability of Commonly Controlled Depository Institutions

Federal Reserve policy historically has required BHCs to act as a source of strength to their bank subsidiaries and to commit capital and financial resources to support those subsidiaries. The Dodd-Frank Act codified this policy as a statutory requirement. Such support may be required by the Federal Reserve at times when we might otherwise determine not to provide it. In addition, any loans by BNY Mellon to its bank subsidiaries would be subordinate in right of payment to depositors and to certain other indebtedness of its banks. In the event of a BHC's bankruptcy, any commitment by the BHC to a federal bank regulator to maintain the capital of a subsidiary bank will be assumed by the bankruptcy trustee and entitled to a priority of payment. In addition, in certain circumstances BNY Mellon's insured depository institution subsidiaries could be held liable for losses incurred by another BNY Mellon insured depository institution subsidiary. In the event of impairment of the capital stock of one of BNY Mellon's national bank subsidiaries or The Bank of New York Mellon, BNY Mellon, as the banks' stockholder, could be required to pay such deficiency.

Incentive Compensation Arrangements Proposal

The Dodd-Frank Act requires federal regulators to prescribe regulations or guidelines regarding incentive-based compensation practices at certain financial institutions. On April 14, 2011, federal regulators including, among other agencies, the FDIC, the Federal Reserve and the SEC, issued a proposed rule which, among other things, would require certain executive officers of covered financial institutions with total consolidated assets of \$50 billion or more, such as ours, to defer at least 50% of

their annual incentive-based compensation for a minimum of three years. The comment period on the proposed rule closed May 31, 2011. Final regulations have not been issued as of the date of this Annual Report.

Anti-Money Laundering and the USA Patriot Act

A major focus of governmental policy on financial institutions has been aimed at combating money laundering and terrorist financing. The USA PATRIOT Act of 2001 contains numerous anti-money laundering requirements for financial institutions that are applicable to BNY Mellon's bank, broker-dealer and investment adviser subsidiaries and mutual funds and private investment companies advised or sponsored by our subsidiaries. Those regulations impose obligations on financial institutions to maintain appropriate policies, procedures and controls to detect, prevent and report money laundering and terrorist financing and to verify the identity of their customers. Certain of those regulations impose specific due diligence requirements on financial institutions that maintain correspondent or private banking relationships with non-U.S. financial institutions or persons.

In December 2015, the New York Department of Financial Services ("NYDFS") proposed regulations expanding anti-money laundering and anti-terrorism laws for its regulated institutions, including The Bank of New York Mellon. The proposed regulation would require an institution's senior compliance officer to make an annual certification to the institution's compliance with the requirements of the regulation, with the potential for criminal penalties for the officer if the certification is incorrect or false. Among other requirements, the proposed regulation requires a financial institution to:

- Maintain a "Transaction Monitoring Program" to monitor transactions after their execution for potential anti-money laundering violations and suspicious activity reporting;
- Maintain a "Watch List Filtering Program" to prevent transactions that are prohibited by certain applicable sanctions; and
- Ensure that the Transaction Monitoring Program and the Watch List Filtering Program use all relevant data sources, provide for validation of data quality, are subject to governance and

management oversight and are appropriately funded and staffed.

Privacy

The privacy provisions of the Gramm-Leach-Bliley Act generally prohibit financial institutions, including BNY Mellon, from disclosing nonpublic personal financial information of consumer customers to third parties for certain purposes (primarily marketing) unless customers have the opportunity to "opt out" of the disclosure. The Fair Credit Reporting Act restricts information sharing among affiliates for marketing purposes.

Acquisitions/Transactions

Federal and state laws impose notice and approval requirements for mergers and acquisitions involving depository institutions or BHCs. The BHC Act requires the prior approval of the Federal Reserve for the direct or indirect acquisition by a BHC of more than 5% of any class of the voting shares or all or substantially all of the assets of a commercial bank, savings and loan association or BHC. In reviewing bank acquisition and merger applications, the bank regulatory authorities will consider, among other things, the competitive effect of the transaction, financial and managerial resources including the capital position of the combined organization, convenience and needs of the community factors, including the applicant's record under the Community Reinvestment Act of 1977 which requires U.S. banks to help serve the credit needs of their communities (including credit to low and moderate income individuals and geographies), the effectiveness of the subject organizations in combating money laundering activities and the risk to the stability of the U.S. banking or financial system. In addition, prior Federal Reserve approval would be required for certain large non-banking acquisitions and investments.

Regulated Entities of BNY Mellon and Ancillary Regulatory Requirements

BNY Mellon is registered as a BHC an FHC under the Bank Holding Company Act of 1956, as amended by the Gramm-Leach-Bliley Act and by the Dodd-Frank Act (the "BHC Act"). We are subject to supervision by the Federal Reserve. In general, the BHC Act limits an FHC's business activities to banking, managing or controlling banks, performing

certain servicing activities for subsidiaries, engaging in activities incidental to banking, and engaging in any activity, or acquiring and retaining the shares of any company engaged in any activity, that is either financial in nature or complementary to a financial activity and does not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally.

A BHC's ability to maintain FHC status is dependent upon a number of factors, including:

- its U.S. depository institution subsidiaries qualifying on an ongoing basis as "well capitalized" and "well managed" under the prompt corrective regulations of the appropriate regulatory agency (discussed above under "Prompt Corrective Action"); and
- the BHC itself, qualifying on an ongoing basis as "well capitalized" and "well managed" under applicable Federal Reserve regulations.

An FHC that does not continue to meet all the requirements for FHC status will, depending on which requirements it fails to meet, lose the ability to undertake new activities, or make acquisitions, that are not generally permissible for BHCs without FHC status or to continue such activities. At Dec. 31, 2015, BNY Mellon and all of its bank subsidiaries were "well capitalized" based on the ratios and rules applicable to them.

The Bank of New York Mellon, which is BNY Mellon's largest banking subsidiary, is a New York state-chartered bank, and a member of the Federal Reserve System and is subject to regulation, supervision and examination by the Federal Reserve, the FDIC and the NYDFS. BNY Mellon's national bank subsidiaries, BNY Mellon, N.A. and The Bank of New York Mellon Trust Company, National Association, are chartered as national banking associations subject to primary regulation, supervision and examination by the OCC.

We operate a number of broker-dealers that engage in securities underwriting and other broker-dealer activities in the United States. These companies are SEC-registered broker-dealers and members of Financial Industry Regulatory Authority, Inc. ("FINRA"), a securities industry self-regulatory organization. BNY Mellon's non-bank subsidiaries engaged in securities-related activities are regulated

by supervisory agencies in the countries in which they conduct business.

Certain of BNY Mellon's public finance and advisory activities are regulated by the Municipal Securities Rulemaking Board. The SEC issued its final Municipal Advisors Rule, effective July 2014, to require municipal advisors to register with the SEC if they provide advice to municipal entities or certain other persons on the issuance of municipal securities, or about certain investment strategies or municipal derivatives.

Certain of BNY Mellon's subsidiaries are registered with the CFTC as commodity pool operators or commodity trading advisors and, as such, are subject to CFTC regulation. The Bank of New York Mellon is provisionally registered as a Swap Dealer (as defined in the Dodd-Frank Act) with the CFTC, through the National Futures Association ("NFA"). As a Swap Dealer, The Bank of New York Mellon is subject to regulation, supervision and examination by the CFTC and NFA. In connection with certain Dodd-Frank clearing requirements, The Bank of New York Mellon is a member of LCH Clearnet Limited's SwapClear interest rate swap clearing service.

Certain of our subsidiaries are registered investment advisors under the Investment Advisers Act of 1940, as amended, and as such are supervised by the SEC. They are also subject to various U.S. federal and state laws and regulations and to the laws and regulations of any countries in which they conduct business. Our subsidiaries advise both public investment companies which are registered with the SEC under the Investment Company Act of 1940 (the "'40 Act"), including the Dreyfus family of mutual funds, and private investment companies which are not registered under the '40 Act.

Certain of our investment management, trust and custody operations provide services to employee benefit plans that are subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), administered by the U.S. Department of Labor ("DOL"). ERISA imposes certain statutory duties, liabilities, disclosure obligations, and restrictions on fiduciaries, as applicable, related to the services being performed and fees being paid.

Department of Labor Proposed Fiduciary Rule

The U.S. Department of Labor has recently proposed a regulation that, among other things, would expand the definition of who is designated a “fiduciary” of an employee benefit plan or individual retirement account (IRA) under ERISA and the Internal Revenue Code, respectively. If designated an ERISA fiduciary, the entity or individual will be subject to various duties, liabilities, disclosure obligations, and restrictions related to the services it performs for ERISA plans and IRAs, as well as the compensation or other benefits the fiduciary receives in connection with those services. Certain BNY Mellon businesses may need to modify their practices in order to comply with the rule or modify how they transact with third parties that are impacted by the rule, both of which could adversely affect the financial results of such businesses. The final rule is expected to be issued in the second quarter of 2016.

Operations and Regulations Outside the United States

In Europe, branches of The Bank of New York Mellon are subject to regulation in the countries in which they are established, in addition to being subject to oversight by the US regulators referred to above. The Bank of New York Mellon SA/NV is a public limited liability company incorporated under the laws of Belgium. The Bank of New York Mellon SA/NV, has been granted a banking license by the National Bank of Belgium (“NBB”) and is authorized to carry out all banking and savings activities as a credit institution. In 2014, the European Central Bank (“ECB”) assumed responsibility for the supervision of 120 significant banks and banking groups in the euro area, including The Bank of New York Mellon SA/NV. The ECB’s supervision is carried out in conjunction with the relevant national prudential regulator (NBB in The Bank of New York Mellon SA/NV’s case). The Bank of New York Mellon SA/NV conducts its activities in Belgium as well as through branch offices in the United Kingdom, Ireland, Luxembourg, the Netherlands, France and Germany.

Certain of our financial services operations in the UK are subject to regulation and supervision by the FCA and PRA. The PRA is responsible for the authorization and prudential regulation of firms that carry on PRA-regulated activities, including banks. PRA-authorized firms are also subject to regulation

by the FCA for conduct purposes. In contrast, FCA-authorized firms (such as investment management firms) have the FCA as their sole regulator for both prudential and conduct purposes although subject to the residual overarching jurisdiction of the PRA, if matters of systemic significance are in issue. As a result, FCA-authorized firms must comply with FCA prudential and conduct rules and the FCA’s Principles for Businesses, while dual-regulated firms must comply with the FCA conduct rules and FCA Principles, as well as the applicable PRA prudential rules and the PRA’s Principles for Businesses.

The PRA regulates The Bank of New York Mellon (International) Limited, our UK incorporated bank, as well as the UK branch of The Bank of New York Mellon and, to a more limited extent, The Bank of New York Mellon SA/NV. Certain of BNY Mellon’s UK incorporated subsidiaries are authorized to conduct investment business in the UK. Their investment management advisory activities and their sale and marketing of retail investment products are regulated by the FCA. Certain UK investment funds, including BNY Mellon Investment Funds, are registered with the FCA and are offered for retail sale in the UK.

Since the financial crisis, the European Union and its Member States have engaged in a significant overhaul of bank regulation and supervision. To increase the resilience of banks and to reduce the impact of potential bank failures, new rules on capital requirements for banks and bank recovery and resolution have been adopted. The European Union’s Banking Union has been launched. Further measures are under way, including providing for a structural separation of the risks associated with certain banks’ trading activities from their deposit-taking function.

Aspects of the Banking Union entered into force on Nov. 4, 2014 in most EU jurisdictions. The UK is not participating in the Banking Union. The key components of the Banking Union include a single resolution mechanism (“SRM”) and a single supervisory mechanism (“SSM”).

The SRM approach endorses the bail-in rules established in the BRRD. The SRM provides for a Single Resolution Fund, which is to be funded by the banking industry. It also provides for a Single Resolution Board with broad powers in case of bank resolution. Finally, it provides for EU Member States entering into cooperation agreements with non-EEA

countries with the caveat that in certain circumstances they can refuse to recognize proceedings. Various BNY Mellon subsidiaries and branches will fall within the scope of the SRM.

In addition, the Capital Requirements Directive IV (and related Regulation) (“CRD IV”) affects BNY Mellon’s EU subsidiaries by implementing Basel III and other changes, including the enhancement of the quality of capital, and the strengthening of capital requirements for counterparty credit risk, resulting in higher capital requirements. In the EU Member States, CRD IV also introduces substantive parts of the new European supervisory architecture, including the development of a single set of harmonized prudential rules for financial services. This set of rules would replace existing separately implemented rules within EU Member States, with a harmonized approach to implementation across the EU. Elements of CRD IV apply not only to BNY Mellon banking branches and subsidiaries but also to investment management and brokerage entities. CRD IV became effective on Jan. 1, 2014, with certain provisions phased in from 2014 to 2019.

Our Investment Management and Investment Services businesses are subject to significant regulation in numerous jurisdictions around the world relating to, among other things, the safeguarding, administration and management of client assets and client funds. Various new and revised European directives and regulations will impact our provision of these services, including the Markets in Financial Instruments Directive II and Markets in Financial Instruments Regulations (collectively, “MiFID II”), the Alternative Investment Fund Managers Directive (“AIFMD”), the Directive on Undertakings for Collective Investments in Transferable Securities (“UCITS V”), the Central Securities Depositories Regulation (“CSDR”), and the regulation on OTC derivatives, central counterparties and trade repositories. These European directives and regulations may impact our operations and risk profile but may also provide new opportunities for the provision of BNY Mellon products and services. Several of these European directives and regulations are still subject to finalization by the legislature and/or substantial secondary legislation. This creates uncertainty as to business impact.

The types of activities in which the foreign branches of our banking subsidiaries and our international subsidiaries may engage are subject to various

restrictions imposed by the Federal Reserve. Those foreign branches and international subsidiaries are also subject to the laws and regulatory authorities of the countries in which they operate and, in the case of banking subsidiaries, may be subject to regulatory capital requirements in the jurisdictions in which they operate. As of Dec. 31, 2015, each of BNY Mellon’s non-U.S. banking subsidiaries had capital ratios above their specified minimum requirements.

European Central Bank SSM and Comprehensive Assessments

In October 2013, the Council of the European Union adopted a regulation creating an SSM to oversee banks and other credit institutions. The SSM is composed of the ECB and the supervisory authorities of the member states. It covers the prudential supervision of all major banks in the 19 euro area countries as well as any non-euro area countries that choose to participate through close cooperation agreements.

In advance of the SSM, the ECB began in November 2013 a comprehensive assessment of certain credit institutions, which due to their size and systemic characteristics, fall under direct supervision by the ECB. The assessment consisted of a supervisory risk assessment of key risks, an asset quality review to enhance transparency of bank assets, and a stress test to review the resiliency of bank balance sheets, which was conducted in conjunction with the European Banking Authority. The Bank of New York Mellon SA/NV, our Belgian banking subsidiary, was included in this exercise, and passed successfully.

European Resolution Legislation and Structural Reform Proposals

Deposit Guarantee Scheme Directive. Under the recast Deposit Guarantee Scheme Directive, the scope of deposit protection in the EU is being extended to cover most corporate entities, and contributions to deposit guarantee schemes are expected to move to a risk-based calculation method. BNY Mellon expects that the extension of deposit protection to most corporate entities will require certain BNY Mellon entities to contribute to relevant deposit protection schemes. The contributions and required systems enhancements may constitute a meaningful cost for those BNY Mellon entities.

The European Commission has proposed a European Deposit Insurance Scheme (“EDIS”) for euro area member states. Under the EDIS proposal, existing euro area deposit guarantee schemes would transition over a number of years to a mutualized deposit guarantee scheme applicable in the Eurozone.

Structural Reform. In addition, European and Member State regulators (for example, the PRA in the UK) continue to develop proposals in regard to bank structural reform. The details of the European Union Bank Structural Reform proposal continue to be developed, and at this stage the final outcome of such proposal is not certain. Bank structural reform proposals, if implemented, may require BNY Mellon to review its existing corporate structure, and may impact upon the business activities that BNY Mellon subsidiaries and branches can undertake. It is not clear whether bank structural reforms in the European Union will operate on the basis of changes to corporate structure or prohibitions on certain forms of trading (including proprietary trading), or a combination of these approaches. The proposal on structural reform of European Union banks is intended to apply only to the largest and most complex European Union banks with significant trading activities.

Transactions with the Shadow Banking Sector

In December 2015, the EBA finalized its guidance on large exposure limits of credit institutions to shadow banking entities. The guidelines impose a large exposure limit to the shadow banking sector as a whole. The EBA has used a broad definition of the shadow banking sector (for example, money market funds are in scope). EU member states are expected to implement the guidelines by January 2017.

On Jan. 29, 2014, in addition to the proposed new rules on structural reform of the European Union banking sector referred to above, the European Commission proposed measures aimed at increasing transparency of certain transactions in the “shadow banking” sector, including for providing for enhanced transparency and reporting of SFTs (securities financing transactions). In January 2016, the resulting Securities Financing Transactions Regulation entered into force.

European Financial Markets and Market Infrastructure

The EU continues to develop proposals and regulations in relation to financial markets and market infrastructures. The MiFID II, Markets in Financial Instruments Regulation (“MiFIR”) and European Market Infrastructure Regulation (“EMIR”) are at the detailed rule-making stage, and involve a significant volume of change to be implemented in relatively short timeframes. MiFID II/MiFIR/EMIR may create new business opportunities in European markets, but will also require existing business activities and processes to be reviewed. The volume of change required may result in some implementation/execution risk.

A key policy objective of the 2014-19 European Commission is to develop a Capital Markets Union (“CMU”) in the EU. In September 2015, the European Commission published its CMU Action Plan, which set out a range of initiatives that the Commission intends to undertake between 2015-19. Some examples of CMU-related initiatives include a review of the EU regulatory framework for financial services, a review of the macroprudential framework, a new Prospectus Regulation, a review of the Capital Requirements Regulation and a project to address national barriers to free movement of capital and cross-border funds distribution.

Investment Services in Europe

The AIFMD has a direct effect on our alternative fund manager clients and our depository business and other products offered across Europe. AIFMD imposes heightened obligations upon depositories, which have both operational and, potentially, capital effects. The European Securities and Markets Authority is expected to publish guidelines on asset segregation under AIFMD in late 2016.

Our businesses servicing regulated funds in Europe will also be affected by the revised directive governing undertakings for collective investment in transferable securities, known as UCITS V, will take effect in March 2016.

Making or continuing an investment in securities issued by us involves certain risks that you should carefully consider. The following discussion sets forth the most significant risk factors that could affect our business, financial condition or results of operations. However, other factors, other than those discussed below or in other of our reports filed with or furnished to the SEC, also could adversely affect our business, financial condition or results of operations. We cannot assure you that the risk factors described below or elsewhere in our reports address all potential risks that we may face. These risk factors also serve to describe factors which may cause our results to differ materially from those described in forward-looking statements included herein or in other documents or statements that make reference to this Annual Report. See “Forward-looking Statements.”

Operational and Business Risk

An information security event or technology disruption that results in a loss of confidential information or impacts our ability to provide services to our clients may materially adversely affect our business and results of operations.

We rely on communications and information systems to conduct our business. Our businesses rely heavily on technology, and are vulnerable to attacks and technology disruptions, which are occurring globally with greater frequency. Our information systems have been subjected to cyber threats, including hacker attacks, computer viruses or other malicious software, denial of service efforts, limited unavailability of service, phishing attacks, and unauthorized access attempts. We deploy a broad range of sophisticated defenses, but notwithstanding these efforts, it is possible we could suffer a material impact or disruption. The security of our computer systems, software and networks, and those functions that we may outsource, may continue to be subjected to cyber threats that could result in failures or disruptions in our business. In addition, as our business areas evolve due to the introduction of technology, new service offering requirements for our clients and customers, or changes in regulation relative to these service offerings, the business processes which this technology supports could introduce unforeseen risks that could materially impact business operations. Despite our efforts to ensure the integrity of our systems and information, it is possible that we may not be able to anticipate or to implement effective preventive measures against all cyber threats, or

detect all such threats, especially because the techniques used change frequently or are not recognized until launched, and because attacks can originate from a wide variety of sources, including outside third parties such as persons who are involved with organized crime or who may be linked to terrorist organizations or hostile foreign governments. Those parties may also attempt to place individuals within BNY Mellon or fraudulently induce employees, customers or other users of our systems to disclose sensitive information in order to gain access to our data or that of our customers or clients.

Security events may occur through intentional or unintentional acts by individuals or groups having authorized or unauthorized access to our systems or our clients' or counterparties' confidential information. These individuals or groups include employees, vendors and customers, as well as hackers. An event that results in the loss of information may require us to reconstruct lost data, reimburse clients for data and credit monitoring services, result in loss of customer business, or damage to our computers or systems and those of our customers and counterparties. These impacts could be costly and time-consuming and materially negatively impact our business operations and reputation. Additionally, security events or disruptions of our information systems, or those of our service providers, could impact our ability to provide services to our clients, which could expose us to liability for damages, result in the loss of business, damage our reputation, subject us to regulatory scrutiny or expose us to litigation, any of which could have a material adverse effect on our business, financial condition and results of operations. In addition, the failure to upgrade or maintain our computer systems, software and networks, as necessary, could also make us vulnerable to attack and unauthorized access and misuse. There can be no assurance that any such failures, interruptions or security events will not occur or, if they do occur, that they will be adequately addressed. We may be required to expend significant additional resources to modify, investigate or remediate vulnerabilities or other exposures arising from information systems security risks. Furthermore, attacks on us or other large financial institutions, service providers or industry utilities could disrupt the overall functioning of the financial system.

As a result of the importance of communications and information systems to our business, we could also be adversely affected if attacks affecting the third party

providers of our technology, communications or other services impair our ability to process transactions and communicate with customers and counterparties. For a discussion of operational risk, see “Risk Management - Operational/business risk” and “Business Continuity” in the MD&A section in this Annual Report.

If our technology or that of a third party or vendor fails, or if we neglect to update our technology, develop and market new technology to meet our clients’ needs or protect our intellectual property, our business may be materially adversely affected.

Our businesses are highly dependent on our ability to process large volumes of data requiring global capabilities and scale from our technology platforms. As our businesses evolve, the technology used becomes increasingly complex and relies on the continued effectiveness of the programming code and integrity of the data that is inputted. We maintain controls designed to reduce the risk of flaws in our data, models, systems or processes. Nevertheless, such risk cannot be completely eliminated. In addition, our BNY Mellon businesses and their service offerings rely upon the employees and technology of unaffiliated third parties and a failure on their part could lead to a failure of our technology systems or the inability to service our clients.

As a result of financial entities and technology systems across the globe becoming more interdependent and complex, a technology failure that significantly degrades, deletes or compromises the systems or data of one or more financial entities or suppliers could have a material impact on counterparties or other market participants, including us. Any such failure could, among other things, adversely affect our ability to effect transactions, service our clients, manage our exposure to risk or expand our businesses.

Rapid technological changes, together with competitive pressures, require us to make significant and ongoing investments in technology to develop competitive new products and services or adopt new technologies. Our financial performance depends in part on our ability to develop and market these new products and services, adopt or develop new technologies that differentiate our products or provide cost efficiencies and deliver these products and services to the market in a timely manner at a competitive price. The unsuccessful implementation

of technological upgrades and new products and services may adversely impact our ability to service and retain customers. The costs we incur in enhancing our technology could be substantial and may not ultimately improve our competitiveness or profitability.

The failure to maintain an adequate technology infrastructure with effective cybersecurity controls relative to the type, size and complexity of operations, markets and products traded, access to trading venues and our market interconnectedness could impact operations and impede our productivity and growth, which could cause our earnings to decline or could impact our ability to comply with regulatory obligations leading to regulatory fines and sanctions. In addition, the failure to ensure adequate review and consideration of critical business changes prior to and during introduction and deployment of key technological systems or failure to adequately align evolving client commitments and expectations with operational capabilities could have a negative impact on our operations.

We rely on a variety of measures to protect our intellectual property and proprietary information, including copyrights, trademarks, patents and controls on access and distribution. These measures may not prevent misappropriation or infringement of our intellectual property or proprietary information and a resulting loss of competitive advantage. Furthermore, if a third party were to assert a claim of infringement or misappropriation of its proprietary rights, obtained through patents or otherwise, against us, we could be required to spend significant amounts to defend such claims, develop alternative methods of operations, pay substantial money damages, obtain a license from the third party or possibly stop providing one or more products or services.

We are subject to extensive government regulation and supervision and have been impacted by the significant amount of rulemaking since the 2008 financial crisis. These rules and regulations have, and in the future may, compel us to change how we manage our businesses, which could have a material adverse effect on our business, financial condition and results of operations. In addition, these rules and regulations have increased our compliance and operational risks and costs.

We operate in a highly regulated environment, and are subject to a comprehensive statutory and

regulatory regime, including oversight by governmental agencies both in the U.S. and outside the U.S. Since the 2008 financial crisis, domestic and international policy makers and regulators have substantially increased their focus on the financial services industry. New or modified regulations and related regulatory guidance and supervisory oversight are significantly altering the regulatory framework in which we operate and have affected how we analyze certain business opportunities, increased our regulatory capital and liquidity requirements, altered the revenue profile of certain of our core activities and imposed additional costs on us. In addition, they could otherwise materially adversely affect our business, financial condition and results of operations and have other negative consequences. The regulatory and supervisory focus of U.S. banking agencies is primarily intended to protect the safety and soundness of the banking system and federally insured deposits, and not to protect investors in our securities or creditors. Additionally, banking regulators have wide supervisory discretion in the ongoing examination and the enforcement of applicable banking statutes, regulations, and guidelines, and may restrict our ability to engage in certain activities or acquisitions, or may require us to maintain more capital or highly liquid assets.

In common with their U.S. counterparts, European policy makers and regulators have also increased their focus on financial services providers, and our European operations are directly affected and will continue to be affected by changes to the regulatory environment.

The most significant risks of the regulatory environment in which we operate are discussed below. See “Supervision and Regulation” in this Annual Report for additional information regarding the potential impact of the regulatory environment on our business. The Dodd-Frank Act, which became law in July 2010, has had, and will continue to have, a significant impact on the regulatory structure of the global financial markets and has imposed, and is expected to continue to impose, significant additional costs on us. While U.S. regulators have finalized many regulations to implement various provisions of the Dodd-Frank Act, they plan to propose or finalize additional implementing regulations in the future. In light of the further rule-making required, as well as the discretion afforded to federal regulators, the full impact of this legislation on us, our business strategies and financial performance is not known at

this time, may not be known for a number of years and could materially adversely impact us. In addition, new bodies created by the Dodd-Frank Act (including the Financial Stability Oversight Council and the Consumer Financial Protection Bureau) have commenced operations. The related findings of various regulatory and commission studies, the interpretations issued as part of the rulemaking process and the final regulations that are issued with respect to various elements of the Dodd-Frank Act may cause changes that impact the profitability of our business activities and require that we change certain of our business practices and plans. These changes will continue to expose us to additional regulatory costs and require us to invest significant management attention and resources to make any necessary changes, all of which could impact our profitability.

Several provisions of the Dodd-Frank Act, such as the Volcker Rule and enhanced prudential standards for financial institutions designated as SIFIs, impose or are expected to impose significant additional operational, compliance and risk management costs both in the near-term, as we develop and integrate appropriate systems and procedures, and on a recurring basis thereafter, as we monitor, support and refine those systems and procedures.

The U.S. capital rules subject us and our U.S. banking subsidiaries to more stringent capital requirements, which could restrict growth, activities or operations, trigger divestiture of assets or operations or limit our ability to return capital to shareholders. We must also separately obtain final approval from the agencies for the use of certain models used to calculate risk-weighted assets under the Advanced Approach. As discussed in additional detail in “Supervision and Regulation,” the U.S. G-SIB capital surcharge began to be phased in beginning on Jan. 1, 2016 and will become fully effective on Jan. 1, 2019. For 2016, the G-SIB surcharge applicable to BNY Mellon is 1.5%, subject to applicable phase-ins. Failure to meet current or future capital requirements could materially adversely affect our financial condition. Additional impacts relating to compliance with these rules could include, but are not limited to, potential dilution of existing shareholders and competitive disadvantage compared to financial institutions not under the same regulatory framework. In addition, the SLR subjects us a more stringent leverage requirement, which could restrict growth, activities, operations or could result in certain

restrictions on capital distributions and discretionary bonus payments.

The LCR requires us to increase our holdings of high-quality and potentially lower-yielding liquid assets. When the final rule regarding the NSFR is ultimately implemented in the U.S., those requirements could also require BNY Mellon to increase its holdings of high-quality, and potentially lower-yielding, liquid assets, and to reevaluate the composition of its liabilities structure to include more longer-dated debt. To the extent that these and other reforms, such as the proposed TLAC Rules, differ from BNY Mellon's current funding profile, we may need to materially increase our aggregate long-term debt levels and/or alter the composition and terms of our assets and liabilities, which could lead to increased costs of funds and have a negative impact on net interest revenue, among other potential impacts.

Title II of the Dodd-Frank Act established an orderly liquidation process in the event the failure of a large systemically important financial institution, such as BNY Mellon, would have serious adverse effects on the U.S. financial system and that resolution under the orderly liquidation authority would avoid or mitigate those effects. Specifically, when a systemically important financial institution such as BNY Mellon is in default or danger of default, the FDIC may be appointed receiver under the orderly liquidation authority instead of the U.S. Bankruptcy Code. In certain circumstances under the orderly liquidation authority, the FDIC could permit payment of obligations it determines to be systemically significant (*e.g.*, short-term creditors or operating creditors) in lieu of paying other obligations (*e.g.*, long-term senior and subordinated unsecured creditors, among others) without the need to obtain creditors' consent or prior court review. The insolvency and resolution process could also lead to a large reduction in or total elimination of the value of a BHC's outstanding equity. Additionally, under the orderly liquidation authority, amounts owed to the U.S. government generally receive a statutory payment priority. A "single point of entry" approach would replace a distressed BHC with a bridge holding company, which could continue subsidiary bank operations. U.S. supervisors have indicated that a single point of entry strategy may be a desirable strategy to resolve a large financial institution such as BNY Mellon in a manner that would, among other things, impose losses on shareholders, unsecured debt holders and other unsecured creditors of the top-tier

holding company (in our case, The Bank of New York Mellon Corporation), while permitting the holding company's subsidiaries to continue to operate. Under such a strategy, assuming The Bank of New York Mellon Corporation entered resolution proceedings and its subsidiaries remained solvent, losses at the subsidiary level could be transferred to The Bank of New York Mellon Corporation and ultimately borne by The Bank of New York Mellon Corporation's security holders (including holders of The Bank of New York Mellon Corporation's unsecured debt securities), while third-party creditors of The Bank of New York Mellon Corporation's subsidiaries could receive full recoveries on their claims. Accordingly, The Bank of New York Mellon Corporation's security holders (including unsecured debt securities and other unsecured creditors) could face losses in excess of what otherwise would have been the case.

In addition, the Federal Reserve has released for comment proposed rules ("proposed TLAC Rules") that would require U.S. G-SIBs, including BNY Mellon, to maintain minimum amounts of eligible long-term debt ("LTD") and TLAC by Jan. 1, 2019. Under the proposed TLAC Rules, U.S. G-SIBs would be required to maintain a minimum amount of external TLAC and LTD measured against both RWA and the denominator of the SLR. The proposed TLAC Rules would disqualify from eligible LTD, among other instruments, senior debt securities that permit acceleration for reasons other than issuer insolvency or payment default. The currently outstanding senior LTD of U.S. G-SIBs, including BNY Mellon, typically permits acceleration for reasons other than insolvency or payment default and, as a result, neither such outstanding senior LTD, nor any subsequently issued senior LTD with similar terms would qualify as eligible LTD under the proposed rules. The steps that the U.S. G-SIBs, including BNY Mellon, may need to take to come into compliance with the final TLAC Rules, including the amount and form of LTD that must be refinanced or issued, will depend in substantial part on the ultimate eligibility requirements for senior LTD and any grandfathering provisions. The proposed TLAC Rules could have a materially negative impact on U.S. G-SIBs, including BNY Mellon, unless modified prior to becoming a final rule. The proposed TLAC Rules could lead to increased cost of funds, place us at a competitive disadvantage compared to financial institutions not subject to this requirement, require us to issue a material amount of long-term debt, capital

instruments, or other instruments, among other potential impacts.

Large BHCs must develop and submit to the FDIC and the Federal Reserve for review plans for their rapid and orderly resolution in the event of material financial distress or failure. BNY Mellon and The Bank of New York Mellon each file annual complementary resolution plans. We have been submitting our resolution plans since 2012. Most recently, BNY Mellon and The Bank of New York Mellon filed their 2015 resolution plans on July 1, 2015. If the FDIC and the Federal Reserve jointly determine that our resolution plan is not credible and we fail to address the deficiencies in a timely manner, the FDIC and the Federal Reserve may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations. If we continue to fail to adequately remedy any deficiencies, we could be required to divest assets or operations that the regulators determine necessary to facilitate our orderly resolution. BNY Mellon is also subject to heightened supervisory expectations for recovery and resolution preparedness. These expectations, issued by the Federal Reserve in January 2014, apply to the U.S. G-SIBs, including BNY Mellon, and relate to capabilities deemed critical to operational resilience and contingency planning, including collateral management; payment, clearing and settlement activities; liquidity and funding; management information systems; and shared and outsourced services.

Our businesses are also subject to significant regulation in numerous jurisdictions around the world relating to, among other things, the safeguarding, administration and management of client assets and client funds. Various new and revised European directives and regulations have an impact on our provision of these services, including revisions to the Markets in Financial Instruments Directive II (“MiFID II”), the Alternative Investment Fund Managers Directive (“AIFMD”), the Directive on Undertakings for Collective Investments in Transferable Securities (“UCITSV”), the Central Securities Depository Regulation (“CSDR”), and the European Market Infrastructure Regulation (“EMIR”). Implementing these new and revised European directives and regulations has affected our operations and risk profile.

In addition to the direct effects on us, many of our clients are subject to significant regulatory requirements and retain our services in order for us to assist them in complying with those legal requirements. Changes in these regulations can significantly affect the services that we are asked to provide, as well as our costs.

The evolving regulatory environment, including changes to existing regulations and the introduction of new regulations, may contribute to decisions we may make to suspend, reduce or withdraw from existing businesses, activities or initiatives, which may result in potential lost revenue or significant restructuring or related costs or exposures.

Failure to comply with laws, regulations or policies applicable to our business could result in sanctions by regulatory agencies, civil money penalties and reputational damage, which could have a material adverse effect on our business, financial condition and results of operations. Although we have policies and procedures designed to prevent any such violations, there can be no assurance that such violations will not occur. If violations do occur, they could damage our reputation, increase our legal and compliance costs, and ultimately adversely impact our results of operations. Laws, regulations or policies currently affecting us and our subsidiaries may change at any time. Regulatory authorities may also change their interpretation of these statutes and regulations. Therefore, our business may also be adversely affected by future changes in laws, regulations, policies or interpretations or regulatory approaches to compliance and enforcement.

Failure to satisfy regulatory standards, including “well capitalized” and “well managed” status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition.

Under regulatory capital adequacy rules and other regulatory requirements, BNY Mellon and our subsidiary banks must meet thresholds that include quantitative measures of assets, liabilities and certain off-balance sheet items, subject to qualitative judgments by regulators about components, risk weightings and other factors. As discussed under “Supervision and Regulation” in this Annual Report, BNY Mellon is registered with the Federal Reserve as a BHC and an FHC. An FHC’s ability to maintain its

status as an FHC is dependent upon a number of factors, including its U.S. bank subsidiaries' qualifying on an ongoing basis as "well capitalized" and "well managed" under the banking agencies' prompt corrective action regulations and upon it qualifying on an ongoing basis as "well capitalized" and "well managed" under applicable Federal Reserve regulations. Failure by an FHC or one of its U.S. bank subsidiaries to qualify as "well capitalized" and "well managed", if unremedied over a period of time, would cause it to lose its status as an FHC and could affect the confidence of clients in it, compromising its competitive position. Additionally, an FHC that does not continue to meet all the requirements for FHC status could lose the ability to undertake new activities or make acquisitions that are not generally permissible for BHCs without FHC status or to continue such activities. Our U.S. bank subsidiaries are also subject to regulatory capital requirements and the failure by one of our bank subsidiaries to maintain its status as "well capitalized" could lead to, among other things, higher FDIC assessments and could have reputational and associated business consequences. A further failure by BNY Mellon or one of our U.S. bank subsidiaries to maintain its status as "adequately capitalized" would lead to regulatory sanctions and limitations and could lead the federal banking agencies to take "prompt corrective action."

If our company or our subsidiary banks failed to meet the minimum capital rules and other regulatory requirements, we may not be able to deploy capital in the operation of our business or distribute capital to stockholders, which may adversely affect our business. If we are not able to meet the additional, more stringent, capital adequacy standards that were recently promulgated, we may not remain "well capitalized." See "Supervision and Regulation" and the "Liquidity and dividends" and "Capital - Capital adequacy" sections in the MD&A - Results of Operations section in this Annual Report.

BNY Mellon and its domestic subsidiary banks must generally maintain an LCR at least equal to 100% on a fully phased-in basis in 2017 (and 90% in 2016) to satisfy regulatory minimums. However, under certain circumstances it may be necessary for a banking organization's LCR to fall below these thresholds to fund unanticipated liquidity needs. We must notify our primary banking regulator on any day when our LCR falls below the regulatory threshold, and provide a plan for achieving LCR compliance if our LCR is

below the regulatory threshold for three consecutive business days, or if our regulator determines an instance of material noncompliance with the LCR. Failure to comply with the LCR requirements may result in supervisory or enforcement actions.

Failure to meet current or future capital or liquidity requirements, including those imposed by the U.S. capital rules, the LCR, or by regulators in implementing other portions of the Basel III framework, could materially adversely affect our financial condition. The current regulatory environment is fluid, with requirements frequently being introduced and amended. Compliance with the regulatory capital and liquidity requirements may impact our ability to return capital to shareholders and may impact our operations by requiring us to liquidate assets, increase borrowings, issue additional equity or other securities, or cease or alter certain operations, which may adversely affect our results of operations.

Although we expect to continue to satisfy our regulatory capital and liquidity requirements, there can be no assurances that we will not need to hold significantly more regulatory capital and liquid assets than we currently estimate in order to satisfy applicable standards. An inability to meet regulatory expectations regarding these matters may also negatively impact the assessment of BNY Mellon and its U.S. banking subsidiaries by U.S. banking regulators and our ability to make capital distributions.

Finally, our estimated regulatory capital ratios, liquidity metrics, and related components are based on our current interpretation, expectations and understanding of the applicable rules and are subject to, among other things, ongoing regulatory review, regulatory approval of certain statistical models, additional refinements, modifications or enhancements (whether required or otherwise) to our models, and further implementation guidance. Any modifications resulting from these ongoing reviews or the continued implementation of the U.S. capital rules, the LCR and related amendments could result in changes in our risk weighted assets, capital components, liquidity inflows and outflows, HQLA, or other elements involved in the calculation of these measures, which could negatively impact these ratios. Further, because operational risk is measured based not only upon our historical operational loss experience but also upon ongoing events in the

banking industry generally, our level of operational risk-weighted assets could significantly increase or otherwise remain elevated for the foreseeable future and may potentially be subject to significant volatility, negatively impacting our capital and liquidity ratios. The uncertainty caused by these factors could ultimately impact our ability to meet our goals, supervisory requirements, and regulatory standards.

Regulatory actions or litigation could materially adversely affect our results of operations or harm our businesses or reputation.

Like many major financial institutions, we and our affiliates are the subject of inquiries, investigations, lawsuits and proceedings by counterparties, clients, other third parties and regulatory and other governmental agencies in the U.S. and abroad, as well as the Department of Justice and state attorneys general. See “Legal proceedings” in Note 22 of the Notes to Consolidated Financial Statements in this Annual Report for a discussion of material legal and regulatory proceedings in which we are involved. The number of these investigations and proceedings, as well as the amount of penalties and fines sought, has increased substantially in recent years for many firms in the financial services industry, including us. We may become subject to heightened regulatory scrutiny, inquiries or investigations, and potentially client-related inquiries or claims, relating to broad, industry-wide concerns that could lead to increased expenses or reputational damage. For example, many participants in the foreign exchange industry are currently receiving heightened regulatory scrutiny concerning alleged potential manipulation with respect to published foreign exchange benchmarks and we, like a number of others, have received inquiries from government authorities seeking information. Since the 2008 financial crisis, significant settlements by a number of large financial institutions with governmental entities have been publicly announced. The trend of large settlements with governmental entities may adversely affect the outcomes for other financial institutions in similar actions, especially where governmental officials have announced that the large settlements will be used as the basis or a template for other settlements. Separately, policy makers in the European Union continue to focus on conduct rules around the protection of client assets.

The complexity of the federal and state regulatory and enforcement regimes in the U.S., coupled with the global scope of our operations and the increasing aggressiveness of the regulatory environment worldwide, also means that a single event may give rise to a large number of overlapping investigations and regulatory proceedings, either by multiple federal and state agencies in the U.S. or by multiple regulators and other governmental entities in different jurisdictions. Responding to inquiries, investigations, lawsuits and proceedings, regardless of the ultimate outcome of the matter, is time-consuming and expensive and can divert the attention of our senior management from our business. The outcome of such proceedings may be difficult to predict or estimate until late in the proceedings, which may last a number of years.

Certain of our subsidiaries are subject to periodic examination, special inquiries and potential proceedings by regulatory authorities. These examinations, inquiries and proceedings could, if compliance failures or other violations are found, cause a regulatory agency to institute proceedings and impose sanctions for violations, including, for example, regulatory agreements, cease and desist orders, civil monetary penalties or termination of a license and could lead to litigation by investors or clients, any of which could cause our earnings to decline.

Our businesses involve the risk that clients or others may sue us, claiming that we or third parties for whom they say we are responsible have failed to perform under a contract or otherwise failed to carry out a duty perceived to be owed to them, including perceived fiduciary or contractual duties. This risk may be heightened during periods when credit, equity or other financial markets are deteriorating in value or are particularly volatile, or when clients or investors are experiencing losses. In addition, as a publicly held company, we are subject to the risk of claims under the federal securities laws, and volatility in our stock price increases this risk.

Actions brought against us may result in lawsuits, enforcement actions, injunctions, settlements, damages, fines or penalties, which could have a material adverse effect on our financial condition or results of operations or require changes to our business. Claims for significant monetary damages are asserted in many of these legal actions, while claims for disgorgement, penalties and/or other

remedial sanctions may be sought in regulatory matters. Although we establish accruals for our litigation and regulatory matters in accordance with applicable accounting guidance when those matters proceed to a stage where they present loss contingencies that are both probable and reasonably estimable, nonetheless there may be a possible material exposure to loss in excess of any amounts accrued, or in excess of any loss contingencies disclosed as reasonably possible. Such loss contingencies may not be probable and reasonably estimable until the proceedings have progressed significantly, which could take several years and occur close to resolution of the matter.

Any or all of the risks outlined above could result in increased regulatory supervision and affect our ability to attract and retain customers or maintain access to the capital markets.

Our businesses may be negatively affected by adverse publicity, government scrutiny or other reputational harm.

We are subject to reputational, legal and regulatory risk in the ordinary course of our business. The 2008 financial crisis and current political and public sentiment regarding financial institutions have resulted in a significant amount of adverse media coverage of financial institutions. Harm to our reputation can result from numerous sources, including adverse publicity arising from events in the financial markets, our perceived failure to comply with legal and regulatory requirements, the purported actions of our employees, alleged financial reporting irregularities involving ourselves or other large and well-known companies and perceived conflicts of interest. Our reputation could also be harmed by the failure of an affiliate, joint venture or a vendor or other third party with which we do business to comply with laws or regulations. Damage to our reputation could affect the confidence of clients, rating agencies, regulators, employees, stockholders and other stakeholders and could in turn have an impact on our business and results of operations.

Additionally, governmental scrutiny from regulators, legislative bodies and law enforcement agencies with respect to financial services companies has increased dramatically. Press coverage and other public statements that assert some form of wrongdoing often result in some type of investigation by regulators, legislators and law enforcement officials or in

lawsuits. Certain regulators, including the SEC, have announced policies that make it more likely that they will seek an admission of wrongdoing as part of any settlement of a matter brought by them against a regulated entity or individual, which could lead to increased exposure to civil litigation and could adversely affect our reputation and ability to do business in certain jurisdictions with so-called “bad actor” disqualification laws and could have other negative effects, such as loss of our well-known seasoned issuer status. In addition, the DOJ has announced a policy of requiring companies to provide investigators with all relevant facts relating to the individuals responsible for the alleged misconduct in order to qualify for any cooperation credit in civil and criminal investigations of corporate wrongdoing, which may result in our incurring increased fines and penalties if the DOJ determines that we have not provided sufficient information about applicable individuals in connection with an investigation, as well as increased costs in responding to DOJ investigations. It is possible that other governmental authorities will adopt similar policies.

Additionally, a failure to deliver appropriate standards of service and quality by either us or our vendors, or a failure to appropriately describe our products and services can result in customer dissatisfaction, lost revenue, higher operating costs, heightened regulatory scrutiny and litigation. Should any of these or other events or factors that can undermine our reputation occur, there is no assurance that the additional costs and expenses that we may need to incur to address the issues giving rise to the reputational harm would not adversely affect our earnings and results of operations.

New lines of business, new products and services or strategic project initiatives may subject us to additional risks, and the failure to implement these initiatives could affect our results of operations.

From time to time, we may launch new lines of business or offer new products and services within existing lines of business. There are substantial risks and uncertainties associated with these efforts. We invest significant time and resources in developing and marketing new lines of business, products and services. Regulatory requirements can affect whether initiatives are able to be brought to market in a manner that is timely and attractive to our customers. Initial timetables for the development and introduction of new lines of business and/or new

products or services may not be achieved and price and profitability targets may not be met. Furthermore, our revenues and costs may fluctuate because new businesses or products and services generally require startup costs while revenues may take time to develop, which may adversely impact our results of operations.

Additionally from time to time we undertake strategic project initiatives. Significant effort and resources are necessary to manage and oversee the successful completion of these initiatives. These initiatives often place significant demands on management and a limited number of employees with subject matter expertise and may involve significant costs to implement as well as increase operational risk as employees learn to process transactions under new systems. The failure to properly execute on these strategic initiatives could adversely impact our business and results of operations.

Our strategic transactions present risks and uncertainties and could have an adverse effect on our business, results of operations and financial condition.

From time to time, to achieve our strategic objectives, we have acquired, disposed of, or invested in (including through joint venture relationships) companies and businesses, and may do so in the future. Our ability to pursue or complete strategic transactions is in certain instances subject to regulatory approval and we cannot be certain when or if, or on what terms and conditions, any required regulatory approvals would be granted. Moreover, to the extent we pursue a strategic transaction, there can be no guarantee that the transaction will close when anticipated, or at all. If a strategic transaction does not close, or if the strategic transaction fails to maximize shareholder value or required regulatory approval is not obtained, it could have an adverse effect on our business, results of operations and financial condition.

Each acquisition poses integration challenges, including successfully retaining and assimilating clients and key employees, capitalizing on certain revenue synergies and integrating the acquired company's systems and technology. In some cases, acquisitions involve entry into new businesses or new geographic or other markets, and these situations also present risks and uncertainties in instances where we may be inexperienced in these new areas. We may be

required to spend a significant amount of time and resources to integrate these acquisitions. The anticipated integration benefits may take longer to achieve than projected and the time and cost needed to consolidate platforms and systems may significantly exceed our estimates. If we fail to successfully integrate strategic acquisitions, including doing so in a timely and cost-effective manner, we may not realize the expected benefits regarding such acquisitions, which could have an adverse impact on our business, financial condition and results of operations. In addition, we may incur expenses, costs, losses, penalties, taxes and other liabilities which are related to the conduct of the acquired businesses prior to the date of our ownership (including in connection with the defense and/or settlement of legal and regulatory claims, investigations and proceedings) which may not be recoverable through indemnification or otherwise.

Each disposition also poses challenges, including separating the disposed businesses and systems in a way that is cost-effective and is not disruptive to our customers. In addition, the inherent uncertainty involved in the process of evaluating, negotiating or executing a potential sale of one of our companies or businesses may cause the loss of key clients, employees, and business partners which could have an adverse impact on our business, financial condition and results of operations.

Joint ventures and non-controlling investments contain potentially increased financial, legal, reputational, operational, regulatory and/or compliance risks. Notwithstanding our controls and risk management framework, which are designed to manage these risks, we may be dependent on joint venture partners, controlling shareholders or management who may have business interests, strategies or goals that are inconsistent with ours. Business decisions or other actions or omissions of the joint venture partner, controlling shareholders or management may adversely affect the value of our investment, impacting our results of operations, result in litigation or regulatory action against us and otherwise damage our reputation and brand.

Our business may be materially adversely affected by operational risk.

We are exposed to operational risk due to the nature of our businesses and business model. Examples of operational risk include: the risk of loss resulting

from errors related to transaction processing; breaches of the internal control system and compliance requirements; fraud by employees or persons outside BNY Mellon; business interruption due to system failures; failed transaction processing or process management; unsuccessful or difficult implementation of computer systems upgrades or new technology; vendor disruption; unsuccessful or difficult implementation of new products or services; loss or damage to physical assets from natural disasters or other events; and other risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

Operational risk may also include breaches of our technology and information systems resulting from unauthorized access to confidential information or from internal or external threats, such as cyber attacks. Operational risk also includes fiduciary risk and potential legal or regulatory actions that could arise as a result of noncompliance with applicable laws, regulatory requirements or contracts which could have an adverse effect on our reputation and could result in the imposition of fines or civil money penalties or the payment of damages.

Third parties with which we do business or that facilitate our business activities, including exchanges, clearing houses, financial intermediaries or vendors that provide services or security solutions for our operations, could also be sources of operational risk to us, including from breakdowns or failures of their own systems or capacity constraints. For example, in August 2015, the SunGard U.S. InvestOne fund accounting platform environment we use to process net asset values (NAVs) became corrupted during an operating system upgrade undertaken by SunGard, impacting certain mutual fund, exchange-traded fund and unregistered collective fund clients.

We regularly assess and monitor operational risk in our business and provide for disaster and business recovery planning, including geographical diversification of our facilities. However, despite our efforts to assess and monitor operational risk, our risk management program may not be effective in all cases. The occurrence of various events, including unforeseeable and unpreventable events, such as systems failures or natural disasters, could damage our physical facilities or our computer systems or software, cause delay or disruptions to operational functions, impair our clients, vendors and counterparties and ultimately negatively impact our

results of operations due to potentially higher expenses and lower revenues.

Operational losses can impact our capital ratios and results of operations. In addition, our operational loss risk model is informed by external losses, including certain fines and penalties levied against other institutions in the financial services industry, particularly those that relate to businesses in which we operate, and as a result such external losses could impact the amount of capital that we are required to hold. When we record balance sheet reserves for probable and estimable loss contingencies related to litigation and governmental and regulatory matters (or when we disclose a range of reasonably possible loss for reasonably possible and estimable loss contingencies), our estimated exposure may not be sufficient to cover our actual exposure, which could have a material adverse effect on our results of operations in the period in which such actions or matters are resolved or when a loss contingency otherwise becomes probable and reasonably estimable. In addition, in light of policy makers' continued focus on global asset safety, we continue to assess our operational models and risks. For a discussion of operational risk see "Risk Management - Operational/business risk" and "Business Continuity" in the MD&A section in this Annual Report.

A failure or circumvention of our controls and procedures could have a material adverse effect on our business, reputation, results of operations and financial condition.

Management regularly reviews and updates our internal controls, disclosure controls and procedures, and corporate governance policies and procedures. Any system of controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system will be met. Any failure or circumvention of our controls and procedures or failure to comply with regulations related to controls and procedures could have a material adverse effect on our business, reputation, results of operations and financial condition. If we identify material weaknesses in our internal control over financial reporting or are otherwise required to restate our financial statements, we could be required to implement expensive and time-consuming remedial measures and could lose investor confidence in the accuracy and completeness of our financial

reports. In addition, there are risks that individuals, either employees or contractors, may circumvent established control mechanisms in order to, for example, exceed exposure, liquidity, trading or investment management limitations, or commit fraud.

We are subject to competition in all aspects of our business, which could negatively affect our ability to maintain or increase our profitability.

Many businesses in which we operate are intensely competitive around the world. Competitors include other banks, trading firms, broker dealers, investment banks, asset managers, insurance companies, financial technology firms and a variety of other financial services and advisory companies whose products and services span the local, national and global markets in which we conduct operations. We compete on the basis of several factors, including transaction execution, capital or access to capital, products and services, innovation, reputation, and price. Larger and more geographically diverse companies may be able to offer financial products and services at more competitive prices than we are able to offer. Pricing pressures, as a result of the willingness of competitors to offer comparable or improved products or services at a lower price, may result in a reduction in the price we can charge for our products and services, which could, and in some cases has, negatively affected our ability to maintain or increase our profitability. In addition, technological advances have made it possible for other types of non-depository institutions, such as outsourcing companies and data processing companies, to offer a variety of products and services competitive with certain areas of our business. Competitors may develop technological advances that could negatively impact our transaction execution or the pricing of our clearing, settlement, payments and trading activities. Increased competition in any of these areas may require us to make additional capital investments in our businesses in order to remain competitive.

Furthermore, recently implemented and proposed regulations may impact our ability to conduct certain of our businesses in a cost-effective manner or at all. Regulations comparable to those required by several provisions of the Dodd-Frank Act have not been enacted by governments and regulatory agencies outside the U.S. and may not be implemented into law in most countries. The more restrictive laws and regulations applicable to the largest U.S. financial

services institutions, including the U.S. capital rules, can put us at a competitive disadvantage relative to both our non-U.S. competitors and certain U.S. competitors. See “Supervision and Regulation” in this Annual Report. A decline in our competitive position could adversely affect our ability to maintain or increase our profitability.

Our risk management framework may not be effective in mitigating risk and reducing the potential for losses.

Our risk management framework seeks to mitigate risk and loss to us. We have established comprehensive policies and procedures and an internal control framework designed to provide a sound operational environment for the types of risk to which we are subject, including operational risk, credit risk, market risk, liquidity risk, business risk and fiduciary risk. However, as with any risk management framework, there are inherent limitations to our current and future risk management strategies, including risks that we have not appropriately anticipated or identified.

In certain instances, we rely on models to measure, monitor and predict risks. However, these models are inherently limited because they involve techniques, including the use of historical data in some circumstances, and judgments that cannot anticipate every economic and financial outcome in the markets in which we operate, nor can they anticipate the specifics and timing of such outcomes. There is no assurance that these models will appropriately capture all relevant risks or accurately predict future events or exposures. The 2008 financial crisis and resulting regulatory reform highlighted both the importance and some of the limitations of managing unanticipated risks, and our regulators remain focused on ensuring that financial institutions build and maintain robust risk management policies. If our regulators perceive the quality of our risk models and framework to be insufficient, it may negatively impact our regulators’ evaluations of our capital plans and stress tests. Accurate and timely enterprise-wide risk information is necessary to enhance management’s decision-making in times of crisis. If our risk management framework proves ineffective or if our enterprise-wide management information is incomplete or inaccurate, we could suffer unexpected losses, which could materially adversely affect our results of operations or financial condition.

In addition, our businesses and the markets in which we operate are continuously evolving. We may fail to fully understand the implications of changes in our businesses or the financial markets or fail to adequately or timely enhance our risk framework to address those changes. If our risk framework is ineffective, either because it fails to keep pace with changes in the financial markets, regulatory requirements, our businesses, our counterparties, clients or service providers or for other reasons, we could incur losses, suffer reputational damage or find ourselves out of compliance with applicable regulatory or contractual mandates or expectations.

An important aspect of our risk management framework is creating a risk culture in which all employees fully understand that there is risk in every aspect of our business and the importance of managing risk as it relates to their job functions. We continue to enhance our risk management program to support our risk culture, ensuring that it is sustainable and appropriate to our role as a major financial institution. Nonetheless, if we fail to create the appropriate environment that sensitizes all of our employees to managing risk, our business could be adversely impacted. For more information on how we monitor and manage our risk management framework, see “Risk Management - Risk management overview” in this Annual Report.

Change or uncertainty in monetary, tax and other governmental policies may impact our businesses, profitability and ability to compete.

The monetary, tax and other policies of various governments, agencies and regulatory authorities both in the U.S. and globally have a significant impact on interest rates, currencies, commodity pricing (including oil) and overall financial market performance, which can impact our business and results of operations. As a result of the 2008 financial crisis, there have been significant changes in these policies, which have imposed additional compliance, legal, review and response costs that have impacted our profitability. Changes in these policies are beyond our control and can be difficult to predict and we cannot determine the ultimate effect that any such changes would have upon our business, financial condition or results of operations. For example, the Federal Reserve regulates the supply of money and credit in the U.S. and its policies influence our cost of funds for lending, investing and capital raising activities and the return we earn on those loans and

investments, both of which affect our net interest margin. Current low interest rate policies have resulted in waivers of money market fund fees in addition to reductions in our spread-based income and net interest revenue. While the recent rate increase has reduced the amount of such fee waivers, they have not been eliminated.

The actions of the Federal Reserve also could materially affect the value of financial instruments we hold, activity levels, liquidity and volatility in the financial markets, and impact our borrowers, potentially increasing the risk that they may fail to repay their loans. For example, in accordance with proposed TLAC Rules and other influences, we have ended our Parent commercial paper program and are evaluating other changes.

We are subject to political, economic, legal, operational and other risks that are inherent in operating globally and which may adversely affect our business.

In conducting our business and maintaining and supporting our global operations, which includes vendors and other third parties, we are subject to risks of loss from the outbreak of hostilities and various unfavorable political, economic, legal or other developments, including social or political instability, changes in governmental policies or policies of central banks, sanctions, expropriation, nationalization, confiscation of assets, price, capital and exchange controls, unfavorable tax rates and tax court rulings and changes in laws and regulations.

Our international clients accounted for 36% of our revenue in 2015. Our non-U.S. businesses are subject to extensive regulation by various non-U.S. regulators, including governments, securities exchanges, central banks and other regulatory bodies, in the jurisdictions in which those businesses operate. In many countries, the laws and regulations applicable to the financial services industry are uncertain and evolving, and may be applied with extra scrutiny to non-domestic companies, and it may be difficult for us to determine the exact requirements of local laws in every market or manage our relationships with multiple regulators in various jurisdictions. Our inability to remain in compliance with local laws in a particular market and manage our relationships with regulators could have an adverse effect not only on our businesses in that market but also on our reputation generally.

The failure to properly mitigate such risks, or the failure of our operating infrastructure to support such international activities could result in operational failures and regulatory fines or sanctions, which could adversely affect our business and results of operations.

In addition, we are subject in our global operations to rules and regulations relating to corrupt and illegal payments and money laundering, economic sanctions and embargo programs administered by the U.S. Office of Foreign Assets Control and similar bodies and governmental agencies worldwide, and laws relating to doing business with certain individuals, groups and countries, such as the U.S. Foreign Corrupt Practices Act, the USA PATRIOT Act, the Iran Threat Reduction and Syria Human Rights Act of 2012 and the UK Bribery Act. While we have invested and continue to invest significant resources in training and in compliance monitoring, the geographical diversity of our operations, employees, clients and customers, as well as the vendors and other third parties that we deal with, presents the risk that we may be found in violation of such rules, regulations or laws and any such violation could subject us to significant penalties or adversely affect our reputation. In addition, such rules could impact our ability to engage in business with certain individuals, entities, groups and countries, which could materially adversely affect certain of our businesses and results of operations.

Further, our businesses and operations from time to time enter into new regions throughout the world, including emerging and frontier markets. Various emerging and frontier market countries have experienced severe economic and financial disruptions, including significant devaluations of their currencies, defaults or threatened defaults on sovereign debt, capital and currency exchange controls, and low or negative growth rates in their economies. Crime, corruption, war or military actions, and a lack of an established legal and regulatory framework are additional challenges in certain emerging and frontier markets. Revenue from international operations and trading in non-U.S. securities and other obligations may be subject to negative fluctuations as a result of the above considerations. The possible effects of any of these conditions may adversely affect our business and results of operations.

Our business may be adversely affected if we are unable to attract and retain employees.

Our success depends, in large part, on our ability to attract new employees, retain and motivate our existing employees, and continue to compensate our employees competitively amid heightened regulatory restrictions. Competition for the best employees in most activities in which we engage can be intense, and we may not be able to recruit and retain key personnel. We may also rely on certain employees with subject matter expertise to assist in the implementation of important initiatives. Factors that affect our ability to attract and retain talented and diverse employees include our compensation and benefits programs, our profitability and our reputation for rewarding and promoting qualified employees. Our ability to attract and retain key executives and other employees may be hindered as a result of regulations applicable to incentive compensation and other aspects of our compensation programs. These regulations, which include and are expected to include mandatory deferrals, clawback requirements and other limits on incentive compensation, may not apply to some of our competitors and to other institutions with which we compete for talent. Our ability to recruit and retain key talent may be adversely affected by these regulations. In addition, aspects of our compensation programs are performance-based. If we do not achieve applicable performance thresholds for a relevant period, employee compensation may be adversely affected, which could impact retention. The loss of employees' skills, knowledge of the market, industry experience, and the cost of finding replacements may hurt our business. If we are unable to continue to attract and retain highly qualified employees, our performance, including our competitive position, could be adversely affected.

Acts of terrorism, natural disasters, pandemics and global conflicts may have a negative impact on our business and operations.

Acts of terrorism, natural disasters, pandemics, global conflicts or other similar catastrophic events could have a negative impact on our business and operations. While we have in place business continuity and disaster recovery plans, such events could still damage our facilities, disrupt or delay the normal operations of our business (including communications and technology), result in harm or cause travel limitations on our employees, and have a

similar impact on our clients, suppliers and counterparties. For example, our disaster recovery plan was activated due to the recent severe floods in Chennai, India, resulting in the temporary closure of our Global Delivery Center. While this closure was not material to BNY Mellon, it negatively impacted our Chennai employees and facilities and diverted the resources of those employees outside of Chennai in a recovery role. Catastrophic events could also negatively impact the purchase of our products and services to the extent that those acts or conflicts result in reduced capital markets activity, lower asset price levels, or disruptions in general economic activity in the U.S. or abroad, or in financial market settlement functions, which could negatively impact our business and results of operation. In addition, war, terror attacks, political unrest, global conflicts, the national and global efforts to combat terrorism and other potential military activities and outbreaks of hostilities may lead to an increase in delinquencies, bankruptcies or defaults that could result in our experiencing higher levels of nonperforming assets, net charge-offs and provisions for credit losses, negatively impacting our business and operations.

Market Risk

Weakness in financial markets and the economy generally may materially adversely affect our business, results of operations and financial condition.

Our results of operations may be materially affected by conditions in the financial markets and the economy generally, both in the U.S. and elsewhere around the world. A variety of factors impact global economies and financial markets, including interest rates, commodity pricing, such as the continued weakness in oil prices, instability of certain emerging markets, volatile debt and equity market values, the strong U.S. dollar, high unemployment and governmental budget deficits (including, in the U.S., at the federal, state and municipal level), contagion risk from possible default by other countries on sovereign debt, declining business and consumer confidence and the risk of increased inflation. Any resulting economic pressure on consumers and lack of confidence in the financial markets may adversely affect certain portions of our business, financial condition and results of operations. In particular, we face the following risks in connection with these factors, some of which are discussed at greater length in separate risk factors:

- A continuing low interest rate environment, geopolitical tension, continuing low oil prices, and economic instability in China have increased the demand for low-risk investments, particularly in U.S. Treasuries and the dollar. A “flight to safety” has historically increased BNY Mellon’s balance sheet, which has negatively impacted, and could continue to negatively impact, our leverage-based regulatory capital measures. A sustained “flight to safety” has historically triggered a decline in trading, capital markets and cross-border activity. Declining volumes in these activities would likely decrease our revenue, which would negatively impact our results of operations, financial condition and, if sustained in the long term, our business.
- Our businesses may be impacted by the translation of financial results denominated in foreign currencies to the U.S. dollar, primarily in activities denominated in the British pound sterling, euro and the Indian rupee. On a consolidated basis and in our Investment Services business we typically have more foreign currency denominated expenses than revenues. However, our Investment Management business typically has more foreign currency denominated revenues than expenses.
- The fees earned by our Investment Management business are higher as assets under management and/or investment performance increase. Those fees are also impacted by the composition of the assets under management, with higher fees for some asset categories as compared to others. Uncertain and volatile capital markets could result in reductions in assets under management because of investors’ decisions to withdraw assets or from simple declines in the value of assets under management as markets decline. Uncertain and volatile financial markets may also result in changes in customer allocations of funds among money market, equity, fixed income or other investment alternatives. Those changes in allocation may be from higher fee investments to lower fee investments. For example, at Dec. 31, 2015, we estimate that a 5% change in global equity markets, spread evenly throughout the year, would impact fee revenue by less than 1% and diluted earnings per common share by \$0.02 to \$0.04.

- Market conditions resulting in lower transaction volumes could have an adverse effect on the revenues and profitability of certain of our businesses such as clearing, settlement, payments and trading.
- Uncertain and volatile capital markets, particularly declines, could reduce the value of our investments in securities, including pension and other post-retirement plan assets.
- Derivative instruments we hold to hedge and manage exposure to market risks including interest rate risk, equity price risk, foreign currency risk, as well as credit risk associated with our products and businesses might not perform as intended or expected, resulting in higher realized losses and unforeseen stresses on liquidity. Our derivative-based hedging strategies also rely on the performance of counterparties to such derivatives. These counterparties may fail to perform for various reasons resulting in losses on under-collateralized positions.
- Our ability to continue to operate certain commingled investment funds at a net asset value of \$1.00 per unit and to allow unrestricted cash redemptions by investors in those commingled funds (or by investors in other funds managed by us which are invested in those commingled investment funds) may be adversely affected by depressed mark-to-market prices of the underlying portfolio securities held by such funds, or by material defaults on such securities or by the level of liquidity that could be achieved from the portfolio securities in such funds. We may be faced with claims from investors and exposed to financial loss as a result of our operation of such funds.
- Continuing low interest rates will result in the continued voluntary waiving of fees on certain money market mutual funds and related distribution fees by us in order to prevent clients' yields on such funds from becoming uneconomic, which has had, and will continue to have, an adverse impact on our revenue and results of operations. The recent U.S. short-term rate increase has reduced, but not eliminated, the amount of such waivers.
- Continuing weakness in oil prices may continue to negatively impact capital markets and may impact the ability of certain of our clients, including oil and gas exploration and production companies and sovereign funds in oil-exporting countries, to continue using our services or repay outstanding loans. Increased defaults among oil and gas exploration and production companies may also negatively impact the high yield market and our high yield funds.
- The process we use to estimate our projected credit losses and to ascertain the fair value of securities held by us is subject to uncertainty in that it requires use of statistical models and difficult, subjective and complex judgments, including forecasts of economic conditions and how these conditions might impair the ability of our borrowers and others to meet their obligations. In uncertain and volatile capital markets, our ability to estimate our projected credit losses may be impaired, which could adversely affect our overall profitability and results of operations.

Market volatility may adversely impact our business, financial condition and results of operations and our ability to manage risk.

As a financial institution, our businesses, including our Investment Management, Global Markets, Corporate Trust, Depositary Receipts and Securities Lending businesses, are particularly sensitive to economic and market conditions, including in the capital and credit markets. When these markets are volatile or disruptive, we could experience a decline in our marked-to-market assets, such as our securities portfolio and equity investments, including seed capital. Market volatility may be caused by concerns about the liquidity of the global financial markets; the level and volatility of debt and equity prices, interest rates and currency and commodities prices, including oil; investor sentiment; events that reduce confidence in the financial markets; inflation and unemployment; the economic effects of natural disasters, severe weather conditions, acts of war or terrorism; dissolution of agreements among member states facilitating trade, such as the Schengen Agreement; monetary policies and actions taken by the Federal Reserve and other central banks and the health of U.S. or international economies. A market downturn could also cause a decline in the value of the assets that we manage for clients, hold in custody or administer, adversely impacting fee revenue and certain of our capital ratios, while the costs of

providing the related services remain constant due to the high fixed costs associated with these businesses. A significant and sustained market downturn could materially adversely impact our business, financial condition, results of operations and ability to manage risk. Fluctuations in global market activity could also impact the flow of investment capital into or from assets under custody and/or administration and the way customers allocate capital among money market, equity, fixed income or other investment alternatives, which could negatively impact our results of operations. In addition, market volatility could produce downward pressure on our stock price and credit availability without regard to our underlying financial strength. If the market price of our common stock were to decline below certain levels, we could be required to perform goodwill impairment testing. While a substantial goodwill impairment charge would not have a significant impact on our financial condition, it would have an adverse impact on our results of operations. For a discussion of goodwill, see “Critical accounting estimates - Goodwill and other intangibles” in the MD&A - Results of Operations section in this Annual Report.

We use various models and strategies to assess and control our market risk exposures but those are subject to inherent limitations. Our models, which rely on historical trends and assumptions, may not be sufficiently predictive of future results due to limited historical patterns, extreme or unanticipated market movements and illiquidity, especially during severe market downturns or stress events. The models that we use to assess and control our market risk exposures also reflect assumptions about the degree of correlation among prices of various asset classes or other market indicators. In addition, market conditions in recent years have involved unprecedented dislocations and highlight the limitations inherent in using historical data to manage risk. In times of market stress or other unforeseen circumstances, such as the market conditions experienced in 2008 and 2009, previously uncorrelated indicators may become correlated, or previously correlated indicators may move in different directions. These types of market movements have at times limited the effectiveness of our hedging strategies and have caused us to incur significant losses, and they may do so in the future. For a discussion of our management of market risk, see “Risk Management-Market risk” in the MD&A section in this Annual Report.

Ongoing concerns about the financial stability of certain countries, the failure or instability of any of our significant global counterparties, or a breakup of the European Union or Eurozone could have a material adverse effect on our business and results of operations.

There remain ongoing concerns about the financial stability of certain countries, including the possibility of sovereign debt defaults, bank failures and the exit of countries from the European Union or the Eurozone. This has led to, and could continue to lead to, declines in market liquidity, a contraction of available credit, and diminished economic growth and business confidence in those countries, with potential collateral consequences to other countries as well. We are primarily exposed to disruptions in global markets in a number of principal areas - on our balance sheet, in certain interest-bearing deposits with banks, loans, trading assets and investment securities, as well as fee revenue. Additionally, market disruptions could lead to a “flight to safety,” triggering increased client deposits and altering the size and composition of our balance sheet, which could adversely impact our leverage-based regulatory capital measures. For additional information regarding our exposure to certain countries, please see “International operations - Country risk exposure” in the MD&A - Results of operations section in this Annual Report.

A potential consequence of global financial instability could be a partial or full break-up of the European Union or Eurozone. While a European Union or Eurozone break-up does not appear to be imminent, if one were to occur it would be unprecedented and its impact highly uncertain. The exit of Greece, Britain or other countries from the European Union or Eurozone or the dissolution of those bodies could lead to redenomination of certain obligations of obligors in exiting countries. Any such exit and redenomination would cause significant uncertainty with respect to outstanding obligations of counterparties and debtors in any exiting country, whether sovereign or otherwise, and could lead to complex and lengthy disputes and litigation. The resulting uncertainty and market stress could also cause, among other things, severe disruption to equity markets, significant increases in bond yields generally, potential failure or default of financial institutions, including those of systemic importance, a significant decrease in global liquidity, a freeze-up of

global credit markets and a potential worldwide recession.

The interdependencies among world economies, particularly the Eurozone, and financial institutions have contributed to concerns regarding the stability of financial markets generally and certain institutions in particular. Financial services institutions are interdependent as a result of trading, clearing, counterparty or other relationships. We routinely execute transactions with global counterparties, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional clients. As a result, defaults or non-performance by, or even rumors or questions about, one or more global financial institutions, or the financial markets generally, have in the past led to market-wide liquidity problems and could lead to losses by us or by other institutions in the future. Given the scope of our global operations, clients and counterparties, persistent disruptions in the global financial markets, the failure of a significant global financial institution, even if not an immediate counterparty to us, or the attempt of a country to abandon the euro and persistent weakness in a leading global currency could have a material adverse impact on our business or results of operations.

Continuing low or volatile interest rates could have a material adverse effect on our profitability.

Our net interest revenue and cash flows are sensitive to changes in short-term interest rates and changes in valuations in the debt or equity markets over which we have no control. Our net interest revenue is the difference between the interest income earned on our interest-earning assets, such as the loans we make and the securities we hold in our investment portfolio, and the interest expense incurred on our interest-bearing liabilities, such as deposits and borrowed money.

A continuing low short-term rate environment will likely adversely impact our revenue and results of operations by:

- continued compression of our net interest spreads, depending on our balance sheet position; and
- sustained weakness of our spread-based revenues, resulting in continued voluntary waiving of fees on certain money market mutual funds and related distribution fees by us in order to prevent

the yields on such funds from becoming uneconomic.

A rise in interest rates could trigger one or more of the following, which could impact our business, results of operations and financial condition, including:

- less liquidity in bonds and fixed income funds in the case of a sharp rise in interest rates resulting in lower performance, yield and fees;
- increased number of delinquencies, bankruptcies or defaults and more nonperforming assets and net charge-offs, as borrowers may have more difficulty making higher interest payments;
- decreases in deposit levels and higher redemptions from our fixed income funds or separate accounts, as clients move funds into investments with higher rates of return;
- a decline in our capital ratios;
- reduction in other comprehensive income in our shareholders' equity and therefore our tangible common equity due to the impact of rising long term rates on our largely fixed-income securities portfolio; and
- higher funding costs.

A more detailed discussion of the interest rate and market risks we face is contained under "Risk Management" in the MD&A section in this Annual Report.

We may experience write-downs of securities that we own and other losses related to volatile and illiquid market conditions, reducing our earnings and impacting our financial condition.

We maintain an investment securities portfolio of various holdings, types and maturities. At Dec. 31, 2015, these securities were primarily classified as available-for-sale, which are recorded on our balance sheet at fair value with unrealized gains or losses reported as a component of accumulated other comprehensive income, net of tax. In 2015, we increased the amount of securities in our held to maturity portfolio, recorded on our balance sheet at amortized cost, from \$21.1 billion and approximately

18% of the portfolio at Dec. 31, 2014 to \$43.2 billion and approximately 36% at Dec. 31, 2015.

Our investment securities portfolio includes U.S. Agency RMBS, U.S. Treasuries, sovereign and sovereign-guaranteed debt, non-agency U.S. and non-U.S. residential mortgage-backed securities, European floating rate notes, commercial mortgage-backed securities, state and political subdivision debt, foreign covered bonds, corporate bonds, collateralized loan obligations, U.S. government agency debt, consumer asset-backed securities and other securities, the values of which are subject to market price volatility to the extent unhedged. Many of these securities experienced significant liquidity, valuation and credit quality deterioration during the 2008 financial crisis and could experience a similar deterioration in another financial crisis. Non-U.S. mortgage-backed and asset-backed securities with exposures to European countries, whose sovereign-debt markets have experienced increased stress since 2011, may continue to experience stress in the future. U.S. state and municipal bonds have also experienced stress in light of the fiscal concerns that a number of states and municipalities face. If these or any of the other available-for-sale securities experience an other-than-temporary impairment, it would negatively impact our earnings. If our held-to-maturity securities experience a loss in fair value, it would negatively impact the fair value of our securities portfolio, although it would not impact our earnings unless a credit event occurred. The low interest-rate environment that has persisted since the financial crisis began, notwithstanding the short-term rate increase announced by the Federal Reserve in December 2015, could constrain our ability to achieve a net interest margin consistent with historical averages.

Our investment securities portfolio represents a greater proportion of our consolidated total assets (approximately 30% at Dec. 31, 2015), and our loan and lease portfolios represent a smaller proportion of our consolidated total assets (approximately 16% at Dec. 31, 2015), in comparison to many other major U.S. financial institutions due to our custody and trust bank business model. As such, our capital levels and results of operations and financial condition are materially exposed to the risks associated with our investment portfolio. For example, the accounting and regulatory treatment of our investment securities portfolio in an available-for-sale accounting environment may have more volatility than a more

traditional held-for-investment loan portfolio, or a securities portfolio comprised exclusively U.S. Treasury securities. Under the U.S. capital rules, after-tax changes in the fair value of available-for-sale investment securities will be included in Tier 1 capital. For example, decreases in the general level of interest rates, and corresponding increases in mortgage prepayment speeds, which can be caused by refinancing activity, could adversely impact the value of fixed-rate mortgage-backed securities we hold. Conversely, increases in the general level of interest rates may adversely impact the fair value of fixed-rate debt securities we hold and, accordingly, for debt securities classified as available-for-sale, may adversely affect accumulated other comprehensive income and, thus, capital levels. Since loans held for investment, or securities in a held-to-maturity accounting environment, are not subject to a fair-value accounting framework, changes in the fair value of these instruments (other than incurred credit losses) are not similarly included in the determination of Tier 1 capital under the U.S. capital rules. As a result, we may experience increased variability in our Tier 1 capital relative to other major financial institutions who maintain a lower proportion of their consolidated total assets in an available-for-sale accounting environment.

Generally, the fair value of securities in the securities investment portfolio held as available-for-sale is determined based upon market values available from third-party sources. During periods of market disruption, it may be difficult to value certain of our investment securities if trading becomes less frequent and/or market data becomes less observable. As a result, valuations may include inputs and assumptions that are less observable or require greater estimation and judgment as well as valuation methods which are more complex. These values may not be ultimately realizable in a market transaction, and such values may change very rapidly as market conditions change and valuation assumptions are modified. Decreases in value may have a material adverse effect on our results of operations or financial condition. If any of our securities suffer credit losses, as we experienced with some of our investments in 2009, we may recognize the credit losses as an other-than-temporary impairment which could impact our revenue in the quarter in which we recognize the losses. The decision on whether to record an other-than-temporary impairment or write-down is determined in part by management's assessment of the financial condition and prospects of a particular issuer,

projections of future cash flows and recoverability of the particular security. Management's conclusions on such assessments are highly judgmental and include assumptions and projections of future cash flows which may ultimately prove to be incorrect as assumptions, facts and circumstances change. On the other hand, securities held in a held-to-maturity accounting environment are limited in the actions we can take absent a significant deterioration in the issuer's creditworthiness. Therefore we may be constrained in our ability to liquidate a held-to-maturity security that is deteriorating in value, which would negatively impact the fair value of our securities portfolio. If our assertions change about our intention or ability to not sell securities that have experienced a reduction in fair value below its amortized cost we could be required to recognize an other-than-temporary loss in earnings for the entire difference between fair value and amortized cost.

For information regarding our investment securities portfolio, refer to "Consolidated balance sheet review - Investment securities" and for information regarding the sensitivity of and risks associated with the market value of portfolio investments and interest rates, refer to the "Critical accounting estimates - Fair value - Securities" and "- Other-than-temporary impairment" sections both of which are in the MD&A - Results of Operations section in this Annual Report and Note 4 of the Notes to Consolidated Financial Statements in this Annual Report.

We are dependent on fee-based business for a substantial majority of our revenue and our fee-based revenues could be adversely affected by a slowing in market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences.

Our principal operational focus is on fee-based business, which is distinct from commercial banking institutions that earn most of their revenues from loans and other traditional interest-generating products and services. In 2015, approximately 79% of our revenue was fee-based (excluding net securities gains). Our fee-based businesses include investment management, custody, corporate trust, depository receipts, clearing, collateral management and treasury services, which are highly competitive businesses.

Fees for many of our products and services are based on the volume of transactions processed, the market value of assets managed and administered, securities

lending volume and spreads, and fees for other services rendered. Corporate actions, cross-border investing, global mergers and acquisitions activity, new debt and equity issuances, and secondary trading volumes all affect the level of our revenues. If the volumes of these activities decrease due to weak financial markets or otherwise, our revenues will also decrease, which would negatively impact our results of operations.

In addition, poor investment returns in our investment management business, due to either weak market conditions or underperformance (relative to our competitors or to benchmarks) by funds or accounts that we manage or investment products that we design or sell, result in reduced market values of portfolios that we manage and/or administer and affect our ability to retain existing assets and to attract new clients or additional assets from existing clients. This could affect the management and incentive fees that we earn on assets under management. Similarly, significant declines in the volume of capital markets activity would reduce the number of transactions we process and the amount of securities we lend and therefore would also have an adverse effect on our results of operations. Continuing low interest rates have also resulted in, and may continue to result in, waivers of money market fund fees. The recent U.S. short-term rate increase has reduced, but not eliminated, the amount of such waivers.

Our business generally benefits when individuals invest their savings in mutual funds and other collective funds, unit investment trusts or exchange traded funds, or contribute more to defined contribution plans. If there is a decline in the savings rates of individuals, or if there is a change in investment preferences that leads to less investment in mutual funds or other collective funds, or a shift to lower fee investment products, our revenues could be adversely affected. In addition, to the extent that we are forced to compete on the basis of price with other financial institutions, fee reductions on existing or future new business could cause revenues and profit margins to decline.

The profitability of certain of our businesses has declined since the financial crisis. For example, due to changes in fee structures, the margins on our clearing and corporate trust businesses have lowered, and we do not expect those margins to return to their historically high levels.

Our FX revenue may be adversely affected by decreases in market volatility and the cross-border investment activity of our clients.

Our foreign exchange trading generates revenues which are influenced by market pressures, which continue to be increasingly competitive, the volume of client transactions and the spread realized on these transactions. The level of volume and spreads is affected by market volatility, the level of cross-border assets held in custody for clients, the level and nature of underlying cross-border investments and other transactions undertaken by corporate and institutional clients. Our clients' cross-border investing activity could decrease in reaction to economic and political uncertainties, including changes in laws or regulations governing cross-border transactions, such as currency controls. Uncertainties resulting from terrorist attacks and/or military actions may also negatively affect cross-border investments activity. Volumes and/or spreads in some of our products tend to benefit from currency volatility and are likely to decrease during times of lower currency volatility. These revenues also depend on our ability to manage the risk associated with the currency transactions we execute and program pricing.

Furthermore, a shift by custody clients from the standing instruction programs to other trading options combined with competitive market pressures on the foreign exchange business is negatively impacting our FX revenue. Continued growth of electronic FX trading capabilities may also accelerate a shift of volume to lower margin channels.

Credit and Liquidity Risk

The failure or perceived weakness of any of our significant counterparties, many of whom are major financial institutions and sovereign entities, and our assumption of credit and counterparty risk, could expose us to loss and adversely affect our business.

We have exposure to many different industries and counterparties, particularly financial institutions as a result of trading, clearing, counterparty or other relationships. We routinely execute transactions with counterparties in the financial industry, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, insurance companies, as well as sovereigns and other governmental or quasi-governmental entities, and other institutional clients. As a result, our ability to engage in routine

funding or other transactions could be adversely affected by the actions and commercial soundness of other financial institutions or sovereign entities, as defaults or non-performance by (or even rumors or questions about such default or non-performance) one or more financial institutions, or the financial services industry generally, have in the past led to market-wide liquidity problems and could lead to losses or defaults by us or by other institutions (including our counterparties and/or clients) in the future. For example, as a result of our membership in several industry clearing or settlement exchanges, we may be required to guarantee obligations and liabilities or provide financial support in the event that other members do not honor their obligations or default. These obligations may be limited to members that dealt with the defaulting member or to the amount (or a multiple of the amount) of our contribution to a member's guarantee fund, or, in a few cases, the obligation may be unlimited. The consolidation of financial institutions during the recent financial crisis and the failures of other financial institutions have increased the concentration of our counterparty risk.

In addition to our counterparty exposure to financial institutions, we are from time to time exposed to concentrated credit risk at the industry or country level, potentially exposing us to a single market or political event or a correlated set of events. For example, defaults by companies located in certain countries, such as Brazil and China, may increase meaningfully as a result of deteriorating economic conditions.

The degree of client demand for short-term credit also tends to increase during periods of market turbulence, exposing us to further counterparty-related risks. For example, investors in collective investment vehicles for which we act as custodian may engage in significant redemption activity due to adverse market or economic news that was not anticipated by the fund's manager. We may then extend short-term credit to clients as a result of our relationship with such clients and the nature of various cash and securities settlement processes. For some types of clients, we provide credit to allow them to leverage their portfolios, which may expose us to potential loss if the client experiences credit difficulties. We are also generally not able to net exposures across counterparties that are affiliated entities and may not be able in all circumstances to net exposures to the same legal entity across multiple products. In addition, we may incur a loss in relation to one entity

or product even though our exposure to one of the entities' affiliates is over-collateralized. Moreover, not all of our counterparty exposure is secured and, when our exposure is secured, the realizable market value of the collateral may have declined by the time we exercise our rights against that collateral. This risk may be particularly acute if we are required to sell the collateral into an illiquid or temporarily-impaired market. In addition, disputes with counterparties as to the valuation of collateral significantly increase in times of market stress and illiquidity.

We act as lender's agent in securities lending transactions between our customers, acting as lenders, and financial counterparties, including broker-dealers, acting as borrowers, wherein securities are lent by our customers and the loans are secured by a pledge of cash or securities posted by such financial counterparties. Typically, in the case of cash collateral, we invest the cash collateral pursuant to each customer's investment guidelines and instructions. In certain cases, we agree to indemnify our customers against a default by the borrower under a securities lending transaction and, therefore, may have to buy-in the loaned securities with the cash collateral or the proceeds from the liquidation of the non-cash collateral. In those instances, we, rather than our customers, are exposed to the risks of the defaulting counterparty in the securities lending transaction.

From time to time, we assume concentrated credit risk at the individual obligor, counterparty or group level. Such concentrations may be material. Our material counterparty exposures change daily, and the counterparties or groups of related counterparties to which our risk exposure is material also varies during any reported period; however, our largest exposures tend to be to other financial institutions, clearing organizations, and governmental entities, both inside and outside of the U.S. Concentration of counterparty exposure presents significant risks to us and to our clients because the failure or perceived weakness of our counterparties (or in some cases of our clients' counterparties) has the potential to expose us to risk of financial loss. Changes in market perception of the financial strength of particular financial institutions or sovereign issuers can occur rapidly, are often based on a variety of factors and are difficult to predict.

Under evolving regulatory restrictions on credit exposure, which include a broadening of the measure of credit exposure, we may be required to limit our

exposures to specific issuers or groups, including financial institutions, to levels that we may currently exceed. These credit exposure restrictions under such evolving regulations may adversely affect our businesses and may require that we modify our operating models or the policies and practices we use.

Although our overall business is subject to these interdependencies, several of our businesses are particularly sensitive to them, including our currency and other trading activities, our securities lending and securities finance businesses and our investment management business. There is no assurance that any such losses would not materially and adversely affect our results of operations.

We have credit, regulatory and reputational risks as a result of our tri-party repo collateral agency services, which could adversely affect our business and results of operations.

BNY Mellon offers tri-party collateral agency services to dealers and cash investors active in the tri-party repurchase, or repo, market and currently has approximately 85% of the market share of the U.S. tri-party repo market. As agent, we facilitate settlement between sellers (cash borrowers) and buyers (cash lenders). Our involvement in a transaction commences after a seller and buyer agree to a tri-party repo trade and send instructions to us. We settle the trade, maintain custody of the collateral (the subject securities of the repo), monitor the eligibility and sufficiency of the collateral, and execute payment and delivery instructions provided by the principals.

Providing tri-party repo agent services to repo counterparties exposes BNY Mellon to credit risk at certain points in time. To facilitate trade settlement and collateral substitutions, we extend secured committed intraday credit to certain dealers. The committed credit requires dealers to fully secure the outstanding intraday credit with high-quality liquid assets having a market value in excess of the amount of the outstanding credit. In the event of a default by a dealer to whom we have extended secured committed intraday credit, we would be at risk for the market value of the collateral securing such intraday credit, and for any shortfall in value after the liquidation of such collateral, which could adversely affect our results of operations.

We are in the process of implementing new platforms and systems relating to the tri-party repo business. As with the implementation of any new technology, we may experience operational errors that could lead to system failures and business interruptions and adversely impact our business.

If a BNY Mellon client that is party to a repurchase transaction cleared by BNY Mellon becomes bankrupt or insolvent, BNY Mellon may become involved in disputes and litigation with the client's bankruptcy estate and other creditors, or involved in regulatory investigations, all of which can increase BNY Mellon's operational and litigation costs and may result in losses if the securities in the repurchase transaction decline in value.

We anticipate that regulators will continue to monitor the actions of market participants and use available supervisory tools to encourage constructive and timely action to reduce sources of risk in the tri-party repo market. Failure to meet regulatory expectations could result in regulatory and reputational risk and additional costs.

Additionally, in the event that a significant number of tri-party repo transactions are cleared through a central clearinghouse, our revenues associated with tri-party repo transactions could be negatively impacted.

Any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon or BNY Mellon, N.A., could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse effect on our results of operations and financial condition and on the value of the securities we issue.

Our debt, preferred stock and trust preferred securities and the debt and deposits of our bank subsidiaries, The Bank of New York Mellon and BNY Mellon, N.A., are currently rated investment grade by the major rating agencies. These rating agencies regularly evaluate us and our rated subsidiaries and their outlook on us and our rated subsidiaries. Their credit ratings are based on a number of factors, including our financial strength, performance, prospects and operations as well as factors not entirely within our control, including conditions affecting the financial services industry generally as well as the U.S. government. In addition, rating

agencies employ different models and formulas to assess the financial strength of a rated company, and from time to time rating agencies have, in their discretion, altered these models. Changes to rating agency models, general economic conditions, or other circumstances outside of our control could impact a rating agency's judgment of the rating or outlook it assigns us or our rated subsidiaries. For example, in 2015 S&P changed its methodology for rating global banks, resulting in a one-notch downgrade of the Parent and a one-notch downgrade of The Bank of New York Mellon's subordinated debt.

In view of the difficulties experienced in recent years by many financial institutions, we believe that the rating agencies have heightened their level of scrutiny, increased the frequency and scope of their credit reviews, have requested additional information, and have adjusted upward the requirements employed in their models for maintenance of rating levels. There can be no assurance that we or our rated subsidiaries will maintain our respective credit ratings or outlook on our securities.

A material reduction in our credit ratings or the credit ratings of our rated subsidiaries could have a material adverse effect on our access to credit markets, the related cost of funding and borrowing, our credit spreads, our liquidity and on certain trading revenues, particularly in those businesses where counterparty creditworthiness is critical. In addition, in connection with certain over-the-counter derivatives contracts and other trading agreements, counterparties may require us or our rated subsidiaries to provide additional collateral or to terminate these contracts and agreements and collateral financing arrangements in the event of a credit ratings downgrade below certain ratings levels. The requirement to provide additional collateral or terminate these contracts and agreements could impair our liquidity by requiring us to find other sources of financing or to make significant cash payments or securities movements. A downgrade by any one rating agency, depending on the agency's relative ratings of the firm at the time of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies. If a rating agency downgrade were to occur during broader market instability, our options for responding to events may be more limited and more expensive. An increase in the costs of our funding and borrowing, or an impairment of our liquidity, could have a material adverse effect on our results of operations and financial condition. A

material reduction in our credit ratings also could decrease the number of investors and counterparties willing or permitted to do business with or lend to us and adversely affect the value of the securities we have issued or may issue in the future.

We cannot predict what actions rating agencies may take, or what actions we may elect or be required to take in response thereto, which may adversely affect us. Our and our subsidiaries' ratings could be downgraded at any time and without any notice by any of the rating agencies. For further discussion on the impact of a credit rating downgrade, see "Disclosure of contingent features in over-the-counter ("OTC") derivative instruments" in Note 23 of the Notes to Consolidated Financial Statements in this Annual Report.

Our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity.

Our business is dependent in part on our ability to meet our cash and collateral obligations at a reasonable cost for both expected and unexpected cash flows. We receive client deposits through a variety of investment management and investment servicing businesses and we rely on those deposits as a low-cost and stable source of funding. Our ability to continue to receive those deposits, and other short-term funding sources, is subject to variability based on a number of factors, including volume and volatility in the global securities markets, the relative interest rates that we are prepared to pay for those deposits, and the perception of the safety of those deposits or other short-term obligations relative to alternative short-term investments available to our clients. We could lose deposits if we suffer a significant decline in the level of our business activity, our credit ratings are materially downgraded or we are subject to significant negative press or significant regulatory action or litigation, among other reasons. If we were to lose a significant amount of deposits we may need to replace such funding with more expensive funding and/or reduce assets, which would reduce our net interest revenue. In addition, the Parent's access to the debt capital markets is a significant source of liquidity. If the TLAC Rules are adopted as proposed, the majority of BNY Mellon and other U.S. G-SIBs' outstanding LTD would be ineligible under the final rules, which could result in BNY Mellon and the other U.S. G-SIBs issuing or refinancing a substantial amount of long-term debt in

a concentrated period of time, which could significantly increase our cost of funding.

Events or circumstances often outside of our control, such as market disruptions, government fiscal and monetary policies, or loss of confidence of securities purchasers or counterparties in us or in the funds markets, could limit our access to capital markets, increase our cost of borrowing, adversely affect our liquidity, or impair our ability to execute our business plan. In addition, clearing organizations, regulators, clients and financial institutions with which we interact may exercise the right to require additional collateral based on market perceptions or market conditions, which could further impair our access to and cost of funding. Market perception of sovereign default risks can also lead to inefficient money markets and capital markets, which could further impact BNY Mellon's funding availability and cost. Conversely, if we experience too much liquidity, it could increase interest expense, limit our financial flexibility, and increase the size of our total assets in a manner that could have a negative impact on our capital ratios.

Recently adopted and proposed regulations have been designed to address certain liquidity risks of large banking organizations, including BNY Mellon. The LCR and the Dodd-Frank Act's enhanced prudential standards impose liquidity management requirements on us that require us to increase our holdings of highly liquid, but potentially lower-yielding assets. These regulations also impact our ability to hold certain deposits deemed to pose a higher risk of runoff in the event of financial distress. Under the U.S. capital rules, the size of the capital surcharge that will apply to large U.S. banking organizations is based in part on a banking organization's reliance on short-term wholesale funding, including certain types of deposit funding, which effectively may increase the cost of such funding. Furthermore, certain non-U.S. regulators have proposed legislation or regulations requiring large banks to incorporate a separate subsidiary in countries in which they operate, and to maintain independent capital and liquidity at foreign subsidiaries. If adopted, these requirements could hinder our ability to efficiently manage our funding and liquidity in a centralized manner. There can be no assurances that these measures will be successful in limiting BNY Mellon's liquidity risk.

As a holding company, we also rely on dividends and interest from our subsidiaries for funding. The Parent's policy is to have sufficient unencumbered cash and cash equivalents at its holding company on hand to meet its forecasted debt redemptions, net interest payments and net tax payments over a minimum of the next 18 months without the need to receive dividends from its bank subsidiaries or issue debt. As of Dec. 31, 2015, the Parent was in compliance with this policy. However, there are various legal limitations on the extent to which our bank and other subsidiaries can finance or otherwise supply funds to us (by dividend or otherwise) and certain of our affiliates. If we are not able to obtain funds from our subsidiaries, we could be required to replace such funds through more expensive means and/or reduce assets. The Bank of New York Mellon, our primary subsidiary, is not currently paying regular dividends to the Parent so that it may retain capital in advance of upcoming capital rule implementation, which may impact the Parent's future liquidity.

If we are unable to raise funds using the methods described above, we would likely need to finance or liquidate unencumbered assets, such as our investment portfolio, central bank deposits and bank placements, to meet funding needs. We may be unable to sell some of our assets, or we may have to sell assets at a discount from market value, either of which could adversely affect our financial condition and results of operations. Further, our ability to sell assets may be impaired if other market participants are seeking to sell similar assets at the same time, which could occur in a liquidity or other market crisis. Additionally, if we experience cash flow mismatches, deposit run-off or market constraints resulting from our inability to convert assets to cash or access capital markets, our liquidity could be severely impacted. During periods of market uncertainty, our level of client deposits has in recent years tended to increase; however, since such deposits have a foreseeable potential not to be permanent, we have historically deposited these so-called excess deposits with central banks and in other highly liquid and low-yielding instruments. These levels of excess client deposits, as a consequence, have increased our net interest revenue.

If we are unable to continue to fund our assets through deposits or access capital markets on favorable terms or if we suffer an increase in our borrowing costs or otherwise fail to manage our liquidity effectively, our liquidity, net interest margin,

financial results and condition may be materially adversely affected. In certain cases, this could require us to raise additional capital through the issuance of preferred or common stock, which could dilute the ownership of existing stockholders, or reduce our common stock dividend to preserve capital. For a further discussion of our liquidity, see "Liquidity and dividends" in the MD&A - Results of Operations in this Annual Report.

We could incur charges through provision expense if our reserves for credit losses, including loan reserves, are inadequate.

When we loan money, commit to loan money or provide credit or enter into another contract with a counterparty, we incur credit risk, or the risk of losses if our borrowers do not repay their loans or our counterparties fail to perform according to the terms of their agreements. Our credit exposure is comprised of six classes of financing receivables: financial institutions, commercial, commercial real estate, lease financings, wealth management loans and mortgages, and other residential mortgages. Our revenues and profitability are adversely affected when our borrowers default in whole or in part on their loan obligations to us or when there is a significant deterioration in the credit quality of our loan portfolio. We reserve for credit losses by establishing an allowance through a charge to earnings. The allowance for loan losses and allowance for lending-related commitments represents management's estimate of probable losses inherent in our credit portfolio. We utilize a quantitative methodology, which is supplemented with a qualitative framework that takes into account internal and external environmental factors that are not captured within the quantitative methodology, to determine the allowance for credit losses. This process requires us to make numerous complex and subjective estimates and assumptions relating to probable losses which are inherently uncertain. As is the case with any such assessments, there is always the chance that we will fail to identify the proper factors or that we will fail to accurately estimate the impact of factors that we do identify. We cannot provide any assurance as to whether charge-offs related to our credit exposure may occur in the future. Current and future market and economic developments may increase default and delinquency rates and negatively impact the quality of our credit portfolio, which may impact our charge-offs. If the allowance for credit losses is inadequate due to deterioration in the credit quality of the

portfolio or significant charge-offs, we would be required to record credit loss provisions against current earnings, which could adversely impact our net income. See “Critical accounting estimates” in the MD&A - Results of Operations section in this Annual Report.

Other Risks

Tax law changes or challenges to our tax positions with respect to historical transactions may adversely affect our net income, effective tax rate and our overall results of operations and financial condition.

In the course of our business, we receive inquiries and challenges from both U.S. and non-U.S. tax authorities on the amount of taxes we owe. If we are not successful in defending these inquiries and challenges, we may be required to adjust the timing or amount of taxable income or deductions or the allocation of income among tax jurisdictions, all of which can require a greater provision for taxes or otherwise negatively affect earnings. Probabilities and outcomes are reviewed as events unfold, and adjustments to the reserves are made when necessary, but the reserves may prove inadequate because we cannot necessarily accurately predict the outcome of any challenge, settlement or litigation or the extent to which it will negatively affect us or our business. In addition, new tax laws or the expiration of or changes in existing tax laws, or the interpretation of those laws worldwide, could have a material impact on our business or net income. Our actions taken in response to, or reliance upon, such changes in the tax laws may impact our tax position in a manner that may result in lower earnings. See Note 12 of the Notes to Consolidated Financial Statements in this Annual Report for further information.

Changes in accounting standards governing the preparation of our financial statements and future events could have a material impact on our reported financial condition, results of operations, cash flows and other financial data.

From time to time, the FASB, the IASB, the SEC and bank regulators change the financial accounting and reporting standards governing the preparation of our financial statements or the interpretation of those standards. See “Recent Accounting Developments” in the MD&A section and Note 2 to the Notes to Consolidated Financial Statements in this Annual Report. These changes are difficult to predict and can

materially impact how we record and report our financial condition, results of operations, cash flows and other financial data. In some cases, we may be required to apply a new or revised standard retroactively or to apply an existing standard differently, also retroactively, in each case potentially resulting in the restatement of our prior period financial statements.

Additionally, our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Some of these policies and methods require use of estimates and assumptions, such as allowance for loan losses and allowance for lending-related commitments, fair value of financial instruments and derivatives, other-than-temporary impairment, goodwill and other intangibles, and pension accounting, which may affect the reported value of our assets or liabilities and results of operations. These estimates and assumptions are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain. If subsequent events occur that are materially different than the assumptions and estimates we used, future results may be materially different than estimated.

The Parent is a non-operating holding company, and as a result, is dependent on dividends from its subsidiaries, including its principal subsidiary banks, to meet its obligations, including its obligations with respect to its securities, and to provide funds for payment of dividends to its stockholders and stock repurchases.

The Parent is a non-operating holding company, whose principal assets and sources of income are its principal U.S. bank subsidiaries - The Bank of New York Mellon and BNY Mellon, N.A. - and its other subsidiaries. The Parent is a legal entity separate and distinct from its banks and other subsidiaries and, therefore, it relies in part on dividends, interest, distributions, and other payments from these bank and other subsidiaries to meet its obligations, including its obligations with respect to its securities, and to provide funds for payment of common and preferred dividends to its stockholders, to the extent declared by the Board of Directors. Currently, The Bank of New York Mellon, our primary subsidiary, is no longer paying regular dividends to the Parent to build capital in advance of upcoming capital rule

implementation, which may impact our future liquidity.

There are various legal limitations on the extent to which our bank and other subsidiaries can finance or otherwise supply funds to the Parent (by dividend or otherwise) and certain of our affiliates. Many of our subsidiaries, including our bank subsidiaries, are subject to laws and regulations that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to the parent company or other subsidiaries. These restrictions can reduce the amount of funds available to meet the Parent's obligations. In addition, our bank subsidiaries would not be permitted to distribute a dividend if doing so would constitute an unsafe and unsound practice or if the payment would reduce their capital to an inadequate level. Our bank subsidiaries are also subject to restrictions on their ability to lend to or transact with affiliates, minimum regulatory capital and liquidity requirements, and restrictions on their ability to use funds deposited with them in bank or brokerage accounts to fund their businesses.

We evaluate and manage liquidity on a legal entity basis. Legal entity liquidity is an important consideration as there are legal and other limitations on our ability to utilize liquidity from one legal entity to satisfy the liquidity requirements of another, including the Parent.

Although we maintain cash positions for liquidity at the holding company level, if our bank subsidiaries or other subsidiaries were unable to supply the Parent with cash over time, the Parent could become unable to meet its obligations (including its obligations with respect to its securities), declare or pay dividends in respect of its capital stock, or perform stock repurchases. See "Supervision and Regulation" and "Liquidity and dividends" in the MD&A - Results of Operations and Note 19 of the Notes to Consolidated Financial Statements in this Annual Report.

Because the Parent is a holding company, its rights and the rights of its creditors, including the holders of its securities, to a share of the assets of any subsidiary upon the liquidation or recapitalization of the subsidiary will be subject to the prior claims of the subsidiary's creditors (including, in the case of our banking subsidiaries, their depositors) except to the extent that the Parent may itself be a creditor with recognized claims against the subsidiary. The rights of holders of securities issued by the Parent to benefit

from those distributions will also be junior to those prior claims. Consequently, securities issued by the Parent will be effectively subordinated to all existing and future liabilities of our subsidiaries.

Our ability to return capital to shareholders is subject to the discretion of our Board of Directors and may be limited by U.S. banking laws and regulations, including those governing capital and the approval of our capital plan, applicable provisions of Delaware law or our failure to pay full and timely dividends on our preferred stock.

Holders of our common and preferred stock are only entitled to receive such dividends or other distributions of capital as our Board of Directors may declare out of funds legally available for such payments. Although we have historically declared cash dividends on our common and preferred stock, we are not required to do so. In addition to the Board of Directors' approval, our ability to take certain actions, including our ability to make certain acquisitions, declare dividends or repurchase our common stock, is dependent on, among other things, Federal Reserve non-objection under the annual regulatory review of the results of the CCAR process required by the Federal Reserve and the supervisory stress tests required under the Dodd-Frank Act. These evaluations, in turn, are dependent on, among other things, our successful demonstration that we can maintain capital levels above regulatory minimums in the event of a stressed market environment, as well as the Federal Reserve's assessment of the robustness of our capital adequacy qualitative process and the assumptions and analysis underlying the capital plan. There can be no assurance that the Federal Reserve will respond favorably to our future capital plans or that we will perform adequately on our supervisory stress tests. If the Federal Reserve objects to our proposed capital actions or we underperform on our stress tests, we may be required to revise our stress-testing or capital management approaches, resubmit our capital plan or postpone, cancel or alter our planned capital actions, and we would not be permitted to make any capital distributions other than those to which the Federal Reserve has indicated in writing its non-objection. In addition, if there have been or will be changes in our risk profile (including a material change in business strategy or risk exposure), financial condition or corporate structure, we may be required to resubmit our capital plan to the Federal Reserve.

Our ability to accurately predict or explain the outcome of the CCAR process is influenced by evolving supervisory criteria. The Federal Reserve's annual assessment of our capital adequacy and planning process involves not only a quantitative assessment through the Federal Reserve's proprietary stress test models but also a qualitative assessment. The qualitative assessment involves a number of factors and is expected to continue to evolve and may be revised on an ongoing basis as a result of the Federal Reserve's cross-firm review of capital plan submissions. Similarly, the Federal Reserve may, as part of its stated goal to continually evolve its annual stress testing requirements, adjust several parameters of the annual stress testing process, including the severity of the stress test scenario and the addition of components deemed important by the Federal Reserve (*e.g.*, a counterparty failure). Further, because it is not clear how the Federal Reserve's proprietary stress test models and qualitative assessment may differ from the modeling techniques and capital planning practices employed by us, it is foreseeable that our stress test results (using our own models, estimation methodologies and processes) may not be consistent with those disclosed by the Federal Reserve. In addition, the Federal Reserve may consider, at some point in the future, that some or all of the G-SIB surcharge be integrated into its post-stress test minimum capital requirements.

The Federal Reserve's current guidance provides that, for large BHCs like BNY Mellon, common stock dividend payout ratios exceeding 30% of after-tax net income available to common shareholders under certain baseline scenarios will receive particularly

close scrutiny. A failure to increase dividends along with our competitors, or any reduction of, or elimination of, our common stock dividend would likely adversely affect the market price of our common stock, impact our return on equity, and market perceptions of BNY Mellon.

Our ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our common stock or any of our shares that rank junior to preferred stock as to the payment of dividends and/or the distribution of any assets on any liquidation, dissolution or winding-up of BNY Mellon will be prohibited, subject to certain exceptions, in the event that we do not declare and pay in full dividends for the then current dividend period of our Series A preferred stock or the last preceding dividend period of our Series C, Series D or Series E preferred stock.

In addition, regulatory capital rules that are or will be applicable to us including the U.S. capital rules, the SLR, TLAC, or the U.S. G-SIB Rule may limit or otherwise restrict how we utilize our capital, including common stock dividends and stock repurchases, and may require us to increase or alter the mix of our outstanding regulatory capital instruments. Any requirement to increase our regulatory capital ratios or alter the composition of our capital could require us to liquidate assets or otherwise change our business and/or investment plans, which may negatively affect our financial results. Further, any requirement to maintain higher levels of capital may constrain our ability to return capital to shareholders either in the form of common stock dividends or share repurchases.

Recently Issued Accounting Standards

ASU 2016-02, Leases

In February 2016, the FASB issued ASU 2016-02, “Leases.” The standard introduces a new accounting model for lessees and was issued primarily to address concerns related to off-balance sheet financing arrangements available to lessees under current guidance. The standard requires lessees to account for all leases on the balance sheet, except for certain short-term leases that have a maximum possible lease term of 12 months. A lessee will recognize on its balance sheet (1) an asset for its right to use the underlying asset over the lease term, including optional payment periods only if the lessee is reasonably certain to exercise the option and (2) a liability representing its obligation to make lease payments over the lease term. The classification of leases and income statement impact for lessees will depend on whether the leases meet certain criterion, including those criterion in which the lessee obtains effective control of the underlying asset. The accounting for lessors is largely unchanged from the previous accounting guidance; except for leverage lease accounting which is not be permitted for leases entered into or modified after the effective date of the new standard. The FASB requires a modified retrospective method of adoption. The final guidance is effective for reporting periods beginning after Dec. 15, 2018.

ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued ASU 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities.” The new ASU requires investments in equity securities that do not result in consolidation and are not accounted for under the equity method to be measured at fair value with changes in the fair value recognized through net income, unless one of two available exceptions apply. The first exception, a scope exception, allows Federal Reserve Bank Stock, Federal Home Loan Bank stock and other exchange memberships held by broker dealers to remain accounted for at cost, less impairment. It also does not apply to derivative instruments that are subject to the requirements of ASC 815, *Derivatives and Hedging*. The second exception, a practicability exception, will be available for equity investments that do not have readily determinable fair values and do not qualify for the

practical expedient to estimate fair value under ASC 820, *Fair Value Measurement*.

The amendments also require an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from the entity’s “own credit risk” when the entity has elected to measure the liability at fair value. The amendments also eliminate the requirement to disclose the methods and significant assumptions used to estimate the fair values of financial instruments measured at amortized cost that are on the balance sheet.

This ASU is effective for fiscal years beginning after Dec. 15, 2017, including interim periods within those fiscal years. If certain requirements are met, early adoption of the “own credit risk” provision is permitted; early adoption of the other provisions is not permitted. BNY Mellon is assessing the impacts of the new standard.

ASU - 2014-09 - Revenue from Contracts with Customers

In May 2014, the FASB issued an ASU, “Revenue from Contracts with Customers,” which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The new standard is effective for the Company on Jan. 1, 2018 with early adoption permitted no earlier than Jan. 1, 2017. The standard permits the use of either the retrospective or cumulative effect transition method. The Company is evaluating the effect that this ASU will have on its consolidated financial statements and related disclosures. The Company has not yet selected a transition method nor has it determined the effect of the standard on its ongoing financial reporting.

Proposed Accounting Standards

Improvements to Employee Share-Based Payment Accounting

In June 2015, the FASB issued a proposed ASU, “Improvements to Employee Share-Based Payment Accounting.” This proposed ASU would simplify several aspects of the accounting for share-based payment transactions, including income tax

consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Comments were due on this proposed ASU by Aug. 14, 2015. The effective date and whether to permit early adoption will be determined after considering stakeholder feedback.

Simplifying the Equity Method of Accounting

In June 2015, the FASB issued a proposed ASU, “Simplifying the Equity Method of Accounting.” This proposed ASU would eliminate the requirement to account for the difference between the cost of an investment and the investor’s proportionate share of the net assets of the investee (the basis difference), and also eliminates the requirement to retrospectively apply the equity method when an increase in ownership interest in the investee prompts a change from the cost method to the equity method. Comments were due on this proposed ASU by Aug. 4, 2015. The effective date and whether to permit early adoption will be determined after considering stakeholder feedback.

Financial Instruments - Credit Losses

In December 2012, the FASB issued a proposed ASU, “Financial Instruments-Credit Losses.” This proposed ASU would result in a single model to account for credit losses on financial assets. The proposal would remove the probable threshold for recognizing credit losses and require a current estimate of the expected contractual cash flows an entity does not expect to collect on financial assets that are not measured at fair value through the income statement. The proposal would also change current practice for recognizing OTTI and interest income on debt securities. In addition, the proposal would result in the recognition of an allowance for credit losses for nearly all types of debt instruments. The proposal would expand the credit quality disclosures to require information about changes in the factors that influence estimates of credit losses and the reasons

for those changes. The FASB has decided on a current expected credit loss model for financial assets measured at amortized cost. The FASB recently concluded its re-deliberations. A final standard is estimated to be issued in the first quarter of 2016 with an anticipated effective date Jan.1, 2019.

Adoption of new accounting standards

For a discussion of the adoption of new accounting standards, see Note 2 of the Notes to Consolidated Financial Statements.

IFRS

IFRS are a set of standards and interpretations adopted by the IASB. Commencing with the issuance of the “roadmap” in November 2008, the SEC has considered potential methods of incorporation of IFRS in the United States. The use of IFRS for U.S. companies with global operations would allow for streamlined reporting, easier access to foreign capital markets and investments, and facilitate cross-border acquisitions, ventures or spin-offs.

In July 2012, the SEC staff released its final report on IFRS. This Final Report will be used by the SEC Commissioners to decide whether and, if so, when and how to incorporate IFRS into the financial reporting system for U.S. companies. It is not known when the SEC will make a final decision on the adoption of IFRS in the United States.

While the SEC decides whether IFRS will be required to be used in the preparation of our consolidated financial statements, a number of countries have mandated the use of IFRS by BNY Mellon’s subsidiaries in their statutory reports filed in those countries. Such countries include Belgium, Brazil, the Netherlands, Australia, Hong Kong, Canada and South Korea.

We are prepared for events that could damage our physical facilities, cause delay or disruptions to operational functions, including telecommunications networks, or impair our employees, clients, vendors and counterparties. Key elements of our business continuity strategies are extensive planning and testing, and diversity of business operations, data centers and telecommunications infrastructure.

We have established multiple geographically diverse locations for our funds transfer and broker-dealer services operational units, which provide redundant functionality to facilitate uninterrupted operations.

Our securities clearing, commercial paper, mutual fund accounting and custody, securities lending, master trust, Unit Investment Trust, corporate trust, item processing, wealth management and treasury units have common functionality in multiple sites designed to facilitate continuance of operations or rapid recovery. In addition, we have recovery positions for approximately 12,700 employees on a global basis of which over 6,800 are proprietary.

We continue to enhance geographic diversity for business operations by moving additional personnel to growth centers outside of existing major urban centers. We replicate 100% of our critical production computer data to multiple recovery data centers.

We have an active telecommunications diversity program. All major buildings are provisioned with connectivity from diverse telecommunication carriers. Additionally, we design our critical connectivity to take advantage of separate carrier entrances built into our facilities. This maximizes resiliency by allowing for end to end separation of primary and alternative communications.

In 2003, the Federal Reserve, OCC and SEC jointly published the Interagency Paper, “Sound Practices to Strengthen the Resilience of the U.S. Financial System” (“Sound Practices Paper”). The purpose of the document was to define the guidelines for the

financial services industry and other interested parties regarding “best practices” related to business continuity planning. Under these guidelines, we are a key clearing and settlement organization required to meet a higher standard for business continuity.

We believe we meet substantially all of the requirements of the Sound Practices Paper. As a core clearing and settlement organization, we believe that we are at the forefront of the industry in improving business continuity practices.

We are committed to seeing that requirements for business continuity are met not just within our own facilities, but also within those of our service providers whose operation is critical to our safety and soundness. To that end, we have a Third Party Governance Program in place to review new and existing service providers to see that they meet our standards for business continuity, as well as for information security, financial stability, personnel practices, etc.

We have developed a comprehensive plan to prepare for the possibility of a flu pandemic, which anticipates significant reduced staffing levels and will provide for increased remote working by staff for one or more periods lasting several weeks.

Although we are committed to observing best practices as well as meeting regulatory requirements, geopolitical uncertainties and other external factors will continue to create risk that cannot always be identified and anticipated.

Due to BNY Mellon’s robust business recovery systems and processes, we are not materially impacted by climate change, nor do we expect material impacts in the near term. We have, and will continue to, implement processes and capital projects to deal with the risks of the changing climate. The Company has invested in the development of products and services that support the markets related to climate change.

Supplemental information - Explanation of GAAP and Non-GAAP financial measures

BNY Mellon has included in this Annual Report certain Non-GAAP financial measures based on fully phased-in Basel III CET1 and other risk-based capital ratios, SLR and tangible common shareholders' equity. BNY Mellon believes that the Basel III CET1 and other risk-based capital ratios on a fully phased-in basis, the SLR on a fully phased-in basis and the ratio of tangible common shareholders' equity to tangible assets of operations are measures of capital strength that provide additional useful information to investors, supplementing the capital ratios which are, or were, required by regulatory authorities. The tangible common shareholders' equity ratio includes changes in investment securities valuations which are reflected in total shareholders' equity. In addition, this ratio is expressed as a percentage of the actual book value of assets, as opposed to a percentage of a risk-based reduced value established in accordance with regulatory requirements, although BNY Mellon in its reconciliation has excluded certain assets which are given a zero percent risk-weighting for regulatory purposes and the assets of consolidated investment management funds to which BNY Mellon has limited economic exposure. Further, BNY Mellon believes that the return on tangible common equity measure, which excludes goodwill and intangible assets net of deferred tax liabilities, is a useful additional measure for investors because it presents a measure of those assets that can generate income. BNY Mellon has provided a measure of tangible book value per share, which it believes provides additional useful information as to the level of tangible assets in relation to shares of common stock outstanding.

BNY Mellon has presented revenue measures which exclude the effect of noncontrolling interests related to consolidated investment management funds, gains on the sales of our equity investment in Wing Hang and our One Wall Street building; and expense measures which exclude M&I expenses, litigation charges, restructuring charges, the impairment charge related to a recent court decision, the charge related to investment management funds, net of incentives, and amortization of intangible assets. Earnings per share, and return on equity, operating leverage and operating margin measures, which exclude some or all of these items, are also presented. Earnings per share and return on equity measures also exclude the tax benefit primarily related to a tax carryback claim and the net charge related to the disallowance of certain foreign tax credits. Operating margin measures may also exclude amortization of intangible assets and the net

negative impact of money market fee waivers, net of distribution and servicing expense. BNY Mellon believes that these measures are useful to investors because they permit a focus on period-to-period comparisons, which relate to the ability of BNY Mellon to enhance revenues and limit expenses in circumstances where such matters are within BNY Mellon's control. The excluded items, in general, relate to certain gains or charges as a result of prior transactions. M&I expenses primarily relate to acquisitions and generally continue for approximately three years after the transaction. Litigation charges represent accruals for loss contingencies that are both probable and reasonably estimable, but exclude standard business-related legal fees. Restructuring charges relate to our streamlining actions, Operational Excellence Initiatives and migrating positions to Global Delivery Centers. Excluding these charges mentioned above permits investors to view expenses on a basis consistent with how management views the business.

The presentation of revenue growth on a constant currency basis permits investors to assess the significance of changes in foreign currency exchange rates. Growth rates on a constant currency basis were determined by applying the current period foreign currency exchange rates to the prior period revenue. BNY Mellon believes that this presentation, as a supplement to GAAP information, gives investors a clearer picture of the related revenue results without the variability caused by fluctuations in foreign currency exchange rates.

The presentation of income from consolidated investment management funds, net of net income attributable to noncontrolling interests related to the consolidation of certain investment management funds permits investors to view revenue on a basis consistent with how management views the business. BNY Mellon believes that these presentations, as a supplement to GAAP information, give investors a clearer picture of the results of its primary businesses.

In this Annual Report, the net interest revenue and net interest margin is presented on an FTE basis. We believe that this presentation provides comparability of amounts arising from both taxable and tax-exempt sources, and is consistent with industry practice. The adjustment to an FTE basis has no impact on net income. Each of these measures as described above is used by management to monitor financial performance, both on a company-wide and on a business-level basis.

Supplemental Information (unaudited) (continued)

The following table presents the reconciliation of net income and diluted earnings per common share.

Reconciliation of net income and diluted EPS – GAAP to Non-GAAP <i>(in millions, except per common share amounts)</i>	Net income		Diluted EPS		Inc
	2015	2014	2015	2014	
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	\$ 3,053	\$ 2,494	\$ 2.71	\$ 2.15	
Less: Gain on the sale of our equity investment in Wing Hang	N/A	315	N/A	0.27	
Gain on the sale of our One Wall Street building	N/A	204	N/A	0.18	
Benefit primarily related to a tax carryback claim	N/A	150	N/A	0.13	
Add: Litigation and restructuring charges	56	860	0.05	0.74	
Impairment charge related to a recent court decision	106	N/A	0.09	N/A	
Charge related to investment management funds, net of incentives	N/A	81	N/A	0.07	
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – Non-GAAP	\$ 3,215	\$ 2,766	\$ 2.85	\$ 2.39 <i>(a)</i>	19%

(a) Does not foot due to rounding.

The following table presents the total payout ratio.

Total payout ratio <i>(dollars in millions)</i>	2015
Capital deployed:	
Dividends	\$ 762
Common stock repurchased	2,355
Total capital deployed	\$ 3,117
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	\$ 3,053
Add: Litigation and restructuring	56
Impairment charge related to a recent court decision	106
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – excluding impairment charge related to a recent court decision, litigation and restructuring	\$ 3,215
Payout ratio	102%
Payout ratio - Non-GAAP	97%

Supplemental Information (unaudited) (continued)

The following table presents the reconciliation of the pre-tax operating margin ratio.

Reconciliation of income before income taxes – pre-tax operating margin <i>(dollars in millions)</i>	2015	2014	2013	2012	2011
Income before income taxes – GAAP	\$ 4,235	\$ 3,563	\$ 3,777	\$ 3,357	\$ 3,685
Less: Net income attributable to noncontrolling interests of consolidated investment management funds	68	84	80	76	50
Gain on the sale of our equity investment in Wing Hang	—	490	—	—	—
Gain on the sale of our One Wall Street building	—	346	—	—	—
Add: Amortization of intangible assets	261	298	342	384	428
M&I, litigation and restructuring charges	85	1,130	70	559	390
Impairment charge related to a recent court decision	170	—	—	—	—
Charge related to investment management funds, net of incentives	—	104	12	16	—
Income before income taxes, as adjusted – Non-GAAP (a)	\$ 4,683	\$ 4,175	\$ 4,121	\$ 4,240	\$ 4,453
Fee and other revenue – GAAP	\$12,082	\$ 12,649	\$ 11,856	\$ 11,448	\$ 11,614
Income from consolidated investment management funds – GAAP	86	163	183	189	200
Net interest revenue – GAAP	3,026	2,880	3,009	2,973	2,984
Total revenue – GAAP	15,194	15,692	15,048	14,610	14,798
Less: Net income attributable to noncontrolling interests of consolidated investment management funds	68	84	80	76	50
Gain on the sale of our equity investment in Wing Hang	—	490	—	—	—
Gain on the sale of our One Wall Street building	—	346	—	—	—
Total revenue, as adjusted – Non-GAAP (a)	\$15,126	\$ 14,772	\$ 14,968	\$ 14,534	\$ 14,748
Pre-tax operating margin (b)	28% (c)	23%	25%	23%	25%
Pre-tax operating margin – Non-GAAP (a)(b)	31% (c)	28%	28%	29%	30%

(a) Non-GAAP excludes net income attributable to noncontrolling interests of consolidated investment management funds, the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, amortization of intangible assets, M&I, litigation and restructuring charges, the impairment charge related to a recent court decision and the charge related to investment management funds, net of incentives, if applicable.

(b) Income before taxes divided by total revenue.

(c) Our GAAP earnings include tax-advantaged investments such as low income housing, renewable energy, bank-owned life insurance and tax-exempt securities. The benefits of these investments are primarily reflected in tax expense. If reported on a tax-equivalent basis these investments would increase revenue and income before taxes by \$242 million and would increase our pre-tax operating margin by approximately 1.1% for 2015.

The following table presents the reconciliation of operating leverage.

Pre-tax operating leverage <i>(dollars in millions)</i>	2015	2014	2015 vs. 2014
Total revenue - GAAP	\$ 15,194	\$ 15,692	
Less: Net income attributable to noncontrolling interests of consolidated investment management funds	68	84	
Gain on the sale of our investment in Wing Hang Bank	—	490	
Gain on the sale of the One Wall Street building	—	346	
Total revenue, as adjusted - Non-GAAP	\$ 15,126	\$ 14,772	2.40%
Total noninterest expense - GAAP	\$ 10,799	\$ 12,177	
Less: Amortization of intangible assets	261	298	
M&I, litigation and restructuring charges	85	1,130	
Charge related to investment management funds, net of incentives	—	104	
Total noninterest expense, as adjusted - Non-GAAP	\$ 10,453	\$ 10,645	(1.80)%
Pre-tax operating leverage, as adjusted - Non-GAAP (a)(b)			420 bps

(a) Pre-tax operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

(b) Non-GAAP excludes net income attributable to noncontrolling interests of consolidated investment management funds, the gains on the sales of our investment in Wing Hang Bank and the One Wall Street building, amortization of intangible assets, M&I, litigation and restructuring charges and the charge related to investment management funds, net of incentives, if applicable.

Supplemental Information (unaudited) (continued)

The following table presents the reconciliation of the returns on common equity and tangible common equity.

Return on common equity and tangible common equity <i>(dollars in millions)</i>	2015	2014	2013	2012	2011
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	\$ 3,053	\$ 2,494	\$ 2,040	\$ 2,419	\$ 2,510
Add: Amortization of intangible assets, net of tax	172	194	220	247	269
Net income applicable to common shareholders of The Bank of New York Mellon Corporation excluding amortization of intangible assets – Non-GAAP	3,225	2,688	2,260	2,666	2,779
Less: Gain on the sale of our equity investment in Wing Hang	—	315	—	—	—
Gain on the sale of our One Wall Street building	—	204	—	—	—
Benefit primarily related to a tax carryback claim	—	150	—	—	—
Add: M&I, litigation and restructuring charges	56	860	45	339	240
Impairment charge related to a recent court decision	106	—	—	—	—
Charge related to investment management funds, net of incentives	—	81	9	12	—
Net charge related to the disallowance of certain foreign tax credits	—	—	593	—	—
Net income applicable to common shareholders of The Bank of New York Mellon Corporation, as adjusted – Non-GAAP <i>(a)</i>	\$ 3,387	\$ 2,960	\$ 2,907	\$ 3,017	\$ 3,019
Average common shareholders' equity	\$35,564	\$ 36,618	\$ 34,832	\$ 34,333	\$ 33,519
Less: Average goodwill	17,731	18,063	17,988	17,967	18,129
Average intangible assets	3,992	4,305	4,619	4,982	5,498
Add: Deferred tax liability – tax deductible goodwill <i>(b)</i>	1,401	1,340	1,302	1,130	967
Deferred tax liability – intangible assets <i>(b)</i>	1,148	1,216	1,222	1,310	1,459
Average tangible common shareholders' equity – Non-GAAP	\$16,390	\$ 16,806	\$ 14,749	\$ 13,824	\$ 12,318
Return on common equity – GAAP	8.6%	6.8%	5.9%	7.0%	7.5%
Return on common equity – Non-GAAP <i>(a)</i>	9.5%	8.1%	8.3%	8.8%	9.0%
Return on tangible common equity – Non-GAAP <i>(a)</i>	19.7%	16.0%	15.3%	19.3%	22.6%
Return on tangible common equity – Non-GAAP adjusted <i>(a)</i>	20.7%	17.6%	19.7%	21.8%	24.5%

(a) Non-GAAP excludes amortization of intangible assets, net of tax, the gains on the sales of our equity investment in Wing Hang and our One Wall Street building, the benefit primarily related to a tax carryback claim, M&I, litigation and restructuring charges, the impairment charge related to a recent court decision, the charge related to investment management funds, net of incentives, and the net charge related to the disallowance of certain foreign tax credits, if applicable.

(b) Deferred tax liabilities are based on fully phased-in Basel III rules.

Supplemental Information (unaudited) (continued)

The following table presents the reconciliation of the equity to assets ratio and book value per common share.

Equity to assets and book value per common share <i>(dollars in millions, unless otherwise noted)</i>	Dec. 31,				
	2015	2014	2013	2012	2011
BNY Mellon shareholders' equity at period end – GAAP	\$ 38,037	\$ 37,441	\$ 37,497	\$ 36,414	\$ 33,408
Less: Preferred stock	2,552	1,562	1,562	1,068	—
BNY Mellon common shareholders' equity at period end – GAAP	35,485	35,879	35,935	35,346	33,408
Less: Goodwill	17,618	17,869	18,073	18,075	17,904
Intangible assets	3,842	4,127	4,452	4,809	5,152
Add: Deferred tax liability – tax deductible goodwill <i>(a)</i>	1,401	1,340	1,302	1,130	967
Deferred tax liability – intangible assets <i>(a)</i>	1,148	1,216	1,222	1,310	1,459
BNY Mellon tangible common shareholders' equity at period end – Non-GAAP	\$ 16,574	\$ 16,439	\$ 15,934	\$ 14,902	\$ 12,778
Total assets at period end – GAAP	\$ 393,780	\$ 385,303	\$ 374,516	\$ 359,226	\$ 325,425
Less: Assets of consolidated investment management funds	1,401	9,282	11,272	11,481	11,347
Subtotal assets of operations – Non-GAAP	392,379	376,021	363,244	347,745	314,078
Less: Goodwill	17,618	17,869	18,073	18,075	17,904
Intangible assets	3,842	4,127	4,452	4,809	5,152
Cash on deposit with the Federal Reserve and other central banks <i>(b)</i>	116,211	99,901	105,384	90,040	90,230
Tangible total assets of operations at period end – Non-GAAP	\$ 254,708	\$ 254,124	\$ 235,335	\$ 234,821	\$ 200,792
BNY Mellon shareholders' equity to total assets ratio – GAAP	9.7%	9.7%	10.0%	10.1%	10.3%
BNY Mellon common shareholders' equity to total assets ratio – GAAP	9.0%	9.3%	9.6%	9.8%	10.3%
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP	6.5%	6.5%	6.8%	6.3%	6.4%
Period-end common shares outstanding <i>(in thousands)</i>	1,085,343	1,118,228	1,142,250	1,163,490	1,209,675
Book value per common share – GAAP	\$ 32.69	\$ 32.09	\$ 31.46	\$ 30.38	\$ 27.62
Tangible book value per common share – Non-GAAP	\$ 15.27	\$ 14.70	\$ 13.95	\$ 12.81	\$ 10.56

(a) Deferred tax liabilities are based on fully phased-in Basel III rules.

(b) Assigned a zero percentage risk-weighting by the regulators.

The following table presents income from consolidated investment management funds, net of noncontrolling interests.

Income from consolidated investment management funds, net of noncontrolling interests <i>(in millions)</i>	2015	2014	2013	2012	2011
Income from consolidated investment management funds	\$ 86	\$ 163	\$ 183	\$ 189	\$ 200
Less: Net income attributable to noncontrolling interests of consolidated investment management funds	68	84	80	76	50
Income from consolidated investment management funds, net of noncontrolling interests	\$ 18	\$ 79	\$ 103	\$ 113	\$ 150

The following table presents the impact of changes in foreign currency exchange rates on our consolidated investment management and performance fees.

Investment management and performance fees - Consolidated <i>(dollars in millions)</i>	2015	2014	2015 vs. 2014
Investment management and performance fees – GAAP	\$ 3,438	\$ 3,492	(2)%
Impact of changes in foreign currency exchange rates	—	(151)	
Investment management and performance fees, as adjusted – Non-GAAP	\$ 3,438	\$ 3,341	3 %

Supplemental Information (unaudited) (continued)

The following table presents the revenue line items in the Investment Management business impacted by the consolidated investment management funds.

Income from consolidated investment management funds, net of noncontrolling interests - Investment Management business					
<i>(in millions)</i>	2015	2014	2013	2012	2011
Investment management fees	\$ 15	\$ 66	\$ 80	\$ 81	\$ 107
Other (Investment income)	3	13	23	32	43
Income from consolidated investment management funds, net of noncontrolling interests	\$ 18	\$ 79	\$ 103	\$ 113	\$ 150

The following table presents the impact of changes in foreign currency exchange rates on investment management fees reported in the Investment Management segment.

Investment management fees - Investment Management business	2015 vs. 2014		
<i>(dollars in millions)</i>	2015	2014	2014
Investment management fees – GAAP	\$ 3,263	\$ 3,321	(2)%
Impact of changes in foreign currency exchange rates	—	(142)	
Investment management fees, as adjusted – Non-GAAP	\$ 3,263	\$ 3,179	3 %

The following table presents the reconciliation of the pre-tax operating margin for the Investment Management business.

Pre-tax operating margin - Investment Management business	2015	2014	2013
<i>(dollars in millions)</i>			
Income before income taxes – GAAP	\$ 1,050	\$ 897	\$ 965
Add: Amortization of intangible assets	97	118	143
Money market fee waivers	113	125	108
Charge related to investment management funds, net of incentives	—	104	12
Income before income taxes excluding amortization of intangible assets, money market fee waivers and the charge related to investment management funds, net of incentives – Non-GAAP	\$ 1,260	\$ 1,244	\$ 1,228
Total revenue – GAAP	\$ 3,919	\$ 3,946	\$ 3,868
Less: Distribution and servicing expense	378	423	429
Money market fee waivers benefiting distribution and servicing expense	137	150	147
Add: Money market fee waivers impacting total revenue	250	275	255
Total revenue net of distribution and servicing expense and excluding money market fee waivers – Non-GAAP	\$ 3,654	\$ 3,648	\$ 3,547
Pre-tax operating margin (a)	27%	23%	25%
Pre-tax operating margin, excluding amortization of intangible assets, money market fee waivers, the charge related to investment management funds, net of incentives and net of distribution and servicing expense – Non-GAAP (a)	34%	34%	35%

(a) *Income before taxes divided by total revenue.*

Rate/volume analysis

Rate/volume analysis (a)	2015 over (under) 2014			2014 over (under) 2013		
	Due to change in			Due to change in		
	Average balance	Average rate	Net change	Average balance	Average rate	Net change
<i>(dollar amounts in millions, presented on an FTE basis)</i>						
Interest revenue						
Interest-earning assets:						
Interest-bearing deposits with banks (primarily foreign banks)	\$ (85)	\$ (49)	\$ (134)	\$ (38)	\$ (3)	\$ (41)
Interest-bearing deposits with the Federal Reserve and other central banks	(8)	(29)	(37)	46	11	57
Federal funds sold and securities purchased under resale agreements	54	7	61	37	2	39
Margin loans	25	—	25	34	(12)	22
Non-margin loans:						
Domestic offices:						
Consumer	21	(3)	18	14	(7)	7
Commercial	49	(31)	18	23	(17)	6
Foreign offices	7	(13)	(6)	13	(3)	10
Total non-margin loans	77	(47)	30	50	(27)	23
Securities:						
U.S. Government obligations	79	(11)	68	53	(35)	18
U.S. Government agency obligations	171	15	186	9	(87)	(78)
State and political subdivisions - tax exempt	(36)	10	(26)	(10)	6	(4)
Other securities:						
Domestic offices	(7)	74	67	(26)	(251)	(277)
Foreign offices	25	(132)	(107)	30	127	157
Total other securities	18	(58)	(40)	4	(124)	(120)
Trading securities (primarily domestic)	(55)	10	(45)	(26)	(9)	(35)
Total securities	177	(34)	143	30	(249)	(219)
Total interest revenue	\$ 240	\$ (152)	\$ 88	\$ 159	\$ (278)	\$ (119)
Interest expense						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Domestic offices:						
Money market rate accounts	\$ 1	\$ (2)	\$ (1)	\$ (1)	\$ (5)	\$ (6)
Savings	1	—	1	1	—	1
Demand deposits	—	2	2	—	2	2
Time deposits	1	(2)	(1)	—	(3)	(3)
Total domestic offices	3	(2)	1	—	(6)	(6)
Foreign offices:						
Banks	19	(40)	(21)	5	(12)	(7)
Other	(2)	(24)	(26)	2	(11)	(9)
Total foreign offices	17	(64)	(47)	7	(23)	(16)
Total interest-bearing deposits	20	(66)	(46)	7	(29)	(22)
Federal funds purchased and securities sold under repurchase agreements	2	5	7	(8)	11	3
Trading liabilities	(21)	5	(16)	(5)	(8)	(13)
Other borrowed funds:						
Domestic offices						
Foreign offices	(1)	2	1	—	1	1
Total other borrowed funds	(1)	4	3	(2)	1	(1)
Commercial paper	—	—	—	2	—	2
Payables to customers and broker-dealers	1	(3)	(2)	1	—	1
Long-term debt	3	(3)	—	16	25	41
Total interest expense	\$ 4	\$ (58)	\$ (54)	\$ 11	\$ —	\$ 11
Changes in net interest revenue	\$ 236	\$ (94)	\$ 142	\$ 148	\$ (278)	\$ (130)

(a) Changes which are solely due to balance changes or rate changes are allocated to such categories on the basis of the respective percentage changes in average balances and average rates. Changes in interest revenue or interest expense arising from the combination of rate and volume variances are allocated proportionately to rate and volume based on their relative absolute magnitudes.

Selected Quarterly Data (unaudited)

Selected Quarterly Data <i>(dollar amounts in millions, except per share amounts)</i>	Quarter ended							
	2015				2014			
	Dec. 31	Sept. 30	June 30	March 31	Dec. 31	Sept. 30	June 30	March 31
Consolidated income statement								
Total fee and other revenue	\$ 2,950	\$ 3,053	\$ 3,067	\$ 3,012	\$ 2,935	\$ 3,851	\$ 2,980	\$ 2,883
Income (loss) from consolidated investment management funds	16	(22)	40	52	42	39	46	36
Net interest revenue	760	759	779	728	712	721	719	728
Total revenue	3,726	3,790	3,886	3,792	3,689	4,611	3,745	3,647
Provision for credit losses	163	1	(6)	2	1	(19)	(12)	(18)
Noninterest expense	2,692	2,680	2,727	2,700	3,524	2,968	2,946	2,739
Income before taxes	871	1,109	1,165	1,090	164	1,662	811	926
Provision (benefit) for income taxes	175	282	276	280	(93)	556	217	232
Net income	696	827	889	810	257	1,106	594	694
Net (income) loss attributable to noncontrolling interests	(3)	6	(36)	(31)	(24)	(23)	(17)	(20)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	693	833	853	779	233	1,083	577	674
Preferred stock dividends	(56)	(13)	(23)	(13)	(24)	(13)	(23)	(13)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$ 637	\$ 820	\$ 830	\$ 766	\$ 209	\$ 1,070	\$ 554	\$ 661
Basic earnings per common share	\$ 0.58	\$ 0.74	\$ 0.74	\$ 0.67	\$ 0.18	\$ 0.93	\$ 0.48	\$ 0.57
Diluted earnings per common share	0.57	0.74	0.73	0.67	0.18	0.93	0.48	0.57
Average balances								
Interest-bearing deposits with banks	\$ 104,181	\$ 104,724	\$ 102,081	\$ 103,231	\$ 122,063	\$ 123,595	\$ 126,970	\$ 116,016
Securities	119,532	121,188	128,641	123,476	117,243	112,055	101,420	100,534
Trading assets	2,786	2,737	3,253	3,046	3,922	5,435	5,532	5,217
Loans	61,964	61,657	61,076	57,935	56,844	54,835	53,449	51,647
Total interest-earning assets	312,610	315,672	318,596	308,104	318,608	311,603	300,758	284,532
Assets of operations	366,875	371,328	375,999	366,083	375,609	370,167	357,807	343,638
Total assets	368,590	373,453	378,279	368,411	385,232	380,409	369,212	354,992
Deposits	246,212	254,799	255,606	249,112	248,479	246,567	240,494	234,416
Long-term debt	21,418	21,070	20,625	20,199	21,187	20,429	20,361	20,420
Preferred stock	2,552	2,552	2,313	1,562	1,562	1,562	1,562	1,562
Total The Bank of New York Mellon Corporation common shareholders' equity	35,664	35,588	35,516	35,486	36,859	36,751	36,565	36,289
Net interest margin (FTE)	0.99%	0.98%	1.00%	0.97%	0.91%	0.94%	0.98%	1.05%
Annualized return on common equity (a)	7.1%	9.1%	9.4%	8.8%	2.2%	11.6%	6.1%	7.4%
Pre-tax operating margin	23%	29%	30%	29%	4%	36%	22%	25%
Common stock data (a)								
Market price per share range:								
High	\$ 44.73	\$ 45.45	\$ 44.10	\$ 41.44	\$ 41.79	\$ 40.80	\$ 37.95	\$ 35.88
Low	37.48	36.46	39.87	35.63	35.06	37.12	32.66	30.82
Average	42.02	41.56	42.61	38.95	39.13	38.88	34.60	33.03
Period end close	41.22	39.15	41.97	40.24	40.57	38.73	37.48	35.29
Cash dividends per common share	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.15
Market capitalization (b)	44,738	42,789	46,441	45,130	45,366	43,599	42,412	40,244

(a) At Dec. 31, 2015, there were 29,136 shareholders registered with our stock transfer agent, compared with 30,525 at Dec. 31, 2014 and 29,231 at Dec. 31, 2013. In addition, there were 44,626 of BNY Mellon's current and former employees at Dec. 31, 2015 who participate in BNY Mellon's 401(k) Retirement Savings Plan. All shares of BNY Mellon's common stock held by the Plan for its participants are registered in the name of The Bank of New York Mellon Corporation, as trustee.

(b) At period end.

Some statements in this document are forward-looking. These include all statements about the usefulness of Non-GAAP measures, the future results of BNY Mellon, our businesses, financial, liquidity and capital condition, results of operations, goals, strategies, outlook, objectives, expectations (including those regarding our performance results, regulatory, market, economic or accounting developments, legal proceedings and other contingencies), effective tax rate, estimates (including those regarding capital ratios), intentions, targets, opportunities and initiatives.

In this report, any other report, any press release or any written or oral statement that BNY Mellon or its executives may make, words, such as “estimate,” “forecast,” “project,” “anticipate,” “target,” “expect,” “intend,” “continue,” “seek,” “believe,” “plan,” “goal,” “could,” “should,” “would,” “may,” “will,” “strategy,” “synergies,” “opportunities,” “trends” and words of similar meaning, may signify forward-looking statements.

Actual results may differ materially from those expressed or implied as a result of a number of factors, including those discussed in “Risk Factors” such as: an information security event or technology disruption that results in a loss of confidential information or impacts our ability to provide services to our clients and any material adverse effect on our business and results of operations; failure of our technology or that of a third party or vendor, or if we neglect to update our technology, develop and market new technology to meet clients’ needs or protect our intellectual property and any material adverse effect on our business; extensive government regulation and supervision and the impact of the significant amount of rulemaking since the 2008 financial crisis, which have, and in the future may, compel us to change how we manage our businesses, could have a material adverse effect on our business, financial condition and results of operations and have increased our compliance and operational risks and costs; failure to satisfy regulatory standards, including “well capitalized” and “well managed” status or capital adequacy and liquidity rules, and any resulting limitations on our activities, or adverse effects on our business and financial condition; regulatory actions or litigation and any adverse effect on our results of operations or harm to our businesses or reputation; adverse publicity, government scrutiny or other reputational harm and any negative effect on our businesses; the risks relating to new lines of business,

new products and services or strategic project initiatives and the failure to implement these initiatives, which could affect our results of operations; the risks and uncertainties relating to our strategic transactions and any adverse effect on our business, results of operations and financial condition; operational risk and any material adverse effect on our business; failure or circumvention of our controls and procedures and any material adverse effect on our business, reputation, results of operations and financial condition; competition in all aspects of our business and any negative effect on our ability to maintain or increase our profitability; failure of our risk management framework to be effective in mitigating risk and reducing the potential for losses; change or uncertainty in monetary, tax and other governmental policies and the impact on our businesses, profitability and ability to compete; political, economic, legal, operational and other risks inherent in operating globally and any material adverse effect on our business; failure to attract and retain employees and any adverse effect on our business; acts of terrorism, natural disasters, pandemics and global conflicts and any negative impact on our business and operations; weakness in financial markets and the economy generally and any material adverse effect on our business, results of operations and financial condition; market volatility and any adverse impact on our business, financial condition and results of operations and our ability to manage risk; ongoing concerns about the financial stability of certain countries, the failure or instability of any of our significant global counterparties, or a breakup of the European Union or Eurozone and any material adverse effect on our business and results of operations; continuing low or volatile interest rates and any material adverse effect on our profitability; write-downs of securities that we own and other losses related to volatile and illiquid market conditions and any reduction in our earnings or impact on our financial condition; our dependence on fee-based business for a substantial majority of our revenue and the potential adverse effects of a slowing in market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences; any adverse effect on our foreign exchange revenues from decreased market volatility or cross-border investment activity of our clients; the failure or perceived weakness of any of our significant counterparties, and our assumption of credit and counterparty risk, which could expose us to loss and adversely affect our business; credit, regulatory and reputational risks as a

result of our tri-party repo collateral agency services, which could adversely affect our business and results of operations; any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, which could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse effect on our results of operations and financial condition and on the value of the securities we issue; any adverse effect on our business, financial condition and results of operations of not effectively managing our liquidity; inadequate reserves for credit losses, including loan reserves, and any resulting charges through provision expense; tax law changes or challenges to our tax positions and any adverse effect on our net income, effective tax rate and overall results of operations and financial condition; changes in accounting standards and any material impact on our reported financial condition, results of operations, cash flows and other financial data; risks associated with being a non-operating holding company, including our dependence on dividends from our subsidiaries to meet obligations, to provide funds for payment of dividends and for stock repurchases; and the impact of provisions of U.S. banking laws and regulations, including those governing capital and the approval of our capital plan, applicable provisions of Delaware law or failure to pay full and timely dividends on our preferred stock, on our ability to return capital to shareholders.

Investors should consider all risks in our 2015 Annual Report and any subsequent reports filed with the SEC by BNY Mellon pursuant to the Exchange Act. All forward-looking statements speak only as of the date on which such statements are made, and BNY Mellon undertakes no obligation to update any statement to reflect events or circumstances after the date on which such forward-looking statement is made or to reflect the occurrence of unanticipated events. The contents of BNY Mellon's website or any other websites referenced herein are not part of this report.

Acronyms

ABS	Asset-backed security	IRS	Internal Revenue Service
APAC	Asia-Pacific region	LIBOR	London Interbank Offered Rate
ASC	Accounting Standards Codification	LCR	Liquidity coverage ratio
ASU	Accounting Standards Update	MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
AUC/A	Assets under custody and/or administration	M&I	Merger and integration
AUM	Assets Under Management	MBS	Mortgage-backed security
BHC	Bank holding companies	MMF	Money market funds
bps	basis points	N/A	Not applicable or Not available
CCAR	Comprehensive Capital Analysis and Review	NAV	Net asset value
CD	Certificates of deposit	N/M	Not meaningful
CET1	Common Equity Tier 1 capital	NPR	Notice of proposed rulemaking
CFTC	Commodity Futures Trading Commission	NSFR	Net stable funding ratio
CLO	Collateralized loan obligation	NYSE	New York Stock Exchange
CVA	Credit valuation adjustment	OCC	Office of the Comptroller of the Currency
DARTS	Daily average revenue trades	OCI	Other comprehensive income
DFAST	Dodd Frank Act stress tests	OTC	Over-the-counter
DVA	Debit valuation adjustment	OTTI	Other-than-temporary impairment
ECB	European Central Bank	PSU	Performance units
EMEA	Europe, the Middle East and Africa	REIT	Real estate investment trust
ERISA	Employee Retirement Income Security Act of 1974	RMBS	Residential mortgage-backed security
ESOP	Employee Stock Ownership Plan	RSU	Restricted stock units
EVE	Economic Value of Equity	RWA	Risk-weighted assets
FASB	Financial Accounting Standards Board	S&P	Standard & Poor's
FCA	Financial Conduct Authority	SBIC	Small Business Investment Company
FDIC	Federal Deposit Insurance Corporation	SBLC	Standby letters of credit
FHC	Financial holding company	SEC	Securities and Exchange Commission
FINRA	Financial Industry Regulatory Authority, Inc.	SIFIs	Systemically important financial institutions
FSA	Financial Services Authority	SLR	Supplementary Leverage Ratio
FTE	Fully taxable equivalent	TCE	Tangible common equity
GAAP	Generally Accepted Accounting Principles	TDR	Troubled debt restructuring
GDP	Gross domestic product	TLAC	Total loss-absorbing capacity
G-SIBs	Global systemically important banks	VaR	Value-at-risk
HQLA	High-quality liquid assets	VIE	Variable interest entity
IASB	International Accounting Standards Board	VME	Voting model entity
IFRS	International Financial Reporting Standards		

Accumulated benefit obligation - The actuarial present value of benefits (vested and non-vested) attributed to employee services rendered.

Alt-A securities - A mortgage risk categorization that falls between prime and subprime. Borrowers behind these mortgages will typically have clean credit histories but the mortgage itself will generally have issues that increase its risk profile.

Alternative investments - Usually refers to investments in hedge funds, leveraged loans, subordinated and distressed debt, real estate and foreign currency overlay. Examples of alternative investment strategies are: long-short equity, event-driven, statistical arbitrage, fixed income arbitrage, convertible arbitrage, short bias, global macro and equity market neutral.

Asset-backed security (“ABS”) - A financial security backed by a loan, lease or receivables against assets other than real estate and mortgage-backed securities.

Assets under custody and/or administration (“AUC/A”) - Assets that we hold directly or indirectly on behalf of clients under a safekeeping or custody arrangement or for which we provide administrative services for clients. The following types of assets under administration are not and historically have not been included in AUC/A: performance and risk analytics, transfer agency and asset aggregation services. To the extent that we provide more than one AUC/A service for a client’s assets, the value of the asset is only counted once in the total amount of AUC/A.

Assets under management (“AUM”) - Includes assets beneficially owned by our clients or customers which we hold in various capacities that are either actively or passively managed, as well as the value of hedges supporting customer liabilities. These assets and liabilities are not on our balance sheet.

CAMELS - An international bank-rating system where bank supervisory authorities rate institutions according to six factors. The six factors are Capital adequacy, Asset quality, Management quality, Earnings, Liquidity and Sensitivity to Market Risk.

Collateral management - A comprehensive program designed to simplify collateralization and expedite securities transfers for buyers and sellers.

Collateralized loan obligation (“CLO”) - A debt security backed by a pool of commercial loans.

Collective trust fund - An investment fund formed from the pooling of investments by investors.

Common Equity Tier 1 capital (“CET1”) - The sum of surplus (net of treasury stock), retained earnings, accumulated other comprehensive income (loss), and common equity Tier 1 minority interest subject to certain limitations, minus certain regulatory adjustments and deductions.

Counterparty risk (default risk) - The risk that a counterparty will not pay as obligated on a contract, trade or transaction.

Credit derivatives - Contractual agreements that provide insurance against a credit event of one or more referenced credits. Such events include bankruptcy, insolvency and failure to meet payment obligations when due.

Credit risk - The risk of loss due to borrower or counterparty default.

Credit valuation adjustment (“CVA”) - The market value of counterparty credit risk on OTC derivative transactions.

Currency swaps - An agreement to exchange stipulated amounts of one currency for another currency.

Daily average revenue trades (“DARTS”) - Represents the number of trades from which an entity can expect to generate revenue through fees or commissions on a given day.

Debit valuation adjustment (“DVA”) - The market value of our credit risk on OTC derivative transactions.

Depository Receipts - A negotiable security that generally represents a non-U.S. company’s publicly traded equity.

Derivative - A contract or agreement whose value is derived from changes in interest rates, foreign exchange rates, prices of securities or commodities, credit worthiness for credit default swaps or financial or commodity indices.

Earnings allocated to participating securities - Amount of undistributed earnings, after payment of taxes, preferred stock dividends and the required adjustment for common stock dividends declared, that is allocated to securities that are eligible to receive a portion of the Company's earnings.

Economic capital - The amount of capital required to absorb potential losses and reflects the probability of remaining solvent over a one-year time horizon.

Economic value of equity ("EVE") - An aggregation of discounted future cash flows of assets and liabilities over a long-term horizon.

Eurozone - Formed by European Union Member States whose currency is the euro (€) and in which a single monetary policy is conducted under the responsibility of the Governing Council of the ECB. The Eurozone currently includes Germany, France, Belgium, the Netherlands, Luxembourg, Austria, Finland, Italy, Ireland, Spain, Portugal, Greece, Estonia, Cyprus, Malta, Slovenia, Slovakia, Latvia and Lithuania.

Fiduciary risk - The risk arising from our role as trustee, executor, investment agent or guardian in accordance with governing documents, prudent person principles and applicable laws, rules and regulations.

Foreign currency options - Similar to interest rate options except they are based on foreign exchange rates. Also, see interest rate options in this glossary.

Foreign currency swaps - An agreement to exchange stipulated amounts of one currency for another currency at one or more future dates.

Foreign exchange contracts - Contracts that provide for the future receipt or delivery of foreign currency at previously agreed-upon terms.

Forward rate agreements - Contracts to exchange payments on a specified future date, based on a market change in interest rates from trade date to contract settlement date.

Fully taxable equivalent ("FTE") - Basis for comparison of yields on assets having ordinary taxability with assets for which special tax exemptions apply. The FTE adjustment reflects an increase in the interest yield or return on a tax-exempt

asset to a level that would be comparable had the asset been fully taxable.

Generally accepted accounting principles ("GAAP") - Accounting rules and conventions defining acceptable practices in preparing financial statements in the U.S. The FASB is the primary source of accounting rules.

Grantor Trust - A legal, passive entity through which pass-through securities are sold to investors.

Hedge fund - A fund which is allowed to use diverse strategies that are unavailable to mutual funds, including selling short, leverage, program trading, swaps, arbitrage and derivatives.

High-quality liquid assets ("HQLA") - Assets that can be converted into cash at little or no loss of value in private markets and are considered unencumbered.

Impairment - When an asset's market value is less than its carrying value.

Interest rate options - Contracts to modify interest rate risk in exchange for the payment of a premium when the contract is initiated. As a writer of interest rate options, we receive a premium in exchange for bearing the risk of unfavorable changes in interest rates. Conversely, as a purchaser of an option, we pay a premium for the right, but not the obligation, to buy or sell a financial instrument or currency at predetermined terms in the future.

Interest rate sensitivity - The exposure of net interest income to interest rate movements.

Interest rate swaps - Contracts in which a series of interest rate flows in a single currency are exchanged over a prescribed period. Interest rate swaps are the most common type of derivative contract that we use in our asset/liability management activities.

Investment grade - Represents Moody's long-term rating of Baa3 or better; and/or a Standard & Poor's, Fitch or DBRS long-term rating of BBB- or better; or if unrated, an equivalent rating using our internal risk ratings. Instruments that fall below these levels are considered to be non-investment grade.

Joint venture - A company or entity owned and operated by a group of companies for a specific business purpose, no one of which has a majority interest.

Leverage ratio - Tier 1 capital divided by quarterly average total assets, as defined by the regulators.

Liquidity coverage ratio (“LCR”) - A Basel III framework requirement for banks and BHCs to measure liquidity. It is designed to ensure that certain banking organizations, including BNY Mellon, maintain a minimum amount of unencumbered HQLA sufficient to withstand the net cash outflow under a hypothetical standardized acute liquidity stress scenario for a 30-day time horizon.

Liquidity risk - The risk of being unable to fund our portfolio of assets at appropriate maturities and rates, and the risk of being unable to liquidate a position in a timely manner at a reasonable price.

Litigation risk - Arises when in the ordinary course of business, we are named as defendants or made parties to legal actions.

Market risk - The potential loss in value of portfolios and financial instruments caused by movements in market variables, such as interest and foreign exchange rates, credit spreads, and equity and commodity prices.

Master netting agreement - An agreement between two counterparties that have multiple contracts with each other that provides for the net settlement of all contracts through a single payment in the event of default or termination of any one contract.

Mortgage-backed security (“MBS”) - An asset-backed security whose cash flows are backed by the principal and interest payments of a set of mortgage loans.

Net interest margin - The result of dividing net interest revenue by average interest-earning assets.

Notice of proposed rulemaking (“NPR”) - A public notice issued by law when one of the independent agencies of the U.S. Government wishes to add, remove, or change a rule or regulation as part of the rulemaking process.

Operational risk - The risk of loss resulting from inadequate or failed processes or systems, human factors or external events.

Other-than-temporary impairment (“OTTI”) - An impairment charge taken on a security whose fair value has fallen below the carrying value on the

balance sheet and its value is not expected to recover through the holding period of the security.

Performance fees - Fees received by an investment advisor based upon the fund’s performance for the period relative to various predetermined benchmarks.

Pre-tax operating leverage - The rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

Pre-tax operating margin - Income before taxes for a period divided by total revenue for that period.

Prime securities - A classification of securities collateralized by loans to borrowers who have a high-value and/or a good credit history.

Private equity/venture capital - Investment in start-up companies or those in the early processes of developing products and services with perceived, long-term growth potential.

Projected benefit obligation (“PBO”) - The actuarial present value of all benefits accrued on employee service rendered prior to the calculation date, including allowance for future salary increases if the pension benefit is based on future compensation levels.

Rating agency - An independent agency that assesses the credit quality and likelihood of default of an issue or issuer and assigns a rating to that issue or issuer.

Real estate investment trust (“REIT”) - An investor-owned corporation, trust or association that sells shares to investors and invests in income-producing property.

Repurchase agreement (“Repo”) - An instrument used to raise short term funds whereby securities are sold with an agreement for the seller to buy back the securities at a later date.

Reputational risk - Arises when events or actions that negatively impact our reputation lead to a loss of existing clients and could make it more challenging to acquire new business.

Residential mortgage-backed security (“RMBS”) - An asset-backed security whose cash flows are backed by principal and interest payments of a set of residential mortgage loans.

Restructuring charges - Typically result from the consolidation and/or relocation of operations.

Return on assets - Net income applicable to common shareholders divided by average assets.

Return on common equity - Net income applicable to common shareholders divided by average common shareholders' equity.

Return on tangible common equity - Net income applicable to common shareholders, excluding amortization of intangible assets, divided by average tangible common shareholders' equity.

Securities lending transaction - A fully collateralized transaction in which the owner of a security agrees to lend the security through an agent (such as The Bank of New York Mellon) to a borrower, usually a broker/dealer or bank, on an open, overnight or term basis, under the terms of a prearranged contract, which generally matures in less than 90 days.

Sub-custodian - A local provider (e.g., a bank) contracted to provide specific custodial-related services in a selected country or geographic area.

Subprime securities - A classification of securities collateralized by loans to borrowers who have a tarnished or limited credit history.

Supplementary Leverage Ratio ("SLR") - An Advanced Approach banking organization's Basel III Supplementary Leverage Ratio is the simple arithmetic mean of the ratio of its Tier 1 capital to total leverage exposure (which is broadly defined to capture both on- and off-balance sheet exposures.)

Tangible common shareholders' equity - Common equity less goodwill and intangible assets adjusted for deferred tax liabilities associated with non-tax deductible intangible assets and tax deductible goodwill.

Unfunded commitments - Legally binding agreements to provide a defined level of financing until a specified future date.

Value-at-risk ("VaR") - A measure of the dollar amount of potential loss at a specified confidence level from adverse market movements in an ordinary market environment.

Variable interest entity ("VIE") - An entity that: (1) lacks enough equity investment at risk to permit the entity to finance its activities without additional financial support from other parties; (2) has equity owners that lack the right to make significant decisions affecting the entity's operations; and/or (3) has equity owners that do not have an obligation to absorb or the right to receive the entity's losses or return.

Management of BNY Mellon is responsible for establishing and maintaining adequate internal control over financial reporting for BNY Mellon, as such term is defined in Rule 13a-15(f) under the Exchange Act.

BNY Mellon's management, including its principal executive officer and principal financial officer, has assessed the effectiveness of BNY Mellon's internal control over financial reporting as of December 31, 2015. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). Based upon such assessment, management believes that, as of December 31, 2015, BNY Mellon's internal control over financial reporting is effective based upon those criteria.

KPMG LLP, the independent registered public accounting firm that audited BNY Mellon's 2015 financial statements included in this Annual Report under "Financial Statements and Notes," has issued a report with respect to the effectiveness of BNY Mellon's internal control over financial reporting. This report appears on page 141.

The Board of Directors and Shareholders
The Bank of New York Mellon Corporation:

We have audited The Bank of New York Mellon Corporation's ("BNY Mellon") internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). BNY Mellon's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express an opinion on BNY Mellon's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, BNY Mellon maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of BNY Mellon as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2015, and our report dated February 26, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

New York, New York
February 26, 2016

Item 1. Financial Statements

The Bank of New York Mellon Corporation (and its subsidiaries)

Consolidated Income Statement

<i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Fee and other revenue			
Investment services fees:			
Asset servicing	\$ 4,187	\$ 4,075	\$ 3,905
Clearing services	1,375	1,335	1,264
Issuer services	978	968	1,090
Treasury services	555	564	554
Total investment services fees	7,095	6,942	6,813
Investment management and performance fees	3,438	3,492	3,395
Foreign exchange and other trading revenue	768	570	674
Financing-related fees	220	169	172
Distribution and servicing	162	173	180
Investment and other income	316	1,212	481
Total fee revenue	11,999	12,558	11,715
Net securities gains — including other-than-temporary impairment	82	92	146
Noncredit-related portion of other-than-temporary impairment (recognized in other comprehensive income)	(1)	1	5
Net securities gains	83	91	141
Total fee and other revenue	12,082	12,649	11,856
Operations of consolidated investment management funds			
Investment income	115	503	548
Interest of investment management fund note holders	29	340	365
Income from consolidated investment management funds	86	163	183
Net interest revenue			
Interest revenue	3,326	3,234	3,352
Interest expense	300	354	343
Net interest revenue	3,026	2,880	3,009
Provision for credit losses	160	(48)	(35)
Net interest revenue after provision for credit losses	2,866	2,928	3,044
Noninterest expense			
Staff	5,837	5,845	6,019
Professional, legal and other purchased services	1,230	1,339	1,252
Software	627	620	596
Net occupancy	600	610	629
Distribution and servicing	381	428	435
Furniture and equipment	280	322	337
Sub-custodian	270	286	280
Business development	267	268	317
Other	961	1,031	1,029
Amortization of intangible assets	261	298	342
Merger and integration, litigation and restructuring charges	85	1,130	70
Total noninterest expense	10,799	12,177	11,306
Income			
Income before income taxes	4,235	3,563	3,777
Provision for income taxes	1,013	912	1,592
Net income	3,222	2,651	2,185
Net (income) attributable to noncontrolling interests (includes \$(68), \$(84) and \$(80) related to consolidated investment management funds, respectively)	(64)	(84)	(81)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	3,158	2,567	2,104
Preferred stock dividends	(105)	(73)	(64)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$ 3,053	\$ 2,494	\$ 2,040

Consolidated Income Statement (continued)

Net income applicable to common shareholders of The Bank of New York Mellon Corporation used for the earnings per share calculation (in millions)	Year ended Dec. 31,		
	2015	2014	2013
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$ 3,053	\$ 2,494	\$ 2,040
Less: Earnings allocated to participating securities	43	43	37
Change in the excess of redeemable value over the fair value of noncontrolling interests	N/A	N/A	1
Net income applicable to the common shareholders of The Bank of New York Mellon Corporation after required adjustment for the calculation of basic and diluted earnings per common share	\$ 3,010	\$ 2,451	\$ 2,002

Average common shares and equivalents outstanding of The Bank of New York Mellon Corporation (in thousands)	Year ended Dec. 31,		
	2015	2014	2013
Basic	1,104,719	1,129,897	1,150,689
Common stock equivalents	17,290	20,037	16,874
Less: Participating securities	(9,498)	(12,454)	(13,122)
Diluted	1,112,511	1,137,480	1,154,441
Anti-dilutive securities (a)	28,736	43,735	75,847

Earnings per share applicable to the common shareholders of The Bank of New York Mellon Corporation (b) (in dollars)	Year ended Dec. 31,		
	2015	2014	2013
Basic	\$ 2.73	\$ 2.17	\$ 1.74
Diluted	\$ 2.71	\$ 2.15	\$ 1.73

(a) Represents stock options, restricted stock, restricted stock units and participating securities outstanding but not included in the computation of diluted average common shares because their effect would be anti-dilutive.

(b) Basic and diluted earnings per share under the two-class method are determined on the net income applicable to common shareholders of The Bank of New York Mellon Corporation reported on the income statement less earnings allocated to participating securities, and the change in the excess of redeemable value over the fair value of noncontrolling interests, if applicable.

See accompanying Notes to Consolidated Financial Statements.

Consolidated Comprehensive Income Statement

<i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Net income	\$ 3,222	\$ 2,651	\$ 2,185
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments	(599)	(806)	192
Unrealized (loss) gain on assets available-for-sale:			
Unrealized (loss) gain arising during the period	(363)	413	(889)
Reclassification adjustment	(52)	(58)	(74)
Total unrealized (loss) gain on assets available-for-sale	(415)	355	(963)
Defined benefit plans:			
Prior service cost arising during the period	—	2	(1)
Net (loss) gain arising during the period	(65)	(479)	429
Foreign exchange adjustment	—	(1)	—
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost	69	77	126
Total defined benefit plans	4	(401)	554
Net unrealized gain (loss) on cash flow hedges	8	(15)	9
Total other comprehensive (loss), net of tax <i>(a)</i>	(1,002)	(867)	(208)
Net (income) attributable to noncontrolling interests	(64)	(84)	(81)
Other comprehensive loss (income) attributable to noncontrolling interests	36	125	(41)
Net comprehensive income	\$ 2,192	\$ 1,825	\$ 1,855

(a) Other comprehensive (loss) attributable to The Bank of New York Mellon Corporation shareholders was \$(966) million for the year ended Dec. 31, 2015, \$(742) million for the year ended Dec. 31, 2014 and \$(249) million for the year ended Dec. 31, 2013.

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheet

<i>(dollars in millions, except per share amounts)</i>	Dec. 31,	
	2015	2014
Assets		
Cash and due from:		
Banks	\$ 6,537	\$ 6,970
Interest-bearing deposits with the Federal Reserve and other central banks	113,203	96,682
Interest-bearing deposits with banks	15,146	19,495
Federal funds sold and securities purchased under resale agreements	24,373	20,302
Securities:		
Held-to-maturity (fair value of \$43,204 and \$21,127)	43,312	20,933
Available-for-sale	75,867	98,330
Total securities	119,179	119,263
Trading assets	7,368	9,881
Loans (includes \$422 and \$21, at fair value)	63,703	59,132
Allowance for loan losses	(157)	(191)
Net loans	63,546	58,941
Premises and equipment	1,379	1,394
Accrued interest receivable	562	607
Goodwill	17,618	17,869
Intangible assets	3,842	4,127
Other assets (includes \$1,087 and \$1,916, at fair value)	19,626	20,490
Subtotal assets of operations	392,379	376,021
Assets of consolidated investment management funds, at fair value:		
Trading assets	1,228	8,678
Other assets	173	604
Subtotal assets of consolidated investment management funds, at fair value	1,401	9,282
Total assets	\$ 393,780	\$ 385,303
Liabilities		
Deposits:		
Noninterest-bearing (principally U.S. offices)	\$ 96,277	\$ 104,240
Interest-bearing deposits in U.S. offices	51,704	53,236
Interest-bearing deposits in Non-U.S. offices	131,629	108,393
Total deposits	279,610	265,869
Federal funds purchased and securities sold under repurchase agreements	15,002	11,469
Trading liabilities	4,501	7,434
Payables to customers and broker-dealers	21,900	21,181
Other borrowed funds	523	786
Accrued taxes and other expenses	5,986	6,903
Other liabilities (including allowance for lending-related commitments of \$118 and \$89, also includes \$392 and \$451, at fair value)	5,490	5,025
Long-term debt (includes \$359 and \$347, at fair value)	21,547	20,264
Subtotal liabilities of operations	354,559	338,931
Liabilities of consolidated investment management funds, at fair value:		
Trading liabilities	229	7,660
Other liabilities	17	9
Subtotal liabilities of consolidated investment management funds, at fair value	246	7,669
Total liabilities	354,805	346,600
Temporary equity		
Redeemable noncontrolling interests	200	229
Permanent equity		
Preferred stock – par value \$0.01 per share; authorized 100,000,000 shares; issued 25,826 and 15,826 shares	2,552	1,562
Common stock – par value \$0.01 per share; authorized 3,500,000,000 shares; issued 1,312,941,113 and 1,290,222,821 shares	13	13
Additional paid-in capital	25,262	24,626
Retained earnings	19,974	17,683
Accumulated other comprehensive loss, net of tax	(2,600)	(1,634)
Less: Treasury stock of 227,598,128 and 171,995,262 common shares, at cost	(7,164)	(4,809)
Total The Bank of New York Mellon Corporation shareholders' equity	38,037	37,441
Nonredeemable noncontrolling interests of consolidated investment management funds	738	1,033
Total permanent equity	38,775	38,474
Total liabilities, temporary equity and permanent equity	\$ 393,780	\$ 385,303

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows

<i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Operating activities			
Net income	\$ 3,222	\$ 2,651	\$ 2,185
Net (income) attributable to noncontrolling interests	(64)	(84)	(81)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	3,158	2,567	2,104
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	160	(48)	(35)
Pension plan contributions	(70)	(72)	(68)
Depreciation and amortization	1,457	1,292	1,389
Deferred tax (benefit)	47	(853)	526
Net securities (gains) and venture capital (income)	(84)	(97)	(147)
Change in trading activities	(414)	2,636	(3,946)
Originations of loans held-for-sale	(1,106)	—	—
Proceeds from the sales of loans originated for sale	725	—	—
Change in accruals and other, net	254	(941)	(465)
Net cash provided by (used for) operating activities	4,127	4,484	(642)
Investing activities			
Change in interest-bearing deposits with banks	4,225	16,010	10,667
Change in interest-bearing deposits with the Federal Reserve and other central banks	(16,521)	7,677	(14,249)
Purchases of securities held-to-maturity	(16,060)	(3,498)	(6,740)
Paydowns of securities held-to-maturity	3,698	1,885	1,545
Maturities of securities held-to-maturity	1,222	102	43
Purchases of securities available-for-sale	(33,785)	(69,101)	(28,622)
Sales of securities available-for-sale	19,016	31,254	19,455
Paydowns of securities available-for-sale	8,776	7,253	9,621
Maturities of securities available-for-sale	14,689	11,012	3,911
Net change in loans	(4,615)	(7,904)	(5,092)
Sales of loans and other real estate	362	312	104
Change in federal funds sold and securities purchased under resale agreements	(4,071)	(11,141)	(2,568)
Change in seed capital investments	287	(253)	(171)
Purchases of premises and equipment/capitalized software	(601)	(791)	(609)
Proceeds from the sale of premises and equipment	—	585	—
Acquisitions, net of cash	(9)	(28)	(19)
Dispositions, net of cash	17	64	84
Other, net	3,583	4,887	(560)
Net cash (used for) investing activities	(19,787)	(11,675)	(13,200)
Financing activities			
Change in deposits	11,890	2,247	13,960
Change in federal funds purchased and securities sold under repurchase agreements	3,533	1,821	2,221
Change in payables to customers and broker-dealers	719	5,474	(388)
Change in other borrowed funds	(394)	135	(672)
Change in commercial paper	—	(96)	(242)
Net proceeds from the issuance of long-term debt	4,986	4,686	3,892
Repayments of long-term debt	(3,659)	(4,376)	(2,035)
Proceeds from the exercise of stock options	326	370	263
Issuance of common stock	26	26	25
Issuance of preferred stock	990	—	494
Treasury stock acquired	(2,355)	(1,669)	(1,026)
Common cash dividends paid	(760)	(760)	(680)
Preferred cash dividends paid	(105)	(73)	(64)
Other, net	(12)	44	(127)
Net cash provided by financing activities	15,185	7,829	15,621
Effect of exchange rate changes on cash	42	(128)	(46)
Change in cash and due from banks			
Change in cash and due from banks	(433)	510	1,733
Cash and due from banks at beginning of period	6,970	6,460	4,727
Cash and due from banks at end of period	\$ 6,537	\$ 6,970	\$ 6,460
Supplemental disclosures			
Interest paid	\$ 295	\$ 344	\$ 347
Income taxes paid	1,015	1,363	400
Income taxes refunded	901	144	29

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Equity

(in millions, except per share amounts)	The Bank of New York Mellon Corporation shareholders						Non-redeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock			
Balance at Dec. 31, 2014	\$ 1,562	\$ 13	\$ 24,626	\$ 17,683	\$ (1,634)	\$ (4,809)	\$ 1,033	\$ 38,474	(a) \$ 229
Adjustment for the cumulative effect of applying ASU 2015-02 for the consolidation of a legal entity	—	—	—	—	—	—	602	602	—
Adjustment for the cumulative effect of applying ASU 2015-02 for the deconsolidation of a legal entity	—	—	—	—	—	—	(866)	(866)	—
Adjusted balance at Jan. 1, 2015	1,562	13	24,626	17,683	(1,634)	(4,809)	769	38,210	229
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	48
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	(92)
Other net changes in noncontrolling interests	—	—	(26)	—	—	—	(73)	(99)	29
Net income	—	—	—	3,158	—	—	68	3,226	(4)
Other comprehensive (loss)	—	—	—	—	(966)	—	(26)	(992)	(10)
Dividends:									
Common stock at \$0.68 per share	—	—	—	(762)	—	—	—	(762)	—
Preferred stock	—	—	—	(105)	—	—	—	(105)	—
Repurchase of common stock	—	—	—	—	—	(2,355)	—	(2,355)	—
Common stock issued under:									
Employee benefit plans	—	—	25	—	—	—	—	25	—
Direct stock purchase and dividend reinvestment plan	—	—	21	—	—	—	—	21	—
Preferred stock issued	990	—	—	—	—	—	—	990	—
Stock awards and options exercised	—	—	616	—	—	—	—	616	—
Balance at Dec. 31, 2015	\$ 2,552	\$ 13	\$ 25,262	\$ 19,974	\$ (2,600)	\$ (7,164)	\$ 738	\$ 38,775	(a) \$ 200

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of \$35,879 million at Dec. 31, 2014 and \$35,485 million at Dec. 31, 2015.

Consolidated Statement of Changes in Equity (continued)

(in millions, except per share amounts)	The Bank of New York Mellon Corporation shareholders						Non-redeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss), net of tax	Treasury stock			
Balance at Dec. 31, 2013	\$ 1,562	\$ 13	\$ 24,002	\$ 15,952	\$ (892)	\$ (3,140)	\$ 783	\$ 38,280	(a) \$ 230
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	63
Redemption of subsidiary shares from noncontrolling interests	—	—	(31)	—	—	—	—	(31)	(103)
Other net changes in noncontrolling interests	—	—	10	—	—	—	277	287	53
Net income	—	—	—	2,567	—	—	84	2,651	—
Other comprehensive (loss)	—	—	—	—	(742)	—	(111)	(853)	(14)
Dividends:									
Common stock at \$0.66 per share	—	—	—	(763)	—	—	—	(763)	—
Preferred stock	—	—	—	(73)	—	—	—	(73)	—
Repurchase of common stock	—	—	—	—	—	(1,669)	—	(1,669)	—
Common stock issued under:									
Employee benefit plans	—	—	24	—	—	—	—	24	—
Direct stock purchase and dividend reinvestment plan	—	—	21	—	—	—	—	21	—
Stock awards and options exercised	—	—	600	—	—	—	—	600	—
Balance at Dec. 31, 2014	\$ 1,562	\$ 13	\$ 24,626	\$ 17,683	\$ (1,634)	\$ (4,809)	\$ 1,033	\$ 38,474	(a) \$ 229

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of \$35,935 million at Dec. 31, 2013 and \$35,879 million at Dec. 31, 2014.

Consolidated Statement of Changes in Equity (continued)

<i>(in millions, except per share amounts)</i>	The Bank of New York Mellon Corporation shareholders						Non-redeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss), net of tax	Treasury stock			
Balance at Dec. 31, 2012	\$ 1,068	\$ 13	\$ 23,485	\$ 14,605	\$ (643)	\$ (2,114)	\$ 833	37,247 (a)	\$ 178
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	49
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	(81)
Other net changes in noncontrolling interests	—	—	21	—	—	—	(161)	(140)	73
Net income	—	—	—	2,104	—	—	80	2,184	1
Other comprehensive income (loss)	—	—	—	(12)	(249)	—	31	(230)	10
Dividends:									
Common stock at \$0.58 per share	—	—	—	(681)	—	—	—	(681)	—
Preferred stock	—	—	—	(64)	—	—	—	(64)	—
Repurchase of common stock	—	—	—	—	—	(1,026)	—	(1,026)	—
Common stock issued under:									
Employee benefit plans	—	—	25	—	—	—	—	25	—
Direct stock purchase and dividend reinvestment plan	—	—	20	—	—	—	—	20	—
Preferred stock issued	494	—	—	—	—	—	—	494	—
Stock awards and options exercised	—	—	451	—	—	—	—	451	—
Balance at Dec. 31, 2013	\$ 1,562	\$ 13	\$ 24,002	\$ 15,952	\$ (892)	\$ (3,140)	\$ 783	\$ 38,280 (a)	\$ 230

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of \$35,346 million at Dec. 31, 2012 and \$35,935 million at Dec. 31, 2013.

See accompanying Notes to Consolidated Financial Statements.

Note 1 - Summary of significant accounting and reporting policies

Basis of presentation

The accounting and financial reporting policies of BNY Mellon, a global financial services company, conform to U.S. generally accepted accounting principles (“GAAP”) and prevailing industry practices.

In the opinion of management, all adjustments necessary for a fair presentation of financial position, results of operations and cash flows for the periods presented have been made. These financial statements should be read in conjunction with BNY Mellon’s Annual Report on Form 10-K for the year ended Dec. 31, 2015. Certain immaterial reclassifications have been made to prior periods to place them on a basis comparable with current period presentation.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates based upon assumptions about future economic and market conditions which affect reported amounts and related disclosures in our financial statements. Although our current estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition. Amounts subject to estimates are items such as the allowance for loan losses and lending-related commitments, the fair value of financial instruments and derivatives, other-than-temporary impairment, goodwill and other intangibles and pension accounting. Among other effects, such changes in estimates could result in future impairments of investment securities, goodwill and intangible assets and establishment of allowances for loan losses and lending-related commitments as well as changes in pension and post-retirement expense.

Equity method investments

The consolidated financial statements include the accounts of BNY Mellon and its subsidiaries. Equity investments of less than a majority but at least 20%

ownership are accounted for by the equity method and classified as other assets. Earnings on these investments are reflected in fee and other revenue as investment services fees, investment management and performance fees or investment and other income, as appropriate, in the period earned.

A loss in value of an equity investment that is determined to be other-than-temporary, is recognized by reducing the carrying value of the equity investment down to its fair value.

Our most significant equity method investments are:

Equity method investments at Dec. 31, 2015		
<i>(dollars in millions)</i>	Percentage ownership	Book value
CIBC Mellon	50.0%	\$ 473
Siguler Guff	20.0%	\$ 262
ConvergEx	33.9%	\$ 86 <i>(a)</i>

(a) In addition to the common ownership interest noted, BNY Mellon also holds an interest in ConvergEx nonvoting Series B preferred units. The book value at Dec. 31, 2015 is reflective of our combined common and preferred interests in ConvergEx.

Acquired businesses

The income statement and balance sheet include results of acquired businesses accounted for under the acquisition method of accounting pursuant to ASC 805, *Business Combinations* and equity investments from the dates of acquisition. For acquisitions completed after Jan. 1, 2009, contingent purchase consideration was measured at its fair value and recorded on the purchase date. Any subsequent changes in the fair value of a contingent consideration liability will be recorded through the income statement.

Parent financial statements

The Parent financial statements in Note 19 of the Notes to Consolidated Financial Statements include the accounts of the Parent; those of a wholly-owned financing subsidiary that functions as a financing entity for BNY Mellon and its subsidiaries; and MIPA, LLC, a single-member limited liability company, created to hold and administer corporate-owned life insurance. Financial data for the Parent, the financing subsidiary and the single-member limited liability company are combined for financial reporting purposes because of the limited function of

these entities and the unconditional guarantee by BNY Mellon of their obligations.

Nature of operations

BNY Mellon is a global leader in providing a broad range of financial products and services in domestic and international markets. Through our two principal businesses, Investment Management and Investment Services, we serve the following major classes of customers - institutions, corporations, and high net worth individuals. For institutions and corporations, we provide the following services:

- investment management;
- trust and custody;
- foreign exchange;
- fund administration;
- global collateral services;
- securities lending;
- depositary receipts;
- corporate trust;
- global payment/cash management;
- banking services; and
- clearing services.

For individuals, we provide mutual funds, separate accounts, wealth management and private banking services. BNY Mellon's investment management businesses provide investment products in many asset classes and investment styles on a global basis.

Variable interest and voting model entities

When evaluating an entity for possible consolidation, the Company must determine whether or not it has a variable interest in the entity. Variable interests are investments or other interests that absorb portions of an entity's expected losses or receive portions of the entity's expected returns. BNY Mellon's variable interests may include its decision maker or service provider fees, its direct and indirect investments and investments made by related parties, including related parties under common control. If it is determined that BNY Mellon does not have a variable interest in the entity, no further analysis is required and BNY Mellon does not consolidate the entity.

If BNY Mellon holds a variable interest in the entity an analysis must be performed to determine if the entity is a variable interest entity ("VIE") or a voting model entity ("VME").

We consider the underlying facts and circumstances of individual entities when assessing whether or not an entity is a VIE. An entity is determined to be a VIE if the equity investors:

- do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support; or
- lack one or more of the following characteristics of a controlling financial interest:
 - the power, through voting rights or similar rights, to direct the activities of an entity that most significantly impact the entity's economic performance.
 - the obligation to absorb the expected losses of the entity.
 - the right to receive the expected residual returns of the entity.

BNY Mellon is required to consolidate a VIE if it is determined to have a controlling financial interest in the entity and therefore is deemed to be the primary beneficiary of the VIE. BNY Mellon is determined to have a controlling financial interest in a VIE when it has both 1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and 2) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to that VIE.

For entities that do not meet the definition of a VIE, the entity is considered a VME. For these entities, if the Company can exert control over the financial and operating policies of an investee, which can occur if it has a 50% or more voting interest in the entity, BNY Mellon consolidates the entity.

BNY Mellon's VIEs generally include certain retail, institutional and alternative investment funds, including CLOs offered to its retail and institutional customers in which it acts as the fund's investment manager. The funds are established to provide our clients access to investment vehicles with specific investment objectives and strategies that address the client's investment needs. BNY Mellon earns investment management fees on these funds as well as performance fees in certain funds. We may also provide start-up capital for new funds. The VIEs are primarily financed by the client's investments in the funds' equity or debt.

Prior to the adoption of ASU 2015-02, effective Jan. 1, 2015, the accounting guidance on the consolidation

of VIEs was included in ASC 810 Consolidation, ASU 2009-17 “Improvements to Financial Reporting by Enterprises Involved with Variable Interest Entities,” and ASU 2010-10 “Amendments for Certain Investment Funds,” which deferred ASU 2009-17 for certain asset managers’ interests in entities that apply the specialized accounting guidance for investment companies or that have the attributes of investment companies and for interests in money market funds.

As a result of ASU 2010-10, BNY Mellon continued to apply ASC 810 to its mutual funds, hedge funds, private equity funds, collective investment funds and real estate investment trusts. If these entities were determined to be VIEs, primary beneficiary calculations were prepared in accordance with ASC 810 to determine whether or not BNY Mellon was the primary beneficiary and required to consolidate the VIE. The primary beneficiary of a VIE was the party that absorbed a majority of the VIE’s expected losses, received a majority of its expected residual returns or both.

BNY Mellon had two securitizations and several CLOs, which were assessed for consolidation in accordance with ASU 2009-17. The primary beneficiary of these VIE’s was the party that has both: (1) the power to direct the activities of the VIE that most significantly impact that entity’s economic performance, and (2) the obligation to absorb losses, or the right to receive benefits, from the VIE that could potentially be significant to the VIE.

Trading account securities, available-for-sale securities, and held-to-maturity securities

Securities are accounted for under ASC 320 *Investments - Debt and Equity Securities*. Securities are classified in the trading, available-for-sale investment or the held-to-maturity investment securities portfolios when they are purchased. Securities are classified as trading securities when our intention is to resell the securities. Securities are classified as available-for-sale securities when we intend to hold the securities for an indefinite period of time or when the securities may be used for tactical asset/liability purposes and may be sold from time to time to effectively manage interest rate exposure, prepayment risk and liquidity needs. Securities are classified as held-to-maturity securities when we intend to hold them until maturity.

Trading securities are measured at fair value. Trading revenue includes both realized and unrealized gains and losses. The liability incurred on short-sale transactions, representing the obligation to deliver securities, is included in trading liabilities at fair value.

Available-for-sale securities are measured at fair value. The difference between fair value and amortized cost representing unrealized gains or losses on assets classified as available-for-sale, are recorded net of tax as an addition to or deduction from OCI, unless a security is deemed to have OTTI. Gains and losses on sales of available-for-sale securities are reported in the income statement. The cost of debt and equity securities sold is determined on a specific identification and average cost method, respectively. Held-to-maturity securities are measured at amortized cost.

Income on investment securities purchased is adjusted for amortization of premium and accretion of discount on a level yield basis.

We routinely conduct periodic reviews to identify and evaluate each investment security to determine whether OTTI has occurred. We examine various factors when determining whether an impairment, representing the fair value of a security being below its amortized cost, is other than temporary. The following are examples of factors that BNY Mellon considers:

- The length of time and the extent to which the fair value has been less than the amortized cost basis;
- Whether management has an intent to sell the security;
- Whether the decline in fair value is attributable to specific adverse conditions affecting a particular investment;
- Whether the decline in fair value is attributable to specific conditions, such as conditions in an industry or in a geographic area;
- Whether a debt security has been downgraded by a rating agency;
- Whether a debt security exhibits cash flow deterioration; and
- For each non-agency RMBS, we compare the remaining credit enhancement that protects the individual security from losses against the projected losses of principal and/or interest expected to come from the underlying mortgage

collateral, to determine whether such credit losses might directly impact the relevant security.

When we do not intend to sell the security and it is more likely than not that BNY Mellon will not be required to sell the security prior to recovery of its cost basis, the credit component of an OTTI of a debt security is recognized in earnings and the non-credit component is recognized in OCI.

The determination of whether a credit loss exists is based on the best estimate of the present value of cash flows to be collected from the debt security. Generally, cash flows are discounted at the effective interest rate implicit in the debt security at the time of acquisition. For debt securities that are beneficial interests in securitized financial assets and are not high credit quality, ASC 325 provides that cash flows be discounted at the current yield used to accrete the beneficial interest.

If we intend to sell the security or it is more likely than not that BNY Mellon will be required to sell the security prior to recovery of its cost basis, the non-credit component of OTTI is recognized in earnings and subsequently accreted to interest income on an effective yield basis over the life of the security.

For held-to-maturity debt securities, the amount of OTTI recorded in OCI for the non-credit portion of a previous OTTI is amortized prospectively, as an increase to the carrying amount of the security, over the remaining life of the security on the basis of the timing of future estimated cash flows of the securities.

The accounting policies for the determination of the fair value of financial instruments and OTTI have been identified as “critical accounting estimates” as they require us to make numerous assumptions based on available market data. See Note 4 of the Notes to Consolidated Financial Statements for these disclosures.

Loans and leases

Loans are reported net of any unearned income and deferred fees and costs. Certain loan origination and upfront commitment fees, as well as certain direct loan origination and commitment costs, are deferred and amortized as a yield adjustment over the lives of the related loans. Loans held for sale are carried at the lower of cost or fair value.

Unearned revenue on direct financing leases is accreted over the lives of the leases in decreasing amounts to provide a constant rate of return on the net investment in the leases. Revenue on leveraged leases is recognized on a basis to achieve a constant yield on the outstanding investment in the lease, net of the related deferred tax liability, in the years in which the net investment is positive. Gains and losses on residual values of leased equipment sold are included in investment and other income.

Considering the nature of these leases and the number of significant assumptions, there is risk associated with the income recognition on these leases should any of the assumptions change materially in future periods.

A modified loan is considered a TDR if the debtor is experiencing financial difficulties and the creditor grants a concession to the debtor that would not otherwise be considered. A TDR may include a transfer of real estate or other assets from the debtor to the creditor, or a modification of the term of the loan. TDRs are accounted for as impaired loans (see the Nonperforming assets policy).

Nonperforming assets

Commercial loans are placed on nonaccrual status when principal or interest is past due 90 days or more, or when there is reasonable doubt that interest or principal will be collected.

When a first lien residential mortgage loan reaches 90 days delinquent, it is subject to an impairment test and may be placed on nonaccrual status. At 180 days delinquent, the loan is subject to further impairment testing. The loan will remain on accrual status if the realizable value of the collateral exceeds the unpaid principal balance plus accrued interest. If the loan is impaired, a charge-off is taken and the loan is placed on nonaccrual status. At 270 days delinquent, all first lien mortgages are placed on nonaccrual status. Second lien mortgages are automatically placed on nonaccrual status when they reach 90 days delinquent.

When a loan is placed on nonaccrual status, previously accrued and uncollected interest is reversed against current period interest revenue. Interest receipts on nonaccrual and impaired loans are recognized as interest revenue or are applied to principal when we believe the ultimate collectability of principal is in doubt. Nonaccrual loans generally

are restored to an accrual basis when principal and interest become current and remain current for a specified period.

A loan is considered to be impaired when it is probable that we will be unable to collect all principal and interest amounts due according to the contractual terms of the loan agreement. An impairment allowance on loans \$1 million or greater is required to be measured based upon the loan's market price, the present value of expected future cash flows, discounted at the loan's initial effective interest rate, or at fair value of the collateral if the loan is collateral dependent. If the loan valuation is less than the recorded value of the loan, an impairment allowance is established by a provision for credit loss. Impairment allowances are not needed when the recorded investment in an impaired loan is less than the loan valuation.

Allowance for loan losses and allowance for lending-related commitments

The allowance for loan losses, shown as a valuation allowance to loans, and the allowance for lending-related commitments recorded in other liabilities are referred to as BNY Mellon's allowance for credit losses. The accounting policy for the determination of the adequacy of the allowances has been identified as a "critical accounting estimate" as it requires us to make numerous complex and subjective estimates and assumptions relating to amounts which are inherently uncertain.

The allowance for loan losses is maintained to absorb losses inherent in the loan portfolio as of the balance sheet date based on our judgment. The allowance determination methodology is designed to provide procedural discipline in assessing the appropriateness of the allowance. Credit losses are charged against the allowance. Recoveries are added to the allowance.

The methodology for determining the allowance for lending-related commitments considers the same factors as the allowance for loan losses, as well as an estimate of the probability of drawdown. We utilize a quantitative methodology and qualitative framework for determining the allowance for loan losses and the allowance for lending-related commitments. Within this qualitative framework, management applies judgment when assessing internal risk factors and

environmental factors to compute an additional allowance for each component of the loan portfolio.

The three elements of the allowance for loan losses and the allowance for lending-related commitments include the qualitative allowance framework. The three elements are:

- an allowance for impaired credits of \$1 million or greater;
- an allowance for higher risk-rated credits and pass-rated credits; and
- an allowance for residential mortgage loans.

Our lending is primarily to institutional customers. As a result, our loans are generally larger than \$1 million. Therefore, the first element, impaired credits, is based on individual analysis of all impaired loans of \$1 million and greater. The allowance is measured by the difference between the recorded value of impaired loans and their impaired value. Impaired value is either the present value of the expected future cash flows from the borrower, the market value of the loan, or the fair value of the collateral, if the loan is collateral dependent.

The second element, higher risk-rated credits and pass-rated credits, is based on our probable loss model. Individual credit analyses are performed on such loans before being assigned a credit rating. All borrowers are assigned to pools based on their credit rating. The probable loss inherent in each loan in a pool incorporates the borrower's credit rating, loss given default rating and maturity. The loss given default incorporates a recovery expectation and an estimate of the use of the facility at default (usage given default). The borrower's probability of default is derived from the associated credit rating. Borrower ratings are reviewed at least annually and are periodically mapped to third-party databases, including rating agency and default and recovery databases, to ensure ongoing consistency and validity. Higher risk-rated credits are reviewed quarterly.

The third element, the allowance for residential mortgage loans, is determined by segregating five mortgage pools into delinquency periods ranging from current through foreclosure. Each of these delinquency periods is assigned a probability of default. A specific loss given default is assigned for each mortgage pool. BNY Mellon assigns all residential mortgage pools, except home equity lines of credit, a probability of default and loss given

default based on default and loss data derived from internal historical data related to our residential mortgage portfolio. The resulting probable loss factor (the probability of default multiplied by the loss given default) is applied against the loan balance to determine the allowance held for each pool. For home equity lines of credit, probability of default and loss given default are based on external data from third-party databases due to the small size of the portfolio and insufficient internal data.

The qualitative framework is used to determine an additional allowance for each portfolio based on the factors below:

Internal risk factors:

- Nonperforming loans to total non-margin loans;
- Criticized assets to total loans and lending-related commitments;
- Borrower concentration; and
- Significant concentrations in high risk industries and countries.

Environmental risk factors:

- U.S. non-investment grade default rate;
- Unemployment rate; and
- Change in real GDP.

The objective of the qualitative framework is to capture incurred losses that may not have been fully captured in the quantitative reserve, which is based primarily on historical data. Management determines the qualitative allowance each period based on judgment informed by consideration of internal and external risk factors and other considerations that may be deemed relevant during the period. Once determined in the aggregate, our qualitative allowance is then allocated to each of our loan classes based on the respective classes' quantitative allowance balances with the allocations adjusted, when necessary, for class specific risk factors.

For each risk factor, we calculate the minimum and maximum values, and percentiles in-between, to evaluate the distribution of our historical experience. The distribution of historical experience is compared to the risk factor's current quarter observed experience to assess the current risk inherent in the portfolio and overall direction/trend of a risk factor relative to our historical experience.

Based on this analysis, we assign a risk level - no impact, low, moderate, high and elevated - to each

risk factor for the current quarter. Management assesses the impact of each risk factor to determine an aggregate risk level. We do not quantify the impact of any particular risk factor. Management's assessment of the risk factors, as well as the trend in the quantitative allowance, supports management's judgment for the overall required qualitative allowance. A smaller qualitative allowance may be required when our quantitative allowance has reflected incurred losses associated with the aggregate risk level. A greater qualitative allowance may be required if our quantitative allowance does not yet reflect the incurred losses associated with the aggregate risk level.

The allocation of the allowance for credit losses is inherently judgmental, and the entire allowance for credit losses is available to absorb credit losses regardless of the nature of the loss.

Premises and equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization is computed using the straight-line method over the estimated useful life of the owned asset and, for leasehold improvements, over the lesser of the remaining term of the leased facility or the estimated economic life of the improvement. For owned and capitalized assets, estimated useful lives range from 2 to 40 years. Maintenance and repairs are charged to expense as incurred, while major improvements are capitalized and amortized to operating expense over their identified useful lives.

Software

BNY Mellon capitalizes costs relating to acquired software and internal-use software development projects that provide new or significantly improved functionality. We capitalize projects that are expected to result in longer-term operational benefits, such as replacement systems or new applications that result in significantly increased operational efficiencies or functionality. All other costs incurred in connection with an internal-use software project are expensed as incurred. Capitalized software is recorded in other assets.

Identified intangible assets and goodwill

Identified intangible assets with estimable lives are amortized in a pattern consistent with the assets' identifiable cash flows or using a straight-line method over their remaining estimated benefit periods if the pattern of cash flows is not estimable. Intangible assets with estimable lives are reviewed for possible impairment when events or changed circumstances may affect the underlying basis of the asset. Goodwill and intangibles with indefinite lives are not amortized, but are assessed annually for impairment, or more often if events and circumstances indicate it is more likely than not they may be impaired. The accounting policy for valuing and impairment testing of identified intangible assets and goodwill has been identified as a "critical accounting estimate" as it requires us to make numerous complex and subjective estimates. See Note 6 of the Notes to Consolidated Financial Statements for additional disclosures related to goodwill and intangible assets.

Investments in qualified affordable housing projects

Investments in qualified affordable housing projects through a limited liability entity are accounted for utilizing the proportional amortization method. Under the proportional amortization method, the initial cost of the investment is amortized in proportion to the tax credits and other tax benefits received and the net investment performance is recognized in the income statement as a component of income tax expense. Additionally, the value of the commitments to fund qualified affordable housing projects is included in other assets on the balance sheet and a liability is recorded for the unfunded portion.

Seed capital

Seed capital investments are classified as other assets and carried at fair value. Unrealized gains and losses on seed capital investments are recorded in investment and other income.

Noncontrolling interests

Noncontrolling interests included in permanent equity are adjusted for the income or (loss) attributable to the noncontrolling interest holders and any distributions to those shareholders. Redeemable noncontrolling interests are reported as temporary equity. BNY Mellon recognizes changes in the

redemption value of the redeemable noncontrolling interests as they occur and adjusts the carrying value to be equal to the redemption value.

Fee revenue

We record investment services fees, investment management fees, foreign exchange and other trading revenue, financing-related fees, distribution and servicing, and other revenue when the services are provided and earned based on contractual terms, when amounts are determined and collectability is reasonably assured.

Additionally, we recognize revenue from non-refundable, upfront implementation fees under outsourcing contracts using a straight-line method, commencing in the period the ongoing services are performed through the expected term of the contractual relationship. Incremental direct set-up costs of implementation, up to the related implementation fee or minimum fee revenue amount, are deferred and amortized over the same period that the related implementation fees are recognized. If a client terminates an outsourcing contract prematurely, the unamortized deferred incremental direct set-up costs and the unamortized deferred up-front implementation fees related to that contract are recognized in the period the contract is terminated.

Performance fees are recognized in the period in which the performance fees are earned and become determinable. Performance fees are generally calculated as a percentage of the applicable portfolio's performance in excess of a benchmark index or a peer group's performance. When a portfolio underperforms its benchmark or fails to generate positive performance, subsequent years' performance must generally exceed this shortfall prior to fees being earned. Amounts billable, which are subject to a clawback if future performance thresholds in current or future years are not met, are not recognized since the fees are potentially uncollectible. These fees are recognized when it is determined that they will be collected. When a multi-year performance contract provides that fees earned are billed ratably over the performance period, only the portion of the fees earned that are non-refundable are recognized.

Net interest revenue

Revenue on interest-earning assets and expense on interest-bearing liabilities is recognized based on the effective yield of the related financial instrument. Negative interest incurred on assets or charged on liabilities is presented as contra interest income and contra expense respectively.

Foreign currency translation

Assets and liabilities denominated in foreign currencies are translated to U.S. dollars at the rate of exchange on the balance sheet date. Transaction gains and losses are included in the income statement. Translation gains and losses on investments in foreign entities with functional currencies that are not the U.S. dollar are recorded as foreign currency translation adjustments in OCI. Revenue and expense transactions are translated at the applicable daily rate or the weighted average monthly exchange rate when applying the daily rate is not practical.

Pension

The measurement date for BNY Mellon's pension plans is Dec. 31. Plan assets are determined based on fair value generally representing observable market prices. The projected benefit obligation is determined based on the present value of projected benefit distributions at an assumed discount rate. The discount rate utilized is based on the yield curves of high-quality corporate bonds available in the marketplace. The net periodic pension expense or credit includes service costs, interest costs based on an assumed discount rate, an expected return on plan assets based on an actuarially derived market-related value, amortization of prior service cost and amortization of prior years' actuarial gains and losses.

Actuarial gains and losses include gains or losses related to changes in the amount of the projected benefit obligation or plan assets resulting from demographic or investment experience different than assumed, changes in the discount rate or other assumptions. To the extent an actuarial gain or loss exceeds 10% of the greater of the projected benefit obligation or the market-related value of plan assets, the excess is recognized over the future service periods of active employees. As a result of an amendment adopted on Jan. 29, 2015 to freeze benefit accruals under the U.S. pension plans effective June 30, 2015, future unrecognized actuarial gains and

losses for the U.S. plans that exceed a threshold amount are amortized over the average future life expectancy of plan participants with a maximum of 15 years.

Our expected long-term rate of return on plan assets is based on anticipated returns for each applicable asset class. Anticipated returns are weighted for the expected allocation for each asset class and are based on forecasts for prospective returns in the equity and fixed income markets, which should track the long-term historical returns for these markets. We also consider the growth outlook for U.S. and global economies, as well as current and prospective interest rates.

The market-related value utilized to determine the expected return on plan assets is based on the fair value of plan assets adjusted for the difference between expected returns and actual performance of plan assets. The difference between actual experience and expected returns on plan assets is included as an adjustment in the market-related value over a five-year period.

BNY Mellon's accounting policy regarding pensions has been identified as a "critical accounting estimate" as it requires management to make numerous complex and subjective assumptions relating to amounts which are inherently uncertain. See Note 18 of the Notes to Consolidated Financial Statements for additional disclosures related to pensions.

Severance

BNY Mellon provides separation benefits for U.S.-based employees through The Bank of New York Mellon Corporation Supplemental Unemployment Benefit Plan. These benefits are provided to eligible employees separated from their jobs for business reasons not related to individual performance. Basic separation benefits are generally based on the employee's years of continuous benefited service. Severance for employees based outside of the U.S. is determined in accordance with local agreements and legal requirements. Severance expense is recorded when management commits to an action that will result in separation and the amount of the liability can be reasonably estimated.

Income taxes

We record current tax liabilities or assets through charges or credits to the current tax provision for the estimated taxes payable or refundable for the current year. Deferred tax assets and liabilities are recorded for future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A deferred tax valuation allowance is established if it is more likely than not that all or a portion of the deferred tax assets will not be realized. A tax position that fails to meet a more-likely-than-not recognition threshold will result in either reduction of current or deferred tax assets, and/or recording of current or deferred tax liabilities. Interest and penalties related to income taxes are recorded as income tax expense.

Derivative financial instruments

Derivative contracts, such as futures contracts, forwards, interest rate swaps, foreign currency swaps and options and similar products used in trading activities are recorded at fair value. Gains and losses are included in foreign exchange and other trading revenue in fee and other revenue. Unrealized gains are recognized as trading assets and unrealized losses are recognized as trading liabilities, after taking into consideration master netting agreements.

We enter into various derivative financial instruments for non-trading purposes primarily as part of our asset/liability management process. These derivatives are designated as either fair value or cash flow hedges of certain assets and liabilities when we enter into the derivative contracts. Gains and losses associated with fair value hedges are recorded in income as well as any change in the value of the related hedged item associated with the designated risks being hedged. Gains and losses on cash flow hedges are recorded in OCI, until reclassified into earnings in the same period the hedged item impacts earnings. Foreign currency transaction gains and losses related to a hedged net investment in a foreign operation, net of their tax effect, are recorded with cumulative foreign currency translation adjustments within OCI.

We formally document all relationships between hedging instruments and hedged items, as well as our risk-management objectives and strategy for undertaking various hedging transactions.

We formally assess, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective and whether those derivatives are expected to remain highly effective in future periods. At inception, the potential causes of ineffectiveness related to each of our hedges is assessed to determine if we can expect the hedge to be highly effective over the life of the transaction and to determine the method for evaluating effectiveness on an ongoing basis.

Recognizing that changes in the value of derivatives used for hedging or the value of hedged items could result in significant ineffectiveness, we have processes in place that are designed to identify and evaluate such changes when they occur. Quarterly, we perform a quantitative effectiveness assessment and record any ineffectiveness in current earnings.

We discontinue hedge accounting prospectively when we determine that a derivative is no longer an effective hedge, the derivative expires, is sold, or management discontinues the derivative's hedge designation. Subsequent gains and losses on these derivatives are included in foreign exchange and other trading revenue. For discontinued fair value hedges, the accumulated gain or loss on the hedged item is amortized on a yield basis over the remaining life of the hedged item. Accumulated gains and losses, net of tax effect, from discontinued cash flow hedges are reclassified from OCI and recognized in current earnings in foreign exchange and other trading revenue as the hedged item impacts earnings. The accounting policy for the determination of the fair value of derivative financial instruments has been identified as a "critical accounting estimate" as it requires us to make numerous assumptions based on the available market data. See Note 23 of the Notes to Consolidated Financial Statements for additional disclosures related to derivative financial instruments.

Statement of cash flows

We have defined cash as cash and due from banks. Cash flows from hedging activities are classified in the same category as the items hedged.

Stock-based compensation

Compensation expense relating to all share-based payments is recognized in the income statement, on a straight-line basis, over the applicable vesting period.

Certain of our stock compensation grants vest when the employee retires. New grants with this feature are expensed by the first date the employee is eligible to retire.

Note 2 - Accounting changes and new accounting guidance

ASU - 2015-02 - Consolidation (Topic 810): Amendments to the Consolidation Analysis

In February 2015, the FASB issued ASU 2015-02 “Amendments to the Consolidation Analysis,” an amendment to ASC 810, Consolidation.

This ASU eliminated the indefinite deferral of ASU 2010-10 “Amendments for Certain Investment Funds” for asset management funds with characteristics of an investment company and also eliminated the presumption that a general partner should consolidate a limited partnership. Entities that comply with or operate in accordance with the requirements that are similar to those of Rule 2a-7 of the Investment Company Act of 1940 for registered money market funds are excluded from the scope of the ASU. This ASU also changed the consolidation analysis, particularly when a reporting entity has fee arrangements that meet certain requirements and for related party relationships.

The ASU is effective Jan. 1, 2016, with early adoption permitted during an interim period in fiscal year 2015.

In the second quarter of 2015, we elected to early adopt the new accounting guidance retrospectively to Jan. 1, 2015. As a result we restated the first quarter 2015 financial statements. The adoption of this ASU did not change the economic risks related to our businesses and therefore, our computation of economic capital did not change.

Adoption of the ASU resulted in a net decrease in consolidated total assets on our balance sheet at Jan. 1, 2015 of \$7.7 billion, a decrease of approximately 2%.

As of Dec. 31, 2015, we had \$1.4 billion in assets included in our consolidated financial statements related to investment management funds (VIEs and VMEs) we are required to consolidate and presented as assets of consolidated investment management funds. Approximately \$1.2 billion of these assets are classified as trading assets while the remainder is classified as other assets. The net assets of any consolidated investment management fund are solely available to settle the liabilities of the entity and to settle any investors’ ownership liquidation requests, including any seed capital invested by BNY Mellon.

Additionally, BNY Mellon had \$189 million included in other assets in its consolidated financial statements for non-consolidated VIE assets as of Dec. 31, 2015 where we are not the primary beneficiary of the entity. These assets relate solely to seed capital or residual interests invested in the VIEs.

ASU - 2015-07 - Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)

In May 2015, the FASB issued an ASU, “Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).” An entity’s investments, where fair value is measured at net asset value (“NAV”) per share (or its equivalent) using the practical expedient, should not be categorized in the fair value hierarchy. The fair value will be included in aggregate to permit the reconciliation of the fair value with line items presented in the statement of financial position. The ASU is effective Jan. 1, 2016, with early adoption permitted during interim periods in fiscal year 2015. The Company adopted the ASU in the second quarter of 2015 and restated its disclosures for comparative periods in Note 20 “Fair value measurement” and Note 18 “Employee benefit plans.”

ASU - 2014-11 - Transfers and Servicing (Topic 860): Repurchase-to-Maturity Transactions, Repurchase Financings, and Disclosures

In June 2014, the FASB issued an ASU, “Transfers and Servicing (Topic 860): Repurchase-to-Maturity Transactions, Repurchase Financings, and Disclosures,” which amends the accounting guidance for “repo-to-maturity” transactions and repurchase

agreements executed as repurchase financings. This ASU requires public entities to apply the accounting changes for the first interim or annual reporting period beginning after Dec. 15, 2014, and to comply with the enhanced disclosure requirements in the second quarter of 2015. The impact of adopting this ASU did not have a material impact on our results of operations. See Note 23 “Derivative instruments” for the related disclosure.

Note 3 - Acquisitions and dispositions

We sometimes structure our acquisitions with both an initial payment and later contingent payments tied to post-closing revenue or income growth. There were no contingent payments in 2015.

At Dec. 31, 2015, we are potentially obligated to pay additional consideration that could amount to \$4 million over the next 3 months for our acquired companies, based on contractual agreements. The acquisitions and dispositions described below did not have a material impact on BNY Mellon’s results of operations.

Acquisitions in 2015

On Jan. 2, 2015, BNY Mellon acquired Cutwater Asset Management, a U.S.-based fixed income and solutions specialist with approximately \$23 billion in assets under management.

Dispositions in 2015

On July 31, 2015, BNY Mellon sold Meriten Investment Management GmbH, a German-based investment management boutique for \$40 million. As a result of this sale, we recorded an after-tax loss of \$12 million. In addition, goodwill of \$22 million and customer relationship intangible assets of \$9 million were removed from the balance sheet as a result of this sale.

Acquisitions in 2014

On May 1, 2014, BNY Mellon acquired the remaining 65% interest of HedgeMark International, LLC for \$26 million. Since 2011, BNY Mellon held a 35% ownership stake in HedgeMark. Goodwill related to this acquisition totaled \$47 million and is included in the Investment Services business. The customer relationship intangible asset related to this acquisition is included in our Investment Services business and totaled \$1 million at acquisition.

Dispositions in 2014

On April 23, 2014, BNY Mellon sold the subsidiary that conducted corporate trust business in Mexico that was part of our Investment Services business, for \$65 million. As a result of this sale, we recorded an after-tax gain of \$4 million. In addition, goodwill of \$8 million and customer relationship intangible assets of \$1 million were removed from the balance sheet as a result of this sale.

Dispositions in 2013

On May 31, 2013, BNY Mellon sold SourceNet Solutions, our accounts payable outsourcing support services provider that was part of our Investment Services business, for \$11 million. As a result of this sale, we recorded a pre-tax gain of \$2 million and an after-tax gain of \$10 million.

On Sept. 27, 2013, Newton Management Limited, together with Newton Investment Management Limited, an investment boutique of BNY Mellon, sold Newton’s private client business, for \$120 million. As a result of this sale, we recorded a pre-tax gain of \$27 million and an after-tax gain of \$5 million. In addition, goodwill of \$69 million and customer relationship intangible assets of \$7 million were removed from the balance sheet as a result of this sale.

Note 4 - Securities

The following tables present the amortized cost, the gross unrealized gains and losses and the fair value of securities at Dec. 31, 2015, 2014, and 2013.

Securities at Dec. 31, 2015 (in millions)	Amortized cost	Gross unrealized		Fair value
		Gains	Losses	
Available-for-sale:				
U.S. Treasury	\$ 12,693	\$ 175	\$ 36	\$ 12,832
U.S. Government agencies	386	2	1	387
State and political subdivisions	3,968	91	13	4,046
Agency RMBS	23,549	239	287	23,501
Non-agency RMBS	782	31	20	793
Other RMBS	1,072	10	21	1,061
Commercial MBS	1,400	8	16	1,392
Agency commercial MBS	4,031	24	35	4,020
Asset-backed CLOs	2,363	1	13	2,351
Other asset-backed securities	2,909	1	17	2,893
Foreign covered bonds	2,125	46	3	2,168
Corporate bonds	1,740	26	14	1,752
Sovereign debt/ sovereign guaranteed	13,036	211	30	13,217
Other debt securities	2,732	46	3	2,775
Equity securities	3	1	—	4
Money market funds	886	—	—	886
Non-agency RMBS (a)	1,435	362	8	1,789
Total securities available-for-sale (b)	\$ 75,110	\$ 1,274	\$ 517	\$ 75,867
Held-to-maturity:				
U.S. Treasury	\$ 11,326	\$ 25	\$ 51	\$ 11,300
U.S. Government agencies	1,431	—	6	1,425
State and political subdivisions	20	—	1	19
Agency RMBS	26,036	134	205	25,965
Non-agency RMBS	118	5	2	121
Other RMBS	224	1	10	215
Commercial MBS	9	—	—	9
Agency commercial MBS	503	—	9	494
Foreign covered bonds	76	—	—	76
Sovereign debt/ sovereign guaranteed	3,538	22	11	3,549
Other debt securities	31	—	—	31
Total securities held-to-maturity	\$ 43,312	\$ 187	\$ 295	\$ 43,204
Total securities	\$ 118,422	\$ 1,461	\$ 812	\$ 119,071

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized gains of \$84 million and gross unrealized losses of \$248 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains and losses primarily are related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

Securities at Dec. 31, 2014 (in millions)	Amortized cost	Gross unrealized		Fair value
		Gains	Losses	
Available-for-sale:				
U.S. Treasury	\$ 19,592	\$ 420	\$ 15	\$ 19,997
U.S. Government agencies	342	3	2	343
State and political subdivisions	5,176	95	24	5,247
Agency RMBS	32,568	357	325	32,600
Non-agency RMBS	942	37	26	953
Other RMBS	1,551	25	25	1,551
Commercial MBS	1,927	39	7	1,959
Agency commercial MBS	3,105	36	9	3,132
Asset-backed CLOs	2,128	9	7	2,130
Other asset-backed securities	3,241	5	6	3,240
Foreign covered bonds	2,788	80	—	2,868
Corporate bonds	1,747	45	7	1,785
Sovereign debt/ sovereign guaranteed	17,062	224	2	17,284
Other debt securities	2,162	7	—	2,169
Equity securities	94	1	—	95
Money market funds	763	—	—	763
Non-agency RMBS (a)	1,747	471	4	2,214
Total securities available-for-sale (b)	\$ 96,935	\$ 1,854	\$ 459	\$ 98,330
Held-to-maturity:				
U.S. Treasury	\$ 5,047	\$ 32	\$ 16	\$ 5,063
U.S. Government agencies	344	—	3	341
State and political subdivisions	24	1	1	24
Agency RMBS	14,006	200	44	14,162
Non-agency RMBS	153	9	2	160
Other RMBS	315	2	8	309
Commercial MBS	13	—	—	13
Sovereign debt/ sovereign guaranteed	1,031	24	—	1,055
Total securities held-to-maturity	\$ 20,933	\$ 268	\$ 74	\$ 21,127
Total securities	\$ 117,868	\$ 2,122	\$ 533	\$ 119,457

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized gains of \$60 million and gross unrealized losses of \$282 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains and losses are primarily related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

Securities at Dec. 31, 2013 (in millions)	Amortized cost	Gross unrealized		Fair value
		Gains	Losses	
Available-for-sale:				
U.S. Treasury	\$ 13,363	\$ 94	\$ 605	\$ 12,852
U.S. Government agencies	937	16	5	948
State and political subdivisions	6,706	60	92	6,674
Agency RMBS	25,564	307	550	25,321
Non-agency RMBS	1,148	44	50	1,142
Other RMBS	2,299	43	57	2,285
Commercial MBS	2,324	60	27	2,357
Agency commercial MBS	1,822	1	34	1,789
Asset-backed CLOs	1,551	11	—	1,562
Other asset-backed securities	2,894	6	9	2,891
Foreign covered bonds	2,798	73	—	2,871
Corporate bonds	1,808	32	25	1,815
Other debt securities	1,793	4	—	1,797
Sovereign debt/ sovereign guaranteed	11,284	87	18	11,353
Equity securities	18	1	—	19
Money market funds	938	—	—	938
Non-agency RMBS (a)	2,131	567	3	2,695
Total securities available-for-sale (b)	\$ 79,378	\$ 1,406	\$ 1,475	\$ 79,309
Held-to-maturity:				
U.S. Treasury	\$ 3,324	\$ 28	\$ 84	\$ 3,268
U.S. Government agencies	419	—	13	406
State and political subdivisions	44	—	—	44
Agency RMBS	14,568	20	236	14,352
Non-agency RMBS	186	10	3	193
Other RMBS	466	3	20	449
Commercial MBS	16	1	—	17
Sovereign debt/ sovereign guaranteed	720	—	6	714
Total securities held-to-maturity	\$ 19,743	\$ 62	\$ 362	\$ 19,443
Total securities	\$ 99,121	\$ 1,468	\$ 1,837	\$ 98,752

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized gains of \$74 million and gross unrealized losses of \$343 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains and losses are primarily related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

The following table presents the gross securities gains, losses and impairments.

Net securities gains (losses) (in millions)	2015	2014	2013
Realized gross gains	\$ 90	\$ 114	\$ 186
Realized gross losses	(2)	(4)	(10)
Recognized gross impairments	(5)	(19)	(35)
Total net securities gains	\$ 83	\$ 91	\$ 141

At Dec. 31, 2015, the book value and the fair value of UK sovereign debt of \$4.7 billion and \$4.8 billion respectively, exceeded 10% of BNY Mellon's shareholders' equity.

In 2015, Agency MBS, sovereign debt and U.S. Treasury securities with an aggregate amortized cost of \$11.6 billion and fair value of \$11.6 billion were transferred from available-for-sale securities to held-to-maturity securities. Additionally, in 2013, Agency RMBS securities with an amortized cost of \$7.3 billion and fair value of \$7.0 billion were transferred from available-for-sale securities to held-to-maturity securities. These actions, in addition to realizing gains on the sales of securities, is expected to mute the impact to our accumulated other comprehensive income in the event of a rise in interest rates.

Temporarily impaired securities

At Dec. 31, 2015, the unrealized losses on the investment securities portfolio were primarily attributable to an increase in interest rates from date of purchase, and for certain securities that were transferred from available-for-sale to held-to-maturity, an increase in interest rates through the date they were transferred. Specifically, \$248 million of the unrealized losses at Dec. 31, 2015 and \$282 million at Dec. 31, 2014 reflected in the available-for-sale sections of the tables below relate to certain securities (primarily Agency RMBS) that were transferred from available-for-sale to held-to-maturity. The unrealized losses will be amortized into net interest revenue over the estimated lives of the securities. The transfer created a new cost basis for the securities. As a result, if these securities have experienced unrealized losses since the date of transfer, the corresponding fair value and unrealized losses would be reflected in the held-to-maturity sections of the following tables. We do not intend to sell these securities and it is not more likely than not that we will have to sell these securities.

The following tables show the aggregate related fair value of investments with a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for 12 months or more at Dec. 31, 2015, and Dec. 31, 2014.

Temporarily impaired securities at Dec. 31, 2015	Less than 12 months		12 months or more		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
<i>(in millions)</i>						
Available-for-sale:						
U.S. Treasury	\$ 6,343	\$ 36	\$ —	\$ —	\$ 6,343	\$ 36
U.S. Government agencies	148	1	10	—	158	1
State and political subdivisions	143	2	117	11	260	13
Agency RMBS	8,500	44	1,316	243	9,816	287
Non-agency RMBS	72	—	417	20	489	20
Other RMBS	2	—	298	21	300	21
Commercial MBS	567	9	224	7	791	16
Agency commercial MBS	2,551	31	172	4	2,723	35
Asset-backed CLOs	1,599	10	455	3	2,054	13
Other asset-backed securities	2,001	10	546	7	2,547	17
Corporate bonds	338	10	128	4	466	14
Sovereign debt/sovereign guaranteed	2,063	30	43	—	2,106	30
Non-agency RMBS (a)	45	1	52	7	97	8
Other debt securities	505	3	—	—	505	3
Foreign covered bonds	515	3	—	—	515	3
Total securities available-for-sale (b)	\$ 25,392	\$ 190	\$ 3,778	\$ 327	\$ 29,170	\$ 517
Held-to-maturity:						
U.S. Treasury	\$ 9,121	\$ 51	\$ —	\$ —	\$ 9,121	\$ 51
U.S. Government agencies	1,122	6	—	—	1,122	6
State and political subdivisions	4	1	—	—	4	1
Agency RMBS	16,491	171	1,917	34	18,408	205
Non-agency RMBS	40	—	29	2	69	2
Other RMBS	9	—	166	10	175	10
Agency commercial MBS	494	9	—	—	494	9
Sovereign debt/sovereign guaranteed	2,161	11	—	—	2,161	11
Total securities held-to-maturity	\$ 29,442	\$ 249	\$ 2,112	\$ 46	\$ 31,554	\$ 295
Total temporarily impaired securities	\$ 54,834	\$ 439	\$ 5,890	\$ 373	\$ 60,724	\$ 812

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized losses for less than 12 months of \$8 million and gross unrealized losses for 12 months or more of \$240 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized losses primarily related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

Notes to Consolidated Financial Statements (continued)

Temporarily impaired securities at Dec. 31, 2014 <i>(in millions)</i>	Less than 12 months		12 months or more		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Available-for-sale:						
U.S. Treasury	\$ 6,049	\$ 15	\$ —	\$ —	\$ 6,049	\$ 15
U.S. Government agencies	32	—	100	2	132	2
State and political subdivisions	410	18	393	6	803	24
Agency RMBS	3,385	13	5,016	312	8,401	325
Non-agency RMBS	143	1	382	25	525	26
Other RMBS	—	—	449	25	449	25
Commercial MBS	175	1	394	6	569	7
Agency commercial MBS	719	1	550	8	1,269	9
Asset-backed CLOs	1,376	7	—	—	1,376	7
Other asset-backed securities	1,078	2	539	4	1,617	6
Corporate bonds	51	—	230	7	281	7
Sovereign debt/sovereign guaranteed	2,175	2	—	—	2,175	2
Non-agency RMBS (a)	42	1	34	3	76	4
Total securities available-for-sale (b)	\$ 15,635	\$ 61	\$ 8,087	\$ 398	\$ 23,722	\$ 459
Held-to-maturity:						
U.S. Treasury	\$ 1,066	\$ 6	\$ 1,559	\$ 10	\$ 2,625	\$ 16
U.S. Government agencies	—	—	340	3	340	3
State and political subdivisions	5	1	—	—	5	1
Agency RMBS	551	3	3,808	41	4,359	44
Non-agency RMBS	40	—	33	2	73	2
Other RMBS	—	—	219	8	219	8
Total securities held-to-maturity	\$ 1,662	\$ 10	\$ 5,959	\$ 64	\$ 7,621	\$ 74
Total temporarily impaired securities	\$ 17,297	\$ 71	\$ 14,046	\$ 462	\$ 31,343	\$ 533

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized losses for 12 months or more of \$282 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized losses primarily related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

The following table shows the maturity distribution by carrying amount and yield (on a tax equivalent basis) of our investment securities portfolio at Dec. 31, 2015.

Maturity distribution and yield on investment securities at Dec. 31, 2015 <i>(dollars in millions)</i>	U.S. Treasury		U.S. Government agencies		State and political subdivisions		Other bonds, notes and debentures		Mortgage/asset-backed and equity securities		Total
	Amount	Yield (a)	Amount	Yield (a)	Amount	Yield (a)	Amount	Yield (a)	Amount	Yield (a)	
Securities available-for-sale:											
One year or less	\$ 3,766	0.48%	\$ 51	2.56%	\$ 655	1.99%	\$ 4,811	0.90%	\$ —	—%	\$ 9,283
Over 1 through 5 years	4,445	1.53	169	1.24	2,002	2.70	12,937	1.11	—	—	19,553
Over 5 through 10 years	1,217	2.09	167	2.45	1,189	3.98	1,963	1.33	—	—	4,536
Over 10 years	3,404	3.11	—	—	200	1.03	201	1.69	—	—	3,805
Mortgage-backed securities	—	—	—	—	—	—	—	—	32,556	2.65	32,556
Asset-backed securities	—	—	—	—	—	—	—	—	5,244	1.30	5,244
Equity securities (b)	—	—	—	—	—	—	—	—	890	—	890
Total	\$ 12,832	1.69%	\$ 387	1.94%	\$ 4,046	2.88%	\$ 19,912	1.09%	\$ 38,690	2.41%	\$ 75,867
Securities held-to-maturity:											
One year or less	\$ 1,160	0.71%	\$ —	—%	\$ —	—%	\$ 1,442	0.24%	\$ —	—%	\$ 2,602
Over 1 through 5 years	7,605	1.10	1,431	1.06	1	7.01	1,473	0.61	—	—	10,510
Over 5 through 10 years	2,561	2.06	—	—	4	6.80	730	0.71	—	—	3,295
Over 10 years	—	—	—	—	15	5.34	—	—	—	—	15
Mortgage-backed securities	—	—	—	—	—	—	—	—	26,890	2.73	26,890
Total	\$ 11,326	1.28%	\$ 1,431	1.06%	\$ 20	5.75%	\$ 3,645	0.48%	\$ 26,890	2.73%	\$ 43,312

(a) Yields are based upon the amortized cost of securities.

(b) Includes money market funds.

Other-than-temporary impairment

We routinely conduct periodic reviews of all securities to determine whether OTTI has occurred. Such reviews may incorporate the use of economic models. Various inputs to the economic models are used to determine if an unrealized loss on securities is other-than-temporary. For example, the most significant inputs related to non-agency RMBS are:

- Default rate - the number of mortgage loans expected to go into default over the life of the transaction, which is driven by the roll rate of loans in each performance bucket that will ultimately migrate to default; and
- Severity - the loss expected to be realized when a loan defaults.

To determine if an unrealized loss is other-than-temporary, we project total estimated defaults of the underlying assets (mortgages) and multiply that calculated amount by an estimate of realizable value upon sale of these assets in the marketplace (severity) in order to determine the projected collateral loss. In determining estimated default rate and severity assumptions, we review the performance of the underlying securities, industry studies, market forecasts, as well as our view of the economic outlook affecting collateral. We also evaluate the current credit enhancement underlying the bond to determine the impact on cash flows. If we determine that a given security will be subject to a write-down or loss, we record the expected credit loss as a charge to earnings.

The table below shows the projected weighted-average default rates and loss severities for the 2007, 2006 and late 2005 non-agency RMBS and the securities previously held in the Grantor Trust that we established in connection with the restructuring of our investment securities portfolio in 2009, at Dec. 31, 2015 and Dec. 31, 2014.

	Projected weighted-average default rates and loss severities			
	Dec. 31, 2015		Dec. 31, 2014	
	Default rate	Severity	Default rate	Severity
Alt-A	33%	57%	38%	58%
Subprime	52%	72%	55%	74%
Prime	18%	40%	23%	42%

The following table provides net pre-tax securities gains (losses) by type.

Net securities gains (losses) (in millions)	2015	2014	2013
U.S. Treasury	\$ 45	\$ 25	\$ 60
Non-agency RMBS	7	17	(1)
Commercial MBS	5	1	16
State and political subdivisions	4	13	13
European floating rate notes	2	1	8
Other	20	34	45
Total net securities gains	\$ 83	\$ 91	\$ 141

The following tables reflect investment securities credit losses recorded in earnings. The beginning balance represents the credit loss component for which OTTI occurred on debt securities in prior periods. The additions represent the first time a debt security was credit impaired or when subsequent credit impairments have occurred. The deductions represent credit losses on securities that have been sold, are required to be sold, or for which it is our intention to sell.

Debt securities credit loss roll forward (in millions)	2015	2014
Beginning balance as of Jan. 1	\$ 93	\$ 119
Add: Initial OTTI credit losses	—	2
Subsequent OTTI credit losses	5	10
Less: Realized losses for securities sold	7	38
Ending balance as of Dec. 31	\$ 91	\$ 93

Pledged assets

At Dec. 31, 2015, BNY Mellon had pledged assets of \$101 billion, including \$84 billion pledged as collateral for potential borrowings at the Federal Reserve Discount Window. The components of the assets pledged at Dec. 31, 2015 included \$88 billion of securities, \$8 billion of loans, \$3 billion of trading assets and \$2 billion of interest-bearing deposits with banks.

If there has been no borrowing at the Federal Reserve Discount Window, the Federal Reserve generally allows banks to freely move assets in and out of their pledged assets account to sell or repledge the assets for other purposes. BNY Mellon regularly moves assets in and out of its pledged asset account at the Federal Reserve.

At Dec. 31, 2014, BNY Mellon had pledged assets of \$99 billion, including \$74 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window. The components of the assets pledged at Dec. 31, 2014 included \$90 billion of securities, \$6 billion of loans, \$2 billion of trading assets and \$1 billion of interest-bearing deposits with banks.

At Dec. 31, 2015 and Dec. 31, 2014, pledged assets included \$7 billion and \$9 billion, respectively, for which the recipients were permitted to sell or repledge the assets delivered.

We also obtain securities as collateral including receipts under resale agreements, securities borrowed, derivative contracts and custody agreements on terms which permit us to sell or repledge the securities to others. At Dec. 31, 2015 and Dec. 31, 2014, the market value of the securities received that can be sold or repledged was \$52 billion and \$47 billion, respectively. We routinely sell or repledge these securities through delivery to third parties. As of Dec. 31, 2015 and Dec. 31, 2014, the market value of securities collateral sold or repledged was \$17 billion and \$19 billion, respectively.

Restricted cash and securities

Cash and securities may also be segregated under federal and other regulations or requirements. At Dec. 31, 2015 and Dec. 31, 2014, cash segregated under federal and other regulations or requirements was \$4 billion and \$6 billion, respectively.

Segregated cash is included in interest-bearing deposits with banks on the consolidated balance sheet. Securities segregated for these purposes were \$1 billion at Dec. 31, 2015. There were no securities segregated for these purposes at Dec. 31, 2014. Segregated securities are included in trading assets on the consolidated balance sheet.

Note 5 - Loans and asset quality

Loans

The table below provides the details of our loan portfolio and industry concentrations of credit risk at Dec. 31, 2015 and 2014.

Loans <i>(in millions)</i>	Dec. 31,	
	2015	2014
Domestic:		
Financial institutions	\$ 6,640	\$ 5,603
Commercial	2,115	1,390
Wealth management loans and mortgages	13,247	11,095
Commercial real estate	3,899	2,524
Lease financings	1,007	1,282
Other residential mortgages	1,055	1,222
Overdrafts	911	1,348
Other	1,137	1,113
Margin loans	19,340	20,034
Total domestic	49,351	45,611
Foreign:		
Financial institutions	9,259	7,716
Commercial	227	252
Wealth management loans and mortgages	100	89
Commercial real estate	46	6
Lease financings	850	889
Other (primarily overdrafts)	3,637	4,569
Margin loans	233	—
Total foreign	14,352	13,521
Total loans (a)	\$ 63,703	\$ 59,132

(a) Net of unearned income of \$674 million at Dec. 31, 2015 and \$866 million at Dec. 31, 2014 primarily on domestic and foreign lease financings.

Our loan portfolio consists of three portfolio segments: commercial, lease financings and mortgages. We manage our portfolio at the class level which consists of six classes of financing receivables: commercial, commercial real estate, financial institutions, lease financings, wealth management loans and mortgages and other residential mortgages.

The following tables are presented for each class of financing receivable, and provide additional information about our credit risks and the adequacy of our allowance for credit losses.

Allowance for credit losses

Transactions in the allowance for credit losses are summarized as follows:

Allowance for credit losses activity for the year ended Dec. 31, 2015										
<i>(in millions)</i>	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total	
Beginning balance	\$ 60	\$ 50	\$ 31	\$ 32	\$ 22	\$ 41	\$ —	\$ 44	\$	280
Charge-offs	—	—	(170)	—	—	(2)	—	—	—	(172)
Recoveries	—	—	1	—	—	6	—	—	—	7
Net (charge-offs) recoveries	—	—	(169)	—	—	4	—	—	—	(165)
Provision	22	9	169	(17)	(3)	(11)	—	(9)	—	160
Ending balance	\$ 82	\$ 59	\$ 31	\$ 15	\$ 19	\$ 34	\$ —	\$ 35	\$	275
Allowance for:										
Loan losses	\$ 24	\$ 37	\$ 9	\$ 15	\$ 15	\$ 34	\$ —	\$ 23	\$	157
Lending-related commitments	58	22	22	—	4	—	—	12	—	118
Individually evaluated for impairment:										
Loan balance	\$ —	\$ 1	\$ 171	\$ —	\$ 8	\$ —	\$ —	\$ —	\$	180
Allowance for loan losses	—	1	—	—	1	—	—	—	—	2
Collectively evaluated for impairment:										
Loan balance	\$ 2,115	\$ 3,496	\$ 6,469	\$ 1,007	\$ 13,239	\$ 1,035	\$ 21,388	(a)	\$ 14,352	\$ 63,101
Allowance for loan losses	24	36	9	15	14	34	—	23	—	155

(a) Includes \$911 million of domestic overdrafts, \$19,340 million of margin loans and \$1,137 million of other loans at Dec. 31, 2015.

Allowance for credit losses activity for the year ended Dec. 31, 2014										
<i>(in millions)</i>	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total	
Beginning balance	\$ 83	\$ 41	\$ 49	\$ 37	\$ 24	\$ 54	\$ —	\$ 56	\$	344
Charge-offs	(12)	(2)	—	—	(1)	(2)	—	(3)	—	(20)
Recoveries	1	—	1	—	—	2	—	—	—	4
Net (charge-offs) recoveries	(11)	(2)	1	—	(1)	—	—	(3)	—	(16)
Provision	(12)	11	(19)	(5)	(1)	(13)	—	(9)	—	(48)
Ending balance	\$ 60	\$ 50	\$ 31	\$ 32	\$ 22	\$ 41	\$ —	\$ 44	\$	280
Allowance for:										
Loan losses	\$ 17	\$ 32	\$ 17	\$ 32	\$ 17	\$ 41	\$ —	\$ 35	\$	191
Lending-related commitments	43	18	14	—	5	—	—	9	—	89
Individually evaluated for impairment:										
Loan balance	\$ —	\$ —	\$ —	\$ —	\$ 8	\$ —	\$ —	\$ —	\$	8
Allowance for loan losses	—	—	—	—	1	—	—	—	—	1
Collectively evaluated for impairment:										
Loan balance	\$ 1,390	\$ 2,503	\$ 5,603	\$ 1,282	\$ 11,087	\$ 1,222	\$ 22,495	(a)	\$ 13,521	\$ 59,103
Allowance for loan losses	17	32	17	32	16	41	—	35	—	190

(a) Includes \$1,348 million of domestic overdrafts, \$20,034 million of margin loans and \$1,113 million of other loans at Dec. 31, 2014.

Notes to Consolidated Financial Statements (continued)

Allowance for credit losses activity for the year ended Dec. 31, 2013

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total
Beginning balance	\$ 104	\$ 30	\$ 36	\$ 49	\$ 30	\$ 88	\$ 2	\$ 48	\$ 387
Charge-offs	(4)	(1)	—	—	(1)	(8)	—	(3)	(17)
Recoveries	1	—	4	—	—	4	—	—	9
Net (charge-offs)	(3)	(1)	4	—	(1)	(4)	—	(3)	(8)
Provision	(18)	12	9	(12)	(5)	(30)	(2)	11	(35)
Ending balance	\$ 83	\$ 41	\$ 49	\$ 37	\$ 24	\$ 54	\$ —	\$ 56	\$ 344
Allowance for:									
Loan losses	\$ 21	\$ 21	\$ 10	\$ 37	\$ 19	\$ 54	\$ —	\$ 48	\$ 210
Lending-related commitments	62	20	39	—	5	—	—	8	134
Individually evaluated for impairment:									
Loan balance	\$ 15	\$ 3	\$ —	\$ —	\$ 12	\$ —	\$ —	\$ 6	\$ 36
Allowance for loan losses	2	1	—	—	3	—	—	1	7
Collectively evaluated for impairment:									
Loan balance	\$ 1,519	\$ 1,998	\$ 4,511	\$ 1,322	\$ 9,731	\$ 1,385	\$ 17,734 (a)	\$ 13,421	\$ 51,621
Allowance for loan losses	19	20	10	37	16	54	—	47	203

(a) Includes \$1,314 million of domestic overdrafts, \$15,652 million of margin loans and \$768 million of other loans at Dec. 31, 2013.

Nonperforming assets

The table below presents the distribution of our nonperforming assets.

Nonperforming assets (in millions)	Dec. 31, 2015	Dec. 31, 2014
Nonperforming loans:		
Financial institutions	\$ 171	\$ —
Other residential mortgages	102	112
Wealth management loans and mortgages	11	12
Commercial real estate	2	1
Total nonperforming loans	286	125
Other assets owned	6	3
Total nonperforming assets (a)	\$ 292	\$ 128

(a) Loans of consolidated investment management funds are not part of BNY Mellon's loan portfolio. Included in the loans of consolidated investment management funds are nonperforming loans of \$53 million at Dec. 31, 2014. These loans are recorded at fair value and therefore do not impact the provision for credit losses and allowance for loan losses, and accordingly are excluded from the nonperforming assets table above. In the second quarter of 2015, BNY Mellon adopted the new accounting guidance included in ASU 2015-02, Consolidations. As a result, we deconsolidated substantially all of the loans of consolidated investment management funds retrospectively to Jan. 1, 2015.

At Dec. 31, 2015, undrawn commitments to borrowers whose loans were classified as nonaccrual or reduced rate were not material.

Lost interest

The table below presents the amount of lost interest income.

Lost interest (in millions)	2015	2014	2013
Amount by which interest income recognized on nonperforming loans exceeded reversals			
Total	\$ —	\$ 1	\$ 2
Foreign	—	—	—
Amount by which interest income would have increased if nonperforming loans at year-end had been performing for the entire year			
Total	\$ 6	\$ 7	\$ 9
Foreign	—	—	—

Impaired loans

The tables below provide information about our impaired loans. We use the discounted cash flow method as the primary method for valuing impaired loans.

Impaired loans <i>(in millions)</i>	2015		2014		2013	
	Average recorded investment	Interest income recognized	Average recorded investment	Interest income recognized	Average recorded investment	Interest income recognized
Impaired loans with an allowance:						
Commercial	\$ —	\$ —	\$ 11	\$ —	\$ 37	\$ 1
Commercial real estate	1	—	2	—	5	—
Financial institutions	—	—	—	—	1	—
Wealth management loans and mortgages	6	—	8	—	17	—
Foreign	—	—	3	—	8	—
Total impaired loans with an allowance	7	—	24	—	68	1
Impaired loans without an allowance:						
Commercial	—	—	—	—	2	—
Commercial real estate	—	—	1	—	6	—
Financial institutions	—	—	—	—	1	—
Wealth management loans and mortgages	2	—	2	—	3	—
Total impaired loans without an allowance <i>(a)</i>	2	—	3	—	12	—
Total impaired loans	\$ 9	\$ —	\$ 27	\$ —	\$ 80	\$ 1

(a) When the discounted cash flows, collateral value or market price equals or exceeds the carrying value of the loan, then the loan does not require an allowance under the accounting standard related to impaired loans.

Impaired loans <i>(in millions)</i>	Dec. 31, 2015			Dec. 31, 2014		
	Recorded investment	Unpaid principal balance	Related allowance <i>(a)</i>	Recorded investment	Unpaid principal balance	Related allowance <i>(a)</i>
Impaired loans with an allowance:						
Wealth management loans and mortgages	\$ 6	\$ 7	\$ 1	\$ 6	\$ 6	\$ 1
Commercial real estate	1	3	1	—	—	—
Total impaired loans with an allowance	7	10	2	6	6	1
Impaired loans without an allowance:						
Financial institutions	171	312	N/A	—	—	N/A
Wealth management loans and mortgages	2	2	N/A	2	2	N/A
Commercial real estate	—	—	N/A	1	3	N/A
Total impaired loans without an allowance <i>(b)</i>	173	314	N/A	3	5	N/A
Total impaired loans <i>(c)</i>	\$ 180	\$ 324	\$ 2	\$ 9	\$ 11	\$ 1

(a) The allowance for impaired loans is included in the allowance for loan losses.

(b) When the discounted cash flows, collateral value or market price equals or exceeds the carrying value of the loan, then the loan does not require an allowance under the accounting standard related to impaired loans.

(c) Excludes an aggregate of \$2 million and less than \$1 million of impaired loans in amounts individually less than \$1 million at Dec. 31, 2015 and Dec. 31, 2014, respectively. The allowance for loan loss associated with these loans totaled less than \$1 million at both Dec. 31, 2015 and Dec. 31, 2014.

Past due loans

The table below sets forth information about our past due loans.

Past due loans and still accruing interest <i>(in millions)</i>	Dec. 31, 2015				Dec. 31, 2014			
	Days past due			Total past due	Days past due			Total past due
	30-59	60-89	>90		30-59	60-89	>90	
Commercial real estate	\$ 57	\$ 11	\$ —	\$ 68	\$ 79	\$ —	\$ —	\$ 79
Wealth management loans and mortgages	69	2	1	72	45	—	1	46
Other residential mortgages	22	5	4	31	23	3	5	31
Total past due loans	\$ 148	\$ 18	\$ 5	\$ 171	\$ 147	\$ 3	\$ 6	\$ 156

Troubled debt restructurings (“TDRs”)

A modified loan is considered a TDR if the debtor is experiencing financial difficulties and the creditor grants a concession to the debtor that would not otherwise be considered. A TDR may include a

transfer of real estate or other assets from the debtor to the creditor, or a modification of the term of the loan. Not all modified loans are considered TDRs.

The following table presents TDRs that occurred in 2015 and 2014.

TDRs <i>(dollars in millions)</i>	2015			2014		
	Number of contracts	Outstanding recorded investment		Number of contracts	Outstanding recorded investment	
		Pre-modification	Post-modification		Pre-modification	Post-modification
Other residential mortgages	68	\$ 13	\$ 16	108	\$ 17	\$ 20
Wealth management loans and mortgages	4	—	—	1	—	—
Foreign	—	—	—	1	5	4
Total TDRs	72	\$ 13	\$ 16	110	\$ 22	\$ 24

Other residential mortgages

The modifications of the other residential mortgage loans in 2015 and 2014 consisted of reducing the stated interest rates and in certain cases, a forbearance of default and extending the maturity dates. The modified loans are primarily collateral dependent for which the value is based on the fair value of the collateral.

TDRs that subsequently defaulted

There were two residential mortgage loans that had been restructured in a TDR during the previous 12

months and have subsequently defaulted in 2015. The total recorded investment of these loans was less than \$1 million.

Credit quality indicators

Our credit strategy is to focus on investment grade names to support cross-selling opportunities. Each customer is assigned an internal credit rating which is mapped to an external rating agency grade equivalent, if possible, based upon a number of dimensions which are continually evaluated and may change over time.

The following tables set forth information about credit quality indicators.

Commercial loan portfolio

Commercial loan portfolio – Credit risk profile by creditworthiness category						
<i>(in millions)</i>	Commercial		Commercial real estate		Financial institutions	
	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2014
Investment grade	\$ 2,026	\$ 1,381	\$ 2,678	\$ 1,641	\$ 13,965	\$ 11,576
Non-investment grade	316	261	1,267	889	1,934	1,743
Total	\$ 2,342	\$ 1,642	\$ 3,945	\$ 2,530	\$ 15,899	\$ 13,319

The commercial loan portfolio is divided into investment grade and non-investment grade categories based on rating criteria largely consistent with those of the public rating agencies. Each customer in the portfolio is assigned an internal credit rating. These internal credit ratings are generally consistent with the ratings categories of the public rating agencies. Customers with ratings consistent with BBB- (S&P)/Baa3 (Moody's) or better are considered to be investment grade. Those clients with ratings lower than this threshold are considered to be non-investment grade.

Wealth management loans and mortgages

Wealth management loans and mortgages – Credit risk profile by internally assigned grade		
<i>(in millions)</i>	Dec. 31, 2015	Dec. 31, 2014
Wealth management loans:		
Investment grade	\$ 6,529	\$ 5,621
Non-investment grade	171	29
Wealth management mortgages	6,647	5,534
Total	\$ 13,347	\$ 11,184

Wealth management non-mortgage loans are not typically rated by external rating agencies. A majority of the wealth management loans are secured by the customers' investment management accounts or custody accounts. Eligible assets pledged for these loans are typically investment grade, fixed-income securities, equities and/or mutual funds. Internal ratings for this portion of the wealth management portfolio, therefore, would equate to investment grade external ratings. Wealth management loans are provided to select customers based on the pledge of other types of assets, including business assets, fixed assets or a modest amount of commercial real estate. For the loans collateralized by other assets, the credit quality of the obligor is carefully analyzed, but we do

not consider this portfolio of loans to be investment grade.

Credit quality indicators for wealth management mortgages are not correlated to external ratings. Wealth management mortgages are typically loans to high-net-worth individuals, which are secured primarily by residential property. These loans are primarily interest-only adjustable rate mortgages with a weighted-average loan-to-value ratio of 61% at origination. In the wealth management portfolio, less than 1% of the mortgages were past due at Dec. 31, 2015.

At Dec. 31, 2015, the wealth management mortgage portfolio consisted of the following geographic concentrations: California - 23%; New York - 21%; Massachusetts - 13%; Florida - 8%; and other - 35%.

Other residential mortgages

The other residential mortgage portfolio primarily consists of 1-4 family residential mortgage loans and totaled \$1,055 million at Dec. 31, 2015 and \$1,222 million at Dec. 31, 2014. These loans are not typically correlated to external ratings. Included in this portfolio at Dec. 31, 2015 are \$283 million of mortgage loans purchased in 2005, 2006 and the first quarter of 2007 that are predominantly prime mortgage loans, with a small portion of Alt-A loans. As of Dec. 31, 2015, the purchased loans in this portfolio had a weighted-average loan-to-value ratio of 76% at origination and 16% of the serviced loan balance was at least 60 days delinquent. The properties securing the prime and Alt-A mortgage loans were located (in order of concentration) in California, Florida, Virginia, the tri-state area (New York, New Jersey and Connecticut) and Maryland.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and totaled \$4,483 million at Dec. 31, 2015 and \$5,882 million at Dec. 31, 2014. Overdrafts occur on a daily basis in the custody and securities clearance business and are generally repaid within two business days.

Other loans

Other loans primarily include loans to consumers that are fully collateralized with equities, mutual funds and fixed income securities.

Margin loans

We had \$19,573 million of secured margin loans on our balance sheet at Dec. 31, 2015 compared with \$20,034 million at Dec. 31, 2014. Margin loans are collateralized with marketable securities and borrowers are required to maintain a daily collateral margin in excess of 100% of the value of the loan. We have rarely suffered a loss on these types of loans and do not allocate any of our allowance for credit losses to margin loans.

Reverse repurchase agreements

Reverse repurchase agreements are transactions fully collateralized with high-quality liquid securities. These transactions carry minimal credit risk and therefore are not allocated an allowance for credit losses.

Note 6 - Goodwill and intangible assets

Impairment testing

BNY Mellon's three business segments include seven reporting units for which goodwill impairment testing is performed on an annual basis. The Investment Management segment consists of two reporting units. The Investment Services segment consists of four reporting units. One reporting unit is included in the Other segment.

The goodwill impairment test is performed in two steps. The first step compares the estimated fair value of the reporting unit with the carrying amount, including goodwill. If the estimated fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. However, if the carrying amount of the reporting unit were to exceed its estimated fair value, a second step would be performed that would compare the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. An impairment loss would be recorded to the extent that the carrying amount of goodwill exceeds its implied fair value.

BNY Mellon conducted an annual goodwill impairment test on a quantitative basis on all seven reporting units in the second quarter of 2015. The estimated fair value of the Company's seven reporting units exceeded the carrying value and no goodwill impairment was recognized.

Intangible assets not subject to amortization are tested annually for impairment or more often if events or circumstances indicate they may be impaired.

Goodwill

Total goodwill decreased in 2015 compared with 2014 primarily reflecting the impact of foreign exchange translation on non-U.S. dollar denominated goodwill. The tables below provide a breakdown of goodwill by business.

Notes to Consolidated Financial Statements (continued)

Goodwill by business <i>(in millions)</i>	Investment Management	(a)	Investment Services	Other	(a)	Consolidated		
Balance at Dec. 31, 2013	\$	9,446	\$	8,550	\$	77	\$	18,073
Acquisition/dispositions		—		39		—		39
Foreign currency translation		(118)		(124)		(3)		(245)
Other (b)		—		2		—		2
Balance at Dec. 31, 2014	\$	9,328	\$	8,467	\$	74	\$	17,869
Acquisitions/dispositions		10		—		(22)		(12)
Foreign currency translation		(128)		(105)		(3)		(236)
Other (b)		(3)		—		—		(3)
Balance at Dec. 31, 2015	\$	9,207	\$	8,362	\$	49	\$	17,618

(a) Includes the reclassification of goodwill associated with Meriten from Investment Management to the Other segment.

(b) Other changes in goodwill include purchase price adjustments and certain other reclassifications.

Intangible assets

Intangible assets decreased in 2015 compared with 2014 primarily reflecting amortization. Amortization of intangible assets was \$261 million in 2015, \$298 million in 2014 and \$342 million in 2013. In 2013,

we recorded an \$8 million impairment charge related to the write-down of the value of a customer contract intangible in the Investment Services business to its fair value. The tables below provide a breakdown of intangible assets by business.

Intangible assets – net carrying amount by business <i>(in millions)</i>	Investment Management	(a)	Investment Services	Other	(a)	Consolidated		
Balance at Dec. 31, 2013	\$	2,047	\$	1,538	\$	867	\$	4,452
Amortization		(118)		(175)		(5)		(298)
Foreign currency translation		(18)		(8)		(1)		(27)
Balance at Dec. 31, 2014	\$	1,911	\$	1,355	\$	861	\$	4,127
Acquisitions/dispositions		9		—		(9)		—
Amortization		(97)		(162)		(2)		(261)
Foreign currency translation		(16)		(7)		(1)		(24)
Balance at Dec. 31, 2015	\$	1,807	\$	1,186	\$	849	\$	3,842

(a) Includes the reclassification of intangible assets associated with Meriten from Investment Management to the Other segment.

The table below provides a breakdown of intangible assets by type.

Intangible assets <i>(in millions)</i>	Dec. 31, 2015				Dec. 31, 2014		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Remaining weighted-average amortization period	Gross carrying amount	Accumulated amortization	Net carrying amount
Subject to amortization:							
Customer relationships—Investment Management	\$ 1,709	\$ (1,351)	\$ 358	11 years	\$ 1,945	\$ (1,481)	\$ 464
Customer contracts—Investment Services	2,313	(1,503)	810	10 years	2,328	(1,354)	974
Other	75	(66)	9	3 years	81	(67)	14
Total subject to amortization	4,097	(2,920)	1,177	10 years	4,354	(2,902)	1,452
Not subject to amortization: (a)							
Trade name	1,358	N/A	1,358	N/A	1,360	N/A	1,360
Customer relationships	1,307	N/A	1,307	N/A	1,315	N/A	1,315
Total not subject to amortization	2,665	N/A	2,665	N/A	2,675	N/A	2,675
Total intangible assets	\$ 6,762	\$ (2,920)	\$ 3,842	N/A	\$ 7,029	\$ (2,902)	\$ 4,127

(a) Intangible assets not subject to amortization have an indefinite life.

Estimated annual amortization expense for current intangibles for the next five years is as follows:

For the year ended Dec. 31,	Estimated amortization expense (in millions)
2016	\$ 238
2017	214
2018	180
2019	108
2020	97

Note 7 - Other assets

Other assets (in millions)	Dec. 31,	
	2015	2014
Corporate/bank owned life insurance	\$ 4,704	\$ 4,598
Accounts receivable	3,535	4,166
Equity in joint venture and other investments (a)	3,329	3,287
Income taxes receivable	1,554	2,142
Fails to deliver	1,494	1,351
Software	1,355	1,332
Prepaid pension assets	727	708
Fair value of hedging derivatives	716	851
Prepaid expenses	464	451
Due from customers on acceptances	258	247
Other	1,490	1,357
Total other assets	\$ 19,626	\$ 20,490

(a) Includes Federal Reserve Bank stock of \$453 million and \$447 million, respectively, at cost.

Certain seed capital and private equity investments valued using net asset value per share

In our Investment Management business, we manage investment assets, including equities, fixed income, money market and alternative investment funds for institutions and other investors. As part of that activity we make seed capital investments in certain funds. BNY Mellon also holds private equity investments, which consist of investments in private equity funds, mezzanine financings, SBICs and direct equity investments. Seed capital and private equity investments are included in other assets.

The fair value of certain of these investments has been estimated using the net asset value (“NAV”) per share of BNY Mellon’s ownership interest in the funds. The table below presents information about BNY Mellon’s investments in seed capital and private equity investments that have been valued using NAV.

Seed capital and private equity investments valued using NAV

(dollar amounts in millions)	Dec. 31, 2015				Dec. 31, 2014			
	Fair value	Unfunded commitments	Redemption frequency	Redemption notice period	Fair value	Unfunded commitments	Redemption frequency	Redemption notice period
Seed capital and other funds (a)	\$ 83	\$ 1	Daily- quarterly	1-180 days	\$ 307	\$ —	Daily- quarterly	0-180 days
Private equity investments (b)(c)	34	58	N/A	N/A	35	45	N/A	N/A
Total	\$ 117	\$ 59			\$ 342	\$ 45		

(a) Other funds include various leveraged loans, structured credit funds and hedge funds. Redemption notice periods vary by fund.

(b) Private equity funds primarily include numerous venture capital funds that invest in various sectors of the economy. Private equity funds do not have redemption rights. Distributions from such funds will be received as the underlying investments in the funds are liquidated.

(c) Includes investments and unfunded commitments related to SBICs, which are compliant with the Volcker Rule, of \$34 million and \$58 million, respectively, at Dec. 31, 2015 and \$18 million and \$45 million, respectively, at Dec. 31, 2014.

N/A - Not applicable.

Qualified affordable housing project investments

We invest in affordable housing projects primarily to satisfy the Company’s requirements under the Community Reinvestment Act. Our total investment in qualified affordable housing projects totaled \$918 million at Dec. 31, 2015 and \$853 million at Dec. 31, 2014. Commitments to fund future investments in qualified affordable housing projects totaled \$393

million at Dec. 31, 2015 and \$358 million at Dec. 31, 2014. A summary of the commitments to fund future investments is as follows: 2016—\$221 million; 2017—\$53 million; 2018—\$100 million; 2019—\$2 million; 2020—\$5 million and 2021 and thereafter—\$12 million.

Tax credits and other tax benefits recognized were \$130 million in 2015, \$128 million in 2014, and \$118 million in 2013.

Amortization expense included in the provision for income taxes was \$99 million in 2015, \$96 million in the 2014, and \$88 million in 2013.

Note 8 - Deposits

Total time deposits in denominations of \$100,000 or greater was \$72.2 billion at Dec. 31, 2015, and \$46.5 billion at Dec. 31, 2014. At Dec. 31, 2015, the scheduled maturities of all time deposits are as follows: 2016 – \$73.1 billion; 2017 – \$2 million; 2018 – \$2 million; 2019 – \$- million; 2020 – \$- million; and 2021 and thereafter – \$1 million.

Note 9 - Net interest revenue

The following table provides the components of net interest revenue presented on the consolidated income statement.

Net interest revenue <i>(in millions)</i>	2015	2014	2013
Interest revenue			
Non-margin loans	\$ 727	\$ 697	\$ 674
Margin loans	207	182	160
Securities:			
Taxable	1,813	1,603	1,782
Exempt from federal income taxes	82	100	103
Total securities	1,895	1,703	1,885
Deposits with banks	104	238	279
Deposits with the Federal Reserve and other central banks	170	207	150
Federal funds sold and securities purchased under resale agreements	147	86	47
Trading assets	76	121	157
Total interest revenue	3,326	3,234	3,352
Interest expense			
Deposits in domestic offices	30	29	35
Deposits in foreign offices	7	54	70
Federal funds purchased and securities sold under repurchase agreements	(6)	(13)	(16)
Trading liabilities	9	25	38
Other borrowed funds	9	6	7
Commercial paper	2	2	—
Customer payables	7	9	8
Long-term debt	242	242	201
Total interest expense	300	354	343
Net interest revenue	\$ 3,026	\$ 2,880	\$ 3,009

Note 10 - Noninterest expense

The following table provides a breakdown of noninterest expense presented on the consolidated income statement.

Noninterest expense <i>(in millions)</i>	2015	2014	2013
Staff:			
Compensation	\$ 3,580	\$ 3,630	\$ 3,620
Incentives	1,415	1,331	1,384
Employee benefits	842	884	1,015
Total staff	5,837	5,845	6,019
Professional, legal and other purchased services	1,230	1,339	1,252
Software	627	620	596
Net occupancy	600	610	629
Distribution and servicing	381	428	435
Furniture and equipment	280	322	337
Sub-custodian	270	286	280
Business development	267	268	317
Clearing	150	129	130
Communications	103	119	131
Other	708	783	768
Amortization of intangible assets	261	298	342
Litigation	87	953	24
Merger and integration and restructuring charges	(2)	177	46
Total noninterest expense	\$ 10,799	\$ 12,177	\$ 11,306

Note 11 - Restructuring charges

Aggregate restructuring charges are included in M&I, litigation and restructuring charges on the income statement. Restructuring charges recorded in 2014 related to corporate-level initiatives and were therefore recorded in the Other segment. In the fourth quarter of 2013, restructuring charges were recorded in the businesses. Prior to the fourth quarter of 2013, restructuring charges were reported in the Other segment. Severance payments are primarily paid over the salary continuance period in accordance with the separation plan. We recorded net restructuring recoveries of \$2 million in 2015, net charges of \$177 million in 2014 and net charges of \$45 million in 2013.

Streamlining actions

In 2014, we disclosed streamlining actions which included rationalizing our staff and simplifying and automating global processes primarily related to actions taken across investment services, technology, and operations. The initial restructuring charge consisted of \$125 million of severance costs. We

recorded total restructuring charges of \$16 million in 2015 primarily related to severance. The following table presents the activity in the reserve through Dec. 31, 2015.

Streamlining actions 2014 – restructuring reserve activity	
<i>(in millions)</i>	Total
Original restructuring charge	\$ 125
Net additional charges	59
Utilization	(92)
Balance at Dec. 31, 2014	92
Net additional charges	16
Utilization	(79)
Balance at Dec. 31, 2015	\$ 29

The table below presents the restructuring charge if it had been allocated by business.

Streamlining actions 2014 – restructuring charge by business				Total charges since inception
<i>(in millions)</i>	2015	2014		
Investment Management	\$ 12	\$ 23	\$	35
Investment Services	2	83		85
Other segment (including Business Partners)	2	78		80
Total restructuring charge	\$ 16	\$ 184	\$	200

Operational Excellence Initiatives

In 2011, we announced our Operational Excellence Initiatives which include an expense reduction initiative impacting approximately 1,500 positions, as well as additional initiatives to transform operations, technology and corporate services that will increase productivity and reduce the growth rate of expenses. We recorded a pre-tax restructuring charge of \$107 million related to the Operational Excellence Initiatives in 2011. This charge consisted of \$78 million of severance costs and \$29 million primarily for operating lease-related items and consulting costs. We recorded a \$9 million net recovery in 2015 related to this program. The following table presents the activity in the restructuring reserve related to the Operational Excellence Initiatives through Dec. 31, 2015.

Operational Excellence Initiatives 2011 – restructuring reserve activity			
<i>(in millions)</i>	Severance	Other	Total
Original restructuring charge	\$ 78	\$ 29	\$ 107
Net additional charges (net recovery/gain)	100	(57)	43
Utilization	(98)	28	(70)
Balance at Dec. 31, 2013	80	—	80
Net additional (recovery)	(7)	—	(7)
Utilization	(45)	—	(45)
Balance at Dec. 31, 2014	28	—	28
Net additional (recovery)	(9)	—	(9)
Utilization	(10)	—	(10)
Balance at Dec. 31, 2015	\$ 9	\$ —	\$ 9

The table below presents the restructuring charge if it had been allocated by business.

Operational Excellence Initiatives 2011 – restructuring charge (recovery) by business				Total charges since inception
<i>(in millions)</i>	2015	2014	2013	
Investment Management	\$ (2)	\$ (1)	\$ 4	\$ 49
Investment Services	(2)	(1)	25	82
Other segment (including Business Partners)	(5)	(5)	16	3
Total restructuring charge (recovery)	\$ (9)	\$ (7)	\$ 45	\$ 134

Note 12 - Income taxes

The components of the income tax provision are as follows:

Provision (benefit) for income taxes	Year ended Dec. 31,		
	2015	2014	2013
<i>(in millions)</i>			
Current taxes:			
Federal	\$ 551	\$ 1,273	\$ 714
Foreign	306	337	286
State and local	109	155	66
Total current tax expense	966	1,765	1,066
Deferred tax expense (benefit):			
Federal	114	(672)	536
Foreign	(1)	(98)	(30)
State and local	(66)	(83)	20
Total deferred tax expense (benefits)	47	(853)	526
Provision for income taxes	\$ 1,013	\$ 912	\$ 1,592

The components of income before taxes are as follows:

Components of income before taxes <i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Domestic	\$ 2,698	\$ 2,456	\$ 2,428
Foreign	1,537	1,107	1,349
Income before taxes	\$ 4,235	\$ 3,563	\$ 3,777

The components of our net deferred tax liability are as follows:

Net deferred tax liability <i>(in millions)</i>	Dec. 31,	
	2015	2014
Depreciation and amortization	\$ 2,631	\$ 2,646
Lease financings	569	761
Securities valuation	156	230
Pension obligation	155	117
Equity investments	113	115
Employee benefits	(470)	(616)
Reserves not deducted for tax	(274)	(536)
Credit losses on loans	(102)	(113)
Other assets	(109)	(99)
Other liabilities	110	277
Net deferred tax liability	\$ 2,779	\$ 2,782

As of Dec. 31, 2015, we have an available German net operating loss carryforward of \$90 million with an indefinite life. Also, we have a U.S. foreign tax credit carryforward of approximately \$36 million that will expire in 2025. We believe it is more likely than not that we will fully realize our deferred tax assets.

As of Dec. 31, 2015, we had approximately \$6.2 billion of earnings attributable to foreign subsidiaries that have been permanently reinvested abroad and for which no incremental U.S. income tax provision has been recorded. If these earnings were to be repatriated, the estimated U.S. tax liability as of Dec. 31, 2015 would be up to \$1.1 billion. Management has no intention of repatriating these earnings to the U.S. in the foreseeable future.

The statutory federal income tax rate is reconciled to our effective income tax rate below:

Effective tax rate	Year ended Dec. 31,		
	2015	2014	2013
Federal rate	35.0%	35.0%	35.0%
State and local income taxes, net of federal income tax benefit	0.6	1.3	1.6
Leverage lease adjustment	(1.3)	(1.1)	(2.1)
Tax-exempt income	(2.5)	(3.3)	(3.1)
Foreign operations	(6.6)	(3.0)	(4.4)
Tax credits	(1.4)	(0.8)	(2.0)
Tax litigation	—	—	16.5
Carryback claim	—	(4.7)	—
Nondeductible litigation expense	—	2.1	—
Other – net	0.1	0.1	0.6
Effective tax rate	23.9%	25.6%	42.1%

Unrecognized tax positions <i>(in millions)</i>	2015	2014	2013
	Beginning balance at Jan. 1, – gross	\$ 669	\$ 866
Prior period tax positions:			
Increases	13	58	570
Decreases	(21)	(257)	(19)
Current period tax positions	14	19	21
Settlements	(26)	(17)	(46)
Ending balance at Dec. 31, – gross	\$ 649	\$ 669	\$ 866

Our total tax reserves as of Dec. 31, 2015 were \$649 million compared with \$669 million at Dec. 31, 2014. If these tax reserves were unnecessary, \$649 million would affect the effective tax rate in future periods. We recognize accrued interest and penalties, if applicable, related to income taxes in income tax expense. Included in the balance sheet at Dec. 31, 2015 is accrued interest, where applicable, of \$194 million. The additional tax expense related to interest for the year ended Dec. 31, 2015 was \$2 million compared with \$1 million for the year ended Dec. 31, 2014.

It is reasonably possible the total reserve for uncertain tax positions could decrease within the next 12 months by approximately \$60 million as a result of adjustments related to tax years that are still subject to examination.

On Nov. 10, 2009, BNY Mellon filed a petition with the U.S. Tax Court challenging the IRS's disallowance of certain foreign tax credits claimed for the 2001 and 2002 tax years. Trial was held from

April 16 to May 17, 2012. On Feb. 11, 2013, BNY Mellon received an adverse decision from the U.S. Tax Court. On Sept. 23, 2013, the U.S. Tax Court amended its prior ruling to allow BNY Mellon an interest expense deduction and to exclude certain items from taxable income. The net impact of the court rulings for all years involved and related interest decreased after-tax income in 2013 by \$593 million.

The U.S. Tax Court ruling was finalized on Feb. 20, 2014. On March 5, 2014, BNY Mellon appealed the decision to the Second Circuit Court of Appeals. On Sept. 25, 2014, the government filed its response to our appeal. On Sept. 9, 2015, the Second Circuit

affirmed the Tax Court decision. On Nov. 2, 2015, BNY Mellon filed a petition for review with the Supreme Court of the United States, seeking reversal of the Second Circuit Court of Appeals decision. See Note 22 of the Notes to Consolidated Financial Statements for additional information.

Our federal income tax returns are closed to examination through 2010. Our New York State tax returns are closed to examination through 2012. Our New York City income tax returns are closed to examination through 2010. Our UK income tax returns are closed to examination through 2012.

Note 13 - Long-term debt

Long-term debt (in millions)	Dec. 31, 2015			Dec. 31, 2014	
	Rate	Maturity	Amount	Rate	Amount
Senior debt:					
Fixed rate	0.70 - 5.94%	2016 - 2025	\$ 17,724	0.70 - 6.92%	\$ 16,122
Floating rate	0.41 - 1.48%	2018 - 2038	2,378	0.06 - 0.82%	2,178
Subordinated debt (a)	5.45 - 7.50%	2016 - 2021	1,150	4.95 - 7.50%	1,655
Junior subordinated debentures (a)	6.37%	2036	295	6.37%	309
Total			\$ 21,547		\$ 20,264

(a) Fixed rate.

Total long-term debt that matures during the next five years for BNY Mellon is as follows: 2016 – \$2.45 billion, 2017 – \$1.25 billion, 2018 – \$3.65 billion, 2019 – \$4.25 billion and 2020 – \$4.01 billion.

Trust-preferred securities

Mellon Capital III, a Delaware statutory trust owned by BNY Mellon, issued trust preferred securities in 2006. At Dec. 31, 2015, the sole assets of Mellon Capital III are junior subordinated debentures of BNY Mellon with maturities and interest rates that match the trust preferred securities. BNY Mellon's obligations provide a full and unconditional guarantee of payment of distributions and other amounts due on the trust preferred securities. The guarantee does not guarantee payment of distributions or other amounts due when Mellon Capital III does not have funds available to make such payments.

Mellon Capital IV, a Delaware statutory trust owned by BNY Mellon, issued trust preferred securities in June 2007. The sole assets of Mellon Capital IV originally were junior subordinated debentures and a stock purchase contract for preferred stock. Through a remarketing in May 2012, the junior subordinated debentures issued by BNY Mellon and held by Mellon Capital IV were sold to third party investors and then exchanged for BNY Mellon's senior notes, which were sold in a public offering. The proceeds of the sale of the senior notes were used to fund the purchase by Mellon Capital IV of \$500 million of BNY Mellon's Series A preferred stock, which was issued on June 20, 2012. At Dec. 31, 2015, the Series A preferred stock was the sole asset of Mellon Capital IV. See Note 15 of the Notes to Consolidated Financial Statements for additional disclosures related to preferred stock, including the Series A preferred stock.

The following tables summarize the trust preferred securities issued by the Trusts as of Dec. 31, 2015 and 2014.

Trust preferred securities at Dec. 31, 2015	Trust-preferred securities issued by the trust	Interest rate	Assets of the trust (a)	Due date	Call date	Call price
<i>(dollar amounts in millions)</i>						
MEL Capital III (b)	\$ 296	6.37%	\$ 295	2036	2016	Par
MEL Capital IV	—	—%	500	—	—	—
Total	\$ 296		\$ 795			

(a) Represents junior subordinated deferrable interest debentures of BNY Mellon in the case of MEL Capital III and BNY Mellon's Series A preferred stock in the case of MEL Capital IV.

(b) Amount was translated from Sterling into U.S. dollars on a basis of U.S. \$1.48 to £1, the rate of exchange on Dec. 31, 2015.

Trust preferred securities at Dec. 31, 2014	Trust-preferred securities issued by the trust	Interest rate	Assets of the trust (a)	Due date	Call date	Call price
<i>(dollar amounts in millions)</i>						
MEL Capital III (b)	\$ 312	6.37%	\$ 309	2036	2016	Par
MEL Capital IV	—	—%	500	—	—	—
Total	\$ 312		\$ 809			

(a) Represents junior subordinated deferrable interest debentures of BNY Mellon in the case of MEL Capital III and BNY Mellon's Series A preferred stock in the case of MEL Capital IV.

(b) Amount was translated from Sterling into U.S. dollars on a basis of U.S. \$1.56 to £1, the rate of exchange on Dec. 31, 2014.

Note 14 - Securitizations and variable interest entities

BNY Mellon's VIEs generally include retail, institutional and alternative investment funds, including collateralized loan obligation structures in which we provide asset management services. The funds are offered to our retail and institutional clients to provide them with access to investment vehicles with specific investment objectives and strategies that address the client's investment needs.

BNY Mellon earns management fees from these funds as well as performance fees in certain funds and may also provide start-up capital for its new funds. The VIEs are primarily financed by our customer's investments in the funds' equity or debt. These VIEs are included in the scope of ASU 2015-02 and are reviewed for consolidation based on the guidance in ASC 810.

We reconsider and reassess whether or not we are the primary beneficiary of a VIE when governing documents or contractual arrangements are changed which would reallocate the obligation to absorb expected losses or receive expected residual returns between BNY Mellon and the other investors, when BNY Mellon disposes of its variable interests in the fund or when additional variable interests are issued to other investors and when we acquire additional variable interests in the VIE.

The following tables present the incremental assets and liabilities included in BNY Mellon's consolidated financial statements, after applying intercompany eliminations, as of Dec. 31, 2015 based on the assessments performed in accordance with ASC 810, as amended by ASU 2015-02, and as of Dec. 31, 2014 based on the assessments performed in accordance with ASC 810, prior to the adoption of ASU 2015-02. The net assets of any consolidated VIE are solely available to settle the liabilities of the VIE and to settle any investors' ownership liquidation requests, including any seed capital invested in the VIE by BNY Mellon.

Investments consolidated under ASC 810 as amended by ASU 2015-02 at Dec. 31, 2015			
<i>(in millions)</i>	Investment Management funds	Securitizations	Total consolidated investments
Available-for-sale securities	\$ —	\$ 400	\$ 400
Trading assets	1,228	—	1,228
Other assets	173	—	173
Total assets	\$ 1,401 (a)	\$ 400	\$ 1,801
Trading liabilities	\$ 229	\$ —	\$ 229
Other liabilities	17	359	376
Total liabilities	\$ 246 (a)	\$ 359	\$ 605
Nonredeemable noncontrolling interests	\$ 738 (a)	\$ —	\$ 738

(a) Includes VMEs with assets of \$190 million, liabilities of \$1 million and nonredeemable noncontrolling interests of \$5 million.

Investments consolidated under ASC 810 and ASU 2009-17 at Dec. 31, 2014

<i>(in millions)</i>	Investment Management funds	Securitizations	Total consolidated investments
Available-for-sale securities	\$ —	\$ 414	\$ 414
Trading assets	8,678	—	8,678
Other assets	604	—	604
Total assets	\$ 9,282 (a)	\$ 414	\$ 9,696
Trading liabilities	\$ 7,660	\$ —	\$ 7,660
Other liabilities	9	363	372
Total liabilities	\$ 7,669 (a)	\$ 363	\$ 8,032
Nonredeemable noncontrolling interests	\$ 1,033 (a)	\$ —	\$ 1,033

(a) Includes VMEs with assets of \$855 million, liabilities of \$148 million and nonredeemable noncontrolling interests of \$544 million.

BNY Mellon is not contractually required to provide financial or any other support to any of our VIEs. Additionally, creditors of any consolidated VIEs do not have any recourse to the general credit of BNY Mellon.

Non-consolidated VIEs

As of Dec. 31, 2015 and Dec. 31, 2014, the following assets related to the VIEs where BNY Mellon is not the primary beneficiary are included in our consolidated financial statements.

Non-consolidated VIEs at Dec. 31, 2015

<i>(in millions)</i>	Assets	Liabilities	Maximum loss exposure
Other	\$ 189	\$ —	\$ 189

Non-consolidated VIEs at Dec. 31, 2014

<i>(in millions)</i>	Assets	Liabilities	Maximum loss exposure
Other	\$ 148	\$ —	\$ 148

The maximum loss exposure indicated in the above tables relates solely to BNY Mellon's seed capital or residual interests invested in the VIEs.

Note 15 - Shareholders' equity*Common stock*

BNY Mellon has 3.5 billion authorized shares of common stock with a par value of \$0.01 per share. At Dec. 31, 2015, 1,085,342,985 shares of common stock were outstanding.

Common stock repurchase program

On March 26, 2014, in connection with the Federal Reserve's non-objection to our 2014 capital plan, the board of directors authorized a stock purchase program providing for the repurchase of an aggregate of \$1.74 billion of common stock beginning in the second quarter of 2014 and continuing through the first quarter of 2015. On March 11, 2015, in connection with the Federal Reserve's non-objection to our 2015 capital plan, the board of directors authorized a new stock purchase program providing for the repurchase of an aggregate of \$3.1 billion of common stock beginning in the second quarter of 2015 and continuing through the second quarter of 2016. Of the \$3.1 billion authorization, common stock repurchases of \$700 million was contingent on a prior issuance of \$1 billion of qualifying preferred stock. The Company completed the issuance of preferred stock on April 28, 2015. Share repurchases may be executed through repurchase plans designed to comply with Rule 10b5-1 and through derivative, accelerated share repurchase and other structured transactions. In 2015, we repurchased 55.6 million common shares at an average price of \$42.35 per common share for a total of \$2.4 billion. At Dec. 31, 2015, the maximum dollar value of shares that may yet be purchased under the March 11, 2015 program, including employee benefit plan repurchases, totaled \$1.1 billion.

Preferred stock

BNY Mellon has 100 million authorized shares of preferred stock with a par value of \$0.01. The table below summarizes BNY Mellon's preferred stock issued and outstanding at Dec. 31, 2015 and Dec. 31, 2014.

Preferred stock summary			Liquidation preference per share (in dollars)	Total shares issued and outstanding		Carrying value (a)	
				Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2014
<i>(dollars in millions, unless otherwise noted)</i>							
		Per annum dividend rate					
Series A	Noncumulative Perpetual Preferred Stock	Greater of (i) three-month LIBOR plus 0.565% for the related distribution period; or (ii) 4.000%	\$ 100,000	5,001	5,001	\$ 500	\$ 500
Series C	Noncumulative Perpetual Preferred Stock	5.2%	\$ 100,000	5,825	5,825	568	568
Series D	Noncumulative Perpetual Preferred Stock	4.50% commencing Dec. 20, 2013 to but excluding June 20, 2023, then a floating rate equal to the three-month LIBOR plus 2.46%	\$ 100,000	5,000	5,000	494	494
Series E	Noncumulative Perpetual Preferred Stock	4.95% commencing Dec. 20, 2015 to and including June 20, 2020, then a floating rate equal to the three-month LIBOR plus 3.42%	\$ 100,000	10,000	—	990	—
Total				25,826	15,826	\$ 2,552	\$ 1,562

(a) The carrying value of the Series C, Series D and Series E preferred stock is recorded net of issuance costs.

Holder of both the Series A and Series C preferred stock are entitled to receive dividends on each dividend payment date (March 20, June 20, September 20 and December 20 of each year), if declared by BNY Mellon's Board of Directors. Holders of the Series D preferred stock are entitled to receive dividends, if declared by our board of directors, on each June 20 and December 20, to but excluding June 20, 2023; and on each March 20, June 20, September 20 and December 20, from and including June 20, 2023. Holders of the Series E preferred stock are entitled to receive dividends, if declared by our board of directors, on each June 20 and December 20, to and including June 20, 2020; and on each March 20, June 20, September 20 and December 20, from and including September 20, 2020. BNY Mellon's ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our common stock or any of our shares that rank junior to the preferred stock as to the payment of dividends and/or the distribution of any assets on any liquidation, dissolution or winding-up of BNY Mellon will be prohibited, subject to certain restrictions, in the event that we do not declare and pay in full preferred dividends for the then current dividend period of the Series A preferred stock or the last preceding dividend period of the Series C, Series D and Series E preferred stock.

All of the outstanding shares of the Series A preferred stock are owned by Mellon Capital IV, which will pass through any dividend on the Series A preferred stock to the holders of its Normal Preferred Capital Securities. All of the outstanding shares of the Series C, Series D and Series E preferred stock are held by the depositary of the depositary shares, which will pass through the applicable portion of any dividend on the Series C, Series D and Series E preferred stock to the holders of record of their respective depositary shares.

On Dec. 21, 2015, The Bank of New York Mellon Corporation paid the following dividends for the noncumulative perpetual preferred stock for the dividend period ending in December 2015 to holders of record as of the close of business on Dec. 5, 2015:

- \$1,011.11 per share on the Series A Preferred Stock (equivalent to \$10.1111 per Normal Preferred Capital Security of Mellon Capital IV, each representing a 1/100th interest in a share of Series A Preferred Stock);
- \$1,300.00 per share on the Series C Preferred Stock (equivalent to \$0.3250 per depositary share, each representing a 1/4,000th interest in a share of the Series C Preferred Stock);
- \$2,250.00 per share on the Series D Preferred Stock (equivalent to \$22.50 per depositary share,

- each representing a 1/100th interest in a share of the Series D Preferred Stock); and
- \$3,190.00 per share on the Series E Preferred Stock (equivalent to \$31.90 per depositary share, each representing a 1/100th interest in a share of the Series E Preferred Stock).

The preferred stock is not subject to the operation of a sinking fund and is not convertible into, or exchangeable for, shares of our common stock or any other class or series of our other securities. Subject to the restrictions in BNY Mellon's 2007 replacement capital covenant, subsequently amended on May 8 and Sept. 11, 2012, we may redeem the Series A preferred stock, in whole or in part, at our option. We may also, at our option, redeem the shares of the Series C preferred stock in whole or in part, on or after the dividend payment date in September 2017, the Series D preferred stock in whole or in part, on or after the dividend payment date in June 2023 and the Series E preferred stock in whole or in part, on or after the dividend payment date in June 2020. The Series C, Series D or Series E preferred stock can be redeemed in whole but not in part at any time within 90 days following a regulatory capital treatment event (as defined in each of the Series C, Series D and Series E's Certificates of Designation).

Terms of the Series A, Series C, Series D and Series E preferred stock are more fully described in each of their Certificate of Designations, each of which is filed as an Exhibit to BNY Mellon's Annual Report on Form 10-K for the year ended Dec. 31, 2015.

Temporary equity

Temporary equity was \$200 million at Dec. 31, 2015 and \$229 million at Dec. 31, 2014. Temporary equity represents amounts recorded for redeemable non-controlling interests resulting from equity-classified share-based payments and other investment arrangements that are currently redeemable or are expected to become redeemable. The current redemption value of such awards is classified as temporary equity and is adjusted to its redemption value at each balance sheet date.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies and banks, including BNY Mellon and our bank subsidiaries, in accordance with established quantitative measurements. For the

Parent to maintain its status as a financial holding company, our bank subsidiaries and BNY Mellon must, among other things, qualify as "well capitalized".

As of Dec. 31, 2015 and Dec. 31, 2014, BNY Mellon and our bank subsidiaries were considered "well capitalized" on the basis of the Tier 1 and Total capital ratios and, in the case of our bank subsidiaries, the CET1 ratio and the leverage capital ratio (Tier 1 capital to quarterly average assets as defined for regulatory purposes).

Our consolidated and largest bank subsidiary, The Bank of New York Mellon, regulatory capital ratios are shown below.

Consolidated and largest bank subsidiary regulatory capital ratios (a)	Dec. 31,	
	2015	2014
Consolidated regulatory capital ratios:		
CET1	10.8%	11.2%
Tier 1 capital ratio	12.3	12.2
Total (Tier 1 plus Tier 2) capital ratio	12.5	12.5
Leverage capital ratio	6.0	5.6
The Bank of New York Mellon regulatory capital ratios:		
CET1	11.8%	N/A
Tier 1 capital ratio	12.3	12.4%
Total (Tier 1 plus Tier 2) capital ratio	12.5	12.6
Leverage capital ratio	5.9	5.2

(a) The CET1, Tier 1 and Total risk-based regulatory capital ratios are based on Basel III components of capital, as phased-in, and the Advanced Approach framework as the related RWA were higher using that framework. The leverage capital ratio is based on Basel III components of capital and quarterly average total assets, as phased-in. For BNY Mellon to qualify as "well capitalized," its Tier 1 and Total (Tier 1 plus Tier 2) capital ratios must be at least 6% and 10%, respectively. For The Bank of New York Mellon, our largest bank subsidiary, to qualify as "well capitalized," its CET1, Tier 1, Total and leverage capital ratios must be at least 6.5%, 8%, 10% and 5%, respectively. For The Bank of New York Mellon to qualify as "adequately capitalized," its CET1, Tier 1, Total and leverage capital ratios must be at least 4.5%, 6%, 8% and 4%, respectively.

If a financial holding company such as BNY Mellon fails to qualify as "well capitalized", it may lose its status as a financial holding company, which may restrict its ability to undertake or continue certain activities or make acquisitions that are not generally permissible for bank holding companies without financial holding company status. If The Bank of New York Mellon or BNY Mellon, N.A. fails to qualify as "well capitalized", it may be subject to higher FDIC assessments.

If a bank holding company such as BNY Mellon or bank such as The Bank of New York Mellon or BNY Mellon, N.A. fails to qualify as “adequately capitalized”, regulatory sanctions and limitations are imposed.

The following table presents the components of our transitional CET1, Tier 1 and Tier 2 capital, the RWA determined under both the Standardized and Advanced Approaches and the average assets used for leverage capital purposes.

Components of transitional capital (a) (in millions)	Dec. 31,	
	2015	2014
CET1:		
Common shareholders’ equity	\$ 36,067	\$ 36,326
Goodwill and intangible assets	(17,295)	(17,111)
Net pension fund assets	(46)	(17)
Equity method investments	(296)	(314)
Deferred tax assets	(8)	(4)
Other	(5)	4
Total CET1	18,417	18,884
Other Tier 1 capital:		
Preferred stock	2,552	1,562
Trust preferred securities	74	156
Disallowed deferred tax assets	(12)	(14)
Net pension fund assets	(70)	(69)
Other	(25)	(17)
Total Tier 1 capital	20,936	20,502
Tier 2 capital:		
Trust preferred securities	222	156
Subordinated debt	149	298
Allowance for credit losses	275	280
Other	(12)	(11)
Total Tier 2 capital - Standardized Approach	634	723
Excess of expected credit losses	37	13
Less: Allowance for credit losses	275	280
Total Tier 2 capital - Advanced Approach	\$ 396	\$ 456
Total capital:		
Standardized Approach	\$ 21,570	\$ 21,225
Advanced Approach	\$ 21,332	\$ 20,958
Risk-weighted assets:		
Standardized Approach (b)	\$ 159,893	\$ 125,562
Advanced Approach:		
Credit Risk	\$ 106,974	\$ 120,122
Market Risk	2,148	3,046
Operational Risk	61,262	45,112
Total Advanced Approach	\$ 170,384	\$ 168,280
Average assets for leverage capital purposes	\$ 351,435	\$ 368,140

(a) Reflects transitional adjustments to CET1, Tier 1 capital and Tier 2 capital required in 2015 under the U.S. capital rules.

(b) RWA under the Standardized Approach at Dec. 31, 2014 was determined using a Basel I-based calculation. Effective Jan. 1, 2015, we implemented the Basel III Standardized Approach which used a broader array of more risk sensitive risk-weighting categories.

The following table presents the amount of capital by which BNY Mellon and our largest bank subsidiary, The Bank of New York Mellon, exceeded the capital thresholds determined under the transitional rules at Dec. 31, 2015.

Capital above thresholds at Dec. 31, 2015			
(in millions)	Consolidated		The Bank of New York Mellon (b)
CET1	\$	10,750 (a)	\$ 7,333
Tier 1 capital		10,713 (b)	5,837
Total capital		4,294 (b)	3,394
Leverage capital		6,879 (a)	2,464

(a) Based on minimum required standards.

(b) Based on well capitalized standards.

Note 16 - Other comprehensive income (loss)

(in millions)	Components of other comprehensive income (loss)								
	Dec. 31, 2015			Year ended Dec. 31, 2014			Dec. 31, 2013		
	Pre-tax amount	Tax (expense) benefit	After-tax amount	Pre-tax amount	Tax (expense) benefit	After-tax amount	Pre-tax amount	Tax (expense) benefit	After-tax amount
Foreign currency translation:									
Foreign currency translation adjustments arising during the period (a)	\$ (518)	\$ (81)	\$ (599)	\$ (715)	\$ (91)	\$ (806)	\$ 130	\$ 62	\$ 192
Total foreign currency translation	(518)	(81)	(599)	(715)	(91)	(806)	130	62	192
Unrealized gain (loss) on assets available-for-sale:									
Unrealized gain (loss) arising during period	(535)	172	(363)	582	(169)	413	(1,466)	577	(889)
Reclassification adjustment (b)	(83)	31	(52)	(91)	33	(58)	(129)	55	(74)
Net unrealized gain (loss) on assets available-for-sale	(618)	203	(415)	491	(136)	355	(1,595)	632	(963)
Defined benefit plans:									
Prior service cost arising during the period	—	—	—	3	(1)	2	(2)	1	(1)
Net gain (loss) arising during the period	(105)	40	(65)	(766)	287	(479)	732	(303)	429
Foreign exchange adjustment	—	—	—	(2)	1	(1)	—	—	—
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost (b)	104	(35)	69	127	(50)	77	209	(83)	126
Total defined benefit plans	(1)	5	4	(638)	237	(401)	939	(385)	554
Unrealized gain (loss) on cash flow hedges:									
Unrealized hedge gain (loss) arising during period	—	—	—	23	(13)	10	136	(54)	82
Reclassification adjustment (b)	11	(3)	8	(41)	16	(25)	(124)	51	(73)
Net unrealized gain (loss) on cash flow hedges	11	(3)	8	(18)	3	(15)	12	(3)	9
Total other comprehensive income (loss)	\$ (1,126)	\$ 124	\$ (1,002)	\$ (880)	\$ 13	\$ (867)	\$ (514)	\$ 306	\$ (208)

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 23 for additional information.

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains on the Consolidated Income Statement. The amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost is recorded as staff expense on the Consolidated Income Statement. See Note 23 of the Notes to Consolidated Financial Statements for the location of the reclassification adjustment related to cash flow hedges on the Consolidated Income Statement.

Changes in accumulated other comprehensive income (loss) attributable to The Bank of New York Mellon Corporation shareholders

(in millions)	Foreign currency translation	ASC 820 Adjustments		Unrealized gain (loss) on assets available-for-sale	Unrealized gain (loss) on cash flow hedges	Total accumulated other comprehensive income (loss), net of tax
		Pensions	Other post-retirement benefits			
2012 ending balance	\$ (539)	\$ (1,394)	\$ (60)	\$ 1,350	\$ —	\$ (643)
Change in 2013	151	554	—	(963)	9	(249)
2013 ending balance	\$ (388)	\$ (840)	\$ (60)	\$ 387	\$ 9	\$ (892)
Change in 2014	(681)	(396)	(5)	355	(15)	(742)
2014 ending balance	\$ (1,069)	\$ (1,236)	\$ (65)	\$ 742	\$ (6)	\$ (1,634)
Change in 2015	(563)	(14)	18	(415)	8	(966)
2015 ending balance	\$ (1,632)	\$ (1,250)	\$ (47)	\$ 327	\$ 2	\$ (2,600)

Note 17 - Stock-based compensation

Our Long-Term Incentive Plans provide for the issuance of stock options, restricted stock, restricted stock units (“RSUs”) and other stock-based awards to employees and directors of BNY Mellon. At Dec. 31, 2015, under the Long-Term Incentive Plan approved in April 2014, we may issue 42,097,582 new stock-

based awards. Of this amount, 27,453,939 shares (subject to potential increase as provided in the Long-Term Incentive Plan) may be issued as restricted stock or RSUs. Stock-based compensation expense related to retirement eligibility vesting totaled \$97 million in 2015, \$88 million in 2014 and \$65 million in 2013.

Stock options

Our Long-Term Incentive Plans provide for the issuance of stock options at fair market value at the date of grant to officers and employees of BNY Mellon. Generally, each option granted is exercisable between one and ten years from the date of grant. No stock options were granted in 2015, 2014 and 2013.

The compensation cost that has been charged against income was \$10 million for 2015, \$28 million for 2014 (including \$1 million recorded in restructuring expense) and \$49 million for 2013. The total income tax benefit recognized in the income statement was \$4 million for 2015, \$11 million for 2014 and \$20 million for 2013.

A summary of the status of our options as of Dec. 31, 2015, and changes during the year, is presented below:

Stock option activity	Shares subject to option	Weighted-average exercise price	Weighted-average remaining contractual term (in years)
Balance at Dec. 31, 2014	48,420,255	\$ 33.06	4.2
Granted	—	—	
Exercised	(10,862,315)	30.15	
Canceled/Expired	(1,822,676)	40.36	
Balance at Dec. 31, 2015	35,735,264	\$ 33.57	3.4
Vested and expected to vest at Dec. 31, 2015	35,734,694	33.57	3.4
Exercisable at Dec. 31, 2015	33,703,283	34.27	3.2

Range of exercise prices	Options outstanding			Options exercisable (a)	
	Outstanding at Dec. 31, 2015	Weighted-average remaining contractual life (in years)	Weighted-average exercise price	Exercisable at Dec. 31, 2015	Weighted-average exercise price
\$ 18 to 31	19,256,469	4.9	\$ 25.78	17,224,488	\$ 26.22
\$ 31 to 41	6,044,363	1.0	39.73	6,044,363	39.73
\$ 41 to 51	10,434,432	2.0	44.38	10,434,432	44.38
\$ 18 to 51	35,735,264	3.4	\$ 33.57	33,703,283	\$ 34.27

(a) At Dec. 31, 2014 and 2013, 42,137,574 and 52,130,525 options were exercisable at an average price per common share of \$34.38 and \$34, respectively.

Aggregate intrinsic value of options (in millions)	2015	2014	2013
Outstanding at Dec. 31,	\$ 306	\$ 409	\$ 336
Exercisable at Dec. 31,	\$ 267	\$ 307	\$ 212

The total intrinsic value of options exercised was \$130 million in 2015, \$118 million in 2014 and \$67 million in 2013.

As of Dec. 31, 2015, \$1 million of total unrecognized compensation cost related to nonvested options is expected to be recognized over a weighted-average period of less than 3 months.

Cash received from option exercises totaled \$326 million in 2015, \$370 million in 2014 and \$263 million in 2013. The actual tax benefit realized for the tax deductions from options exercised totaled \$21 million in 2015, \$17 million in 2014 and less than \$8 million in 2013.

Restricted stock and RSUs

Restricted stock and RSUs are granted under our long-term incentive plans at no cost to the recipient. These awards are subject to forfeiture until certain restrictions have lapsed, including continued employment, for a specified period. The recipient of a share of restricted stock is entitled to voting rights and generally is entitled to dividends on the common stock. An RSU entitles the recipient to receive a

share of common stock after the applicable restrictions lapse. The recipient generally is entitled to receive cash payments equivalent to any dividends paid on the underlying common stock during the period the RSU is outstanding but does not receive voting rights.

The fair value of restricted stock and RSUs is equal to the fair market value of our common stock on the date of grant. The expense is recognized over the vesting period, which is generally one to four years. The total compensation expense recognized for restricted stock and RSUs was \$235 million in 2015, \$243 million in 2014 (including \$13 million recorded in restructuring expense) and \$201 million in 2013. The total income tax benefit recognized in the income statement was \$83 million for 2015, \$94 million for 2014 and \$79 million for 2013.

BNY Mellon's Executive Committee members were granted a target award of 630,100 performance units ("PSUs") in 2015 that cliff vest in three years based on operating earnings per share with the potential of a risk modifier based on appropriate growth in risk-weighted assets. These awards are marked-to-market as the earnout percentages are determined at the discretion of the Human Resources Compensation Committee based on a payout table.

BNY Mellon's Executive Committee members were granted a target award of 719,947 PSUs in 2014 and 942,428 in 2013 that are earned annually based on an earnout percentage calculated using a metric of net income divided by risk-weighted assets under Basel III. The awards earned in each of the three performance periods vest at the end of the third performance period. Certain of the awards are granted to MRT (Material Risk Takers under the European Banking Authority) and are required to be marked to market due to discretionary claw-back language contained in their grants.

The following table summarizes our nonvested PSU, restricted stock and RSU activity for 2015.

Nonvested PSU, restricted stock and RSU activity	Number of shares	Weighted-average fair value
Nonvested PSUs, restricted stock and RSUs at Dec. 31, 2014	21,400,291	\$ 27.72
Granted	6,948,487	39.58
Vested	(10,880,844)	25.34
Forfeited	(483,963)	33.20
Nonvested PSUs, restricted stock and RSUs at Dec. 31, 2015	16,983,971	\$ 34.07

As of Dec. 31, 2015, \$190 million of total unrecognized compensation costs related to nonvested PSUs, restricted stock and RSUs is expected to be recognized over a weighted-average period of 1.6 years.

The total fair value of restricted stock and RSUs that vested was \$429 million in 2015, \$229 million in 2014 and \$117 million in 2013.

Subsidiary Long-Term Incentive plans

BNY Mellon also has several subsidiary Long-Term Incentive Plans which have issued restricted subsidiary shares to certain employees. These share awards are subject to forfeiture until certain restrictions have lapsed, including continued employment for a specified period of time. The shares are non-voting and non-dividend paying. Once the restrictions lapse, which generally occurs in zero to three years, the shares can only be sold, at the option of the employee, to BNY Mellon at a price based generally on the fair value of the subsidiary at the time of repurchase. In certain instances BNY Mellon has an election to call the shares.

Note 18 - Employee benefit plans

BNY Mellon has defined benefit and/or defined contribution retirement plans covering substantially all full-time and eligible part-time employees and other post-retirement plans providing healthcare benefits for certain retired employees. On Jan. 29, 2015, the board of directors approved an amendment to freeze benefit accruals under the U.S. qualified and nonqualified defined benefit plans effective June 30, 2015. This change resulted in no additional benefits being earned by participants in those plans based on service or pay after June 30, 2015. As a result of the

amendment to the U.S. pension plans, liabilities were re-measured as of Jan. 29, 2015 at a discount rate of

3.73%. The market-related value of plan assets was \$4,713 million at Jan. 29, 2015.

Pension and post-retirement healthcare plans

The following tables report the combined data for our domestic and foreign defined benefit pension and post-retirement healthcare plans.

	Pension Benefits				Healthcare Benefits			
	Domestic		Foreign		Domestic		Foreign	
	2015	2014	2015	2014	2015	2014	2015	2014
<i>(dollar amounts in millions)</i>								
Weighted-average assumptions used to determine benefit obligations								
Discount rate	4.48%	4.13%	3.45%	3.33%	4.48%	4.13%	3.60%	3.10%
Rate of compensation increase	N/A	3.00	3.51	3.29	3.00	3.00	—	—
Change in benefit obligation (a)								
Benefit obligation at beginning of period	\$ (4,460)	\$ (3,712)	\$ (1,177)	\$ (1,021)	\$ (210)	\$ (224)	\$ (8)	\$ (7)
Service cost	(30)	(58)	(32)	(33)	(1)	(1)	—	—
Interest cost	(170)	(180)	(38)	(43)	(8)	(11)	—	—
Employee contributions	—	—	(1)	(1)	—	—	—	—
Amendments	—	—	—	3	—	—	—	—
Actuarial gain (loss)	178	(687)	(1)	(169)	17	(8)	1	(1)
(Acquisitions) divestitures	—	—	12	—	—	—	2	—
Curtailments	94	—	—	—	—	—	—	—
Special termination benefits	—	(1)	—	—	—	—	—	—
Benefits paid	211	178	17	19	18	34	—	—
Foreign exchange adjustment	N/A	N/A	73	68	N/A	N/A	1	—
Benefit obligation at end of period	(4,177)	(4,460)	(1,147)	(1,177)	(184)	(210)	(4)	(8)
Change in fair value of plan assets								
Fair value at beginning of period	4,942	4,721	997	930	93	86	—	—
Actual return on plan assets	(61)	383	40	88	(1)	7	—	—
Employer contributions	19	16	51	56	18	34	—	—
Employee contributions	—	—	1	1	—	—	—	—
Acquisitions (divestitures)	—	—	1	—	—	—	—	—
Benefit payments	(211)	(178)	(17)	(19)	(18)	(34)	—	—
Foreign exchange adjustment	N/A	N/A	(59)	(59)	N/A	N/A	—	—
Fair value at end of period	4,689	4,942	1,014	997	92	93	—	—
Funded status at end of period	\$ 512	\$ 482	\$ (133)	\$ (180)	\$ (92)	\$ (117)	\$ (4)	\$ (8)
Amounts recognized in accumulated other comprehensive (income) loss consist of:								
Net loss (gain)	\$ 1,678	\$ 1,668	\$ 368	\$ 382	\$ 111	\$ 146	\$ (1)	\$ —
Prior service cost (credit)	—	(31)	1	1	(69)	(79)	—	—
Total (before tax effects)	\$ 1,678	\$ 1,637	\$ 369	\$ 383	\$ 42	\$ 67	\$ (1)	\$ —

(a) The benefit obligation for pension benefits is the projected benefit obligation and for healthcare benefits, it is the accumulated benefit obligation.

Notes to Consolidated Financial Statements (continued)

Net periodic benefit cost (credit)	Pension Benefits						Healthcare Benefits					
	Domestic			Foreign			Domestic			Foreign		
<i>(dollar amounts in millions)</i>	2015	2014	2013	2015	2014	2013	2015	2014	2013	2015	2014	2013
Weighted-average assumptions as of Jan. 1:												
Market-related value of plan assets	\$ 4,696	\$ 4,430	\$ 4,121	\$ 959	\$ 898	\$ 790	\$ 92	\$ 86	\$ 80	N/A	N/A	N/A
Discount rate	4.13%	4.99%	4.25%	3.33%	4.29%	4.49%	4.13%	4.99%	4.25%	3.10%	4.21%	4.50%
Expected rate of return on plan assets	7.25	7.25	7.25	5.25	6.26	6.04	7.25	7.25	7.25	N/A	N/A	N/A
Rate of compensation increase	3.00	3.00	3.00	3.29	3.71	3.49	3.00	3.00	3.00	N/A	N/A	N/A
Components of net periodic benefit cost (credit):												
Service cost	\$ 30	\$ 58	\$ 63	\$ 32	\$ 33	\$ 36	\$ 1	\$ 1	\$ 2	\$ —	\$ —	\$ —
Interest cost	170	180	170	38	43	38	8	11	9	—	—	—
Expected return on assets	(333)	(315)	(292)	(51)	(58)	(46)	(6)	(6)	(6)	—	—	—
Amortization of:												
Prior service cost (credit)	(1)	(15)	(16)	—	1	—	(10)	(10)	(10)	—	—	—
Net actuarial (gain) loss	111	125	205	23	15	15	10	11	12	—	—	—
Settlement (gain) loss	1	—	3	—	—	—	—	—	—	—	—	—
Curtailment (gain) loss	(30)	—	—	—	—	—	—	—	—	—	—	—
Special termination benefit charge	—	1	—	—	—	—	—	—	—	—	—	—
Net periodic benefit cost (credit)	\$ (52)	\$ 34	\$ 133	\$ 42	\$ 34	\$ 43	\$ 3	\$ 7	\$ 7	\$ —	\$ —	\$ —

Changes in other comprehensive (income) loss in 2015 <i>(in millions)</i>	Pension Benefits		Healthcare Benefits	
	Domestic	Foreign	Domestic	Foreign
Net loss (gain) arising during period	\$ 122	\$ 9	\$ (25)	\$ (1)
Recognition of prior years' net (loss)	(112)	(23)	(10)	—
Prior service cost (credit) arising during period	—	—	—	—
Recognition of prior years' service credit	31	—	10	—
Foreign exchange adjustment	N/A	—	N/A	—
Total recognized in other comprehensive (income) loss (before tax effects)	\$ 41	\$ (14)	\$ (25)	\$ (1)

Amounts expected to be recognized in net periodic benefit cost (income) in 2016 (before tax effects) <i>(in millions)</i>	Pension Benefits		Healthcare Benefits	
	Domestic	Foreign	Domestic	Foreign
Loss recognition	\$ 69	\$ 20	\$ 8	\$ —
Prior service (credit) recognition	—	—	(10)	—

<i>(in millions)</i>	Domestic		Foreign	
	2015	2014	2015	2014
Pension benefits:				
Prepaid benefit cost	\$ 724	\$ 708	\$ 3	\$ —
Accrued benefit cost	(212)	(226)	(136)	(180)
Total pension benefits	\$ 512	\$ 482	\$ (133)	\$ (180)
Healthcare benefits:				
Accrued benefit cost	\$ (92)	\$ (117)	\$ (4)	\$ (8)
Total healthcare benefits	\$ (92)	\$ (117)	\$ (4)	\$ (8)

Plans with obligations in excess of plan assets <i>(in millions)</i>	Domestic		Foreign	
	2015	2014	2015	2014
Projected benefit obligation	\$ 233	\$ 227	\$ 132	\$ 392
Accumulated benefit obligation	233	225	115	375
Fair value of plan assets	20	—	79	313

For information on pension assumptions see “Critical accounting estimates.”

The accumulated benefit obligation for all defined benefit plans was \$5.2 billion at Dec. 31, 2015 and \$5.4 billion at Dec. 31, 2014.

Assumed healthcare cost trend - Domestic post-retirement healthcare benefits

The assumed healthcare cost trend rate used in determining benefit expense for 2016 is 6.50% decreasing to 4.75% in 2022. This projection is based on various economic models that forecast a decreasing growth rate of healthcare expenses over time. The underlying assumption is that healthcare expense growth cannot outpace gross national product (“GNP”) growth indefinitely, and over time a lower equilibrium growth rate will be achieved. Further, the growth rate assumed in 2022 bears a reasonable relationship to the discount rate.

An increase in the healthcare cost trend rate of one percentage point for each year would increase the accumulated post-retirement benefit obligation by \$12 million, or 6%, and the sum of the service and interest costs by \$1 million, or 7%. Conversely, a decrease in this rate of one percentage point for each year would decrease the benefit obligation by \$10 million, or 6%, and the sum of the service and interest costs by \$1 million, or 6%.

Assumed healthcare cost trend - Foreign post-retirement healthcare benefits

An increase in the healthcare cost trend rate of one percentage point for each year would increase the accumulated post-retirement benefit obligation by less than \$1 million and the sum of the service and interest costs by less than \$1 million. Conversely, a decrease in this rate of one percentage point for each year would decrease the benefit obligation by less than \$1 million and the sum of the service and interest costs by less than \$1 million.

The following benefit payments for BNY Mellon’s pension and healthcare plans, which reflect expected future service as appropriate, are expected to be paid:

Expected benefit payments			
<i>(in millions)</i>			
		Domestic	Foreign
Pension benefits:			
Year	2016	\$ 252	\$ 16
	2017	267	15
	2018	254	17
	2019	250	17
	2020	253	20
	2021-2025	1,275	116
Total pension benefits		\$ 2,551	\$ 201
Healthcare benefits:			
Year	2016	\$ 14	\$ —
	2017	14	—
	2018	14	—
	2019	14	—
	2020	14	—
	2021-2025	62	1
Total healthcare benefits		\$ 132	\$ 1

Plan contributions

BNY Mellon expects to make cash contributions to fund its defined benefit pension plans in 2016 of \$22 million for the domestic plans and \$22 million for the foreign plans.

BNY Mellon expects to make cash contributions to fund its post-retirement healthcare plans in 2016 of \$14 million for the domestic plans and less than \$1 million for the foreign plans.

Investment strategy and asset allocation

BNY Mellon is responsible for the administration of various employee pension and healthcare post-retirement benefits plans, both domestically and internationally. The domestic plans are administered by BNY Mellon’s Benefits Administration Committee, a named fiduciary. Subject to the following, at all relevant times, BNY Mellon’s Benefits Investment Committee, another named fiduciary to the domestic plans, is responsible for the investment of plan assets. The Benefits Investment Committee’s responsibilities include the investment of all domestic defined benefit plan assets, as well as the determination of investment options offered to participants in all domestic defined contribution plans. The Benefits Investment Committee conducts periodic reviews of investment performance, asset allocation and investment manager suitability. In addition, the Benefits Investment Committee has oversight of the Regional Governance Committees for the foreign defined benefit plans.

Our investment objective for U.S. and foreign plans is to maximize total return while maintaining a broadly diversified portfolio for the primary purpose of satisfying obligations for future benefit payments.

Equities are the main holding of the plans. Alternative investments (including private equities) and fixed income securities provide diversification and, in certain cases, lower the volatility of returns. In general, equity securities and alternative investments within any domestic plan's portfolio can be maintained in the range of 30% to 70% of total plan assets, fixed-income securities can range from 20% to 50% of plan assets and cash equivalents can be held in amounts ranging from 0% to 5% of plan assets. Actual asset allocation within the approved ranges varies from time to time based on economic conditions (both current and forecast) and the advice of professional advisors.

Our pension assets were invested as follows at Dec. 31, 2015 and 2014:

Asset allocations	Domestic		Foreign	
	2015	2014	2015	2014
Equities	63%	63%	57%	56%
Fixed income	31	31	34	36
Private equities	1	2	—	—
Alternative investment	3	3	3	2
Real estate	—	—	5	5
Cash	2	1	1	1
Total pension benefits	100%	100%	100%	100%

Our pension plans did not hold any shares of The Bank of New York Mellon Corporation common stock at Dec. 31, 2015 and 2014. Assets of the U.S. post-retirement healthcare plan are invested in an insurance contract.

Fair value measurement of plan assets

In accordance with ASC 715, BNY Mellon has established a three-level hierarchy for fair value measurements of its pension plan assets based upon the transparency of inputs to the valuation of an asset as of the measurement date. The valuation hierarchy is consistent with guidance in ASC 820 which is detailed in Note 20 of the Notes to Consolidated Financial Statements.

The following is a description of the valuation methodologies used for assets measured at fair value,

as well as the general classification of such assets pursuant to the valuation hierarchy.

Cash and currency

This category consists primarily of foreign currency balances and is included in Level 1 of the valuation hierarchy. Foreign currency is translated monthly based on current exchange rates.

Common and preferred stock, exchange traded funds and equity funds

These investments include equities, exchange traded funds and equity funds and are valued at the closing price reported in the active market in which the individual securities are traded, if available. Where there are no readily available market quotations, we determine fair value primarily based on pricing sources with reasonable levels of price transparency.

Collective trust funds

Collective trust funds include commingled and U.S. equity funds that have no readily available market quotations. The fair value of the funds are based on the securities in the portfolio, which typically are the amount that the fund might reasonably expect to receive for the securities upon a sale. These funds are valued using observable inputs on either a daily or monthly basis. Collective trust funds are included as Level 2 of the valuation hierarchy.

Fixed income investments

Fixed income investments include U.S. Treasury securities, U.S. Government agencies, sovereign government obligations, U.S. corporate bonds and foreign corporate debt funds. U.S. Treasury securities are valued at the closing price reported in the active market in which the individual security is traded and included as Level 1 of the valuation hierarchy. U.S. Government agencies, sovereign government obligations, U.S. corporate bonds and foreign corporate debt funds are valued based on quoted prices for comparable securities with similar yields and credit ratings. When quoted prices are not available for identical or similar bonds, the bonds are valued using discounted cash flows that maximize observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks. U.S. Government agencies, sovereign

government obligations, U.S. corporate bonds and foreign corporate debt funds are primarily included as Level 2 of the valuation hierarchy with a small portion of U.S. corporate debt funds included as Level 1.

Other assets measured at NAV

Other assets measured at NAV include venture capital investments and partnership interests, funds of funds, property funds and other funds. There are no readily available market quotations for these funds. The fair value of the venture capital investments is based on the pension plan's ownership percentage of the fair value of the underlying funds as provided by the fund managers. These funds are typically valued on a quarterly basis. The pension plan's venture capital investments and partnership interests are valued at NAV as a practical expedient for fair value. The fair value of the funds of funds is based on NAVs of the funds in the portfolio, which reflects the value of the underlying securities. The fair value of the underlying securities is typically the amount that the fund might reasonably expect to receive upon selling those hard to value or illiquid securities within the portfolios.

The following tables present the fair value of each major category of plan assets as of Dec. 31, 2015 and Dec. 31, 2014, by captions and by ASC 820 valuation hierarchy. There were no transfers between Level 1 and Level 2.

Plan assets measured at fair value on a recurring basis—domestic plans at Dec. 31, 2015				
<i>(in millions)</i>	Level 1	Level 2	Level 3	Total fair value
Common and preferred stock:				
U.S. equity	\$ 1,473	\$ —	\$ —	\$ 1,473
Non-U.S. equity	132	—	—	132
Collective trust funds:				
Commingled	—	318	—	318
U.S. equity	—	1,181	—	1,181
Fixed income:				
U.S. Treasury securities	450	—	—	450
U.S. Government agencies	—	20	—	20
Sovereign government obligations	—	77	—	77
U.S. corporate bonds	—	726	—	726
Other	—	39	—	39
Exchange traded funds	60	—	—	60
Other assets measured at NAV				213
Total domestic plan assets, at fair value	\$ 2,115	\$ 2,361	\$ —	\$ 4,689

Plan assets measured at fair value on a recurring basis—foreign plans at Dec. 31, 2015				
<i>(in millions)</i>	Level 1	Level 2	Level 3	Total fair value
Equity funds	\$ 375	\$ 163	\$ —	\$ 538
Sovereign/government obligation funds	52	84	—	136
Corporate debt funds	—	158	19	177
Cash and currency	5	—	—	5
Other assets measured at NAV				80
Total foreign plan assets, at fair value	\$ 432	\$ 405	\$ 19	\$ 936

Plan assets measured at fair value on a recurring basis—domestic plans at Dec. 31, 2014				
<i>(in millions)</i>	Level 1	Level 2	Level 3	Total fair value
Common and preferred stock:				
U.S. equity	\$ 1,468	\$ —	\$ —	\$ 1,468
Non-U.S. equity	132	—	—	132
Collective trust funds:				
Commingled	—	342	—	342
U.S. equity	—	1,344	—	1,344
Fixed income:				
U.S. Treasury securities	438	—	—	438
U.S. Government agencies	—	59	—	59
Sovereign government obligations	—	91	—	91
U.S. corporate bonds	—	724	—	724
Other	—	32	—	32
Exchange traded funds	70	—	—	70
Other assets measured at NAV				242
Total domestic plan assets, at fair value	\$ 2,108	\$ 2,592	\$ —	\$ 4,942

Plan assets measured at fair value on a recurring basis—foreign plans at Dec. 31, 2014				
<i>(in millions)</i>	Level 1	Level 2	Level 3	Total fair value
Equity funds	\$ 432	\$ 125	\$ —	\$ 557
Sovereign/government obligation funds	75	130	—	205
Corporate debt funds	60	74	20	154
Cash and currency	13	—	—	13
Other assets measured at NAV				68
Total foreign plan assets, at fair value	\$ 580	\$ 329	\$ 20	\$ 997

Changes in Level 3 fair value measurements

The table below includes a roll forward of the plan assets for the years ended Dec. 31, 2015 and 2014 (including the change in fair value), for financial instruments classified in Level 3 of the valuation hierarchy.

Fair value measurements using significant unobservable inputs—foreign plans—for the year ended Dec. 31, 2015	
(in millions)	Corporate debt funds
Fair value at Dec. 31, 2014	\$ 20
Transfers into Level 3	—
Total gains or (losses) included in earnings (or changes in net assets)	(1)
Fair value at Dec. 31, 2015	\$ 19
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period	\$ (1)

Fair value measurements using significant unobservable inputs—foreign plans—for the year ended Dec. 31, 2014	
(in millions)	Corporate debt funds
Fair value at Dec. 31, 2013	\$ 19
Transfers into Level 3	—
Total gains or (losses) included in earnings (or changes in net assets)	1
Fair value at Dec. 31, 2014	\$ 20
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period	\$ 1

Assets valued using net asset value per share

BNY Mellon had pension and post-retirement plan assets invested in venture capital and partnership interests, funds of funds, property funds and other contracts valued using NAV. The fund of funds investments are redeemable at NAV under agreements with the fund of funds managers.

Assets valued using NAV—Dec. 31, 2015					
(dollar amounts in millions)	Fair value	Unfunded commitments	Redemption frequency	Redemption notice period	
Venture capital and partnership interests (a)	\$ 60	\$ 8	N/A	N/A	
Funds of funds (b)	177	—	Monthly	30-45 days	
Property funds (c)	49	—	Daily-Quarterly	0-90 days	
Other contracts (d)	7	—	N/A	N/A	
Total	\$ 293	\$ 8			

Assets valued using NAV—Dec. 31, 2014					
(dollar amounts in millions)	Fair value	Unfunded commitments	Redemption frequency	Redemption notice period	
Venture capital and partnership interests (a)	\$ 159	\$ 11	N/A	N/A	
Funds of funds (b)	151	—	Monthly	30-45 days	
Total	\$ 310	\$ 11			

- (a) Venture capital and partnership interests do not have redemption rights. Distributions from such funds will be received as the underlying investments are liquidated.
- (b) Funds of funds include multi-strategy hedge funds that utilize investment strategies that invest over both long-term investment and short-term investment horizons.
- (c) Property funds include funds invested in regional real estate vehicles that hold direct interest in real estate properties.
- (d) Other contracts include assets invested in pooled accounts at insurance companies that are privately valued by the asset manager.

Defined contribution plans

BNY Mellon sponsors defined contribution plans in the U.S. and in certain non-U.S. locations, all of which are administered in accordance with local laws. The most significant defined contribution plan is The Bank of New York Mellon Corporation 401(k) Savings Plan sponsored by the Company in the U.S. and covers substantially all U.S. employees.

Under The Bank of New York Mellon Corporation 401(k) Savings Plan, the Company matched 100% of the first 4% of an employee's eligible base pay plus 50% of the next 2% of eligible pay contributed by the participant for a maximum matching contribution of 5% for 2015, 2014 and 2013, subject to statutory limits.

The U.S. qualified and nonqualified defined benefit plans were closed to new participants effective Dec. 31, 2010, at which time an annual non-elective contribution equal to 2% of eligible base pay was added to The Bank of New York Mellon Corporation 401(k) Savings Plan. For 2014 and 2013, employees who were hired on or after Jan. 1, 2010 and were not eligible to earn benefits in The Bank of New York Mellon Corporation Pension Plan received the annual non-elective contribution.

On Jan. 29, 2015, the board of directors approved an amendment to freeze benefit accruals under the U.S. qualified and nonqualified defined benefit plans effective June 30, 2015. Employees, who were hired before Jan. 1, 2010 and were eligible to earn benefits in the pension plan prior to freezing the benefit accrual, received the non-elective contribution starting July 1, 2015. All Company contributions are

invested according to participants' individual elections.

At Dec. 31, 2015 and Dec. 31, 2014, The Bank of New York Mellon Corporation 401(k) Savings Plan owned 15.6 million and 16.7 million shares of our common stock, respectively. The fair value of total assets was \$5.2 billion at Dec. 31, 2015 and \$5.3 billion at Dec. 31, 2014. We recorded expense of \$209 million in 2015, \$198 million in 2014 and \$192 million in 2013 primarily for contributions to our defined contribution plans.

We also have an Employee Stock Ownership Plan ("ESOP") covering certain domestic full-time employees hired on or before July 1, 2008. The ESOP works in conjunction with the defined benefit pension plan. Employees are entitled to the higher of their benefit under the ESOP or such defined benefit pension plan at retirement. Benefits payable under the defined benefit pension plan are offset by the equivalent value of benefits earned under the ESOP.

At Dec. 31, 2015 and Dec. 31, 2014, the ESOP owned 6.0 million and 6.4 million shares of our common stock, respectively. The fair value of total ESOP assets was \$251 million at Dec. 31, 2015 and \$263 million at Dec. 31, 2014. The ESOP was amended effective June 30, 2015 to discontinue the ability of the Company to make contributions to the ESOP. There were no contributions to the ESOP in 2015, 2014 or 2013.

The Benefits Investment Committee appointed Fiduciary Counselors, Inc. to serve as the independent fiduciary to (i) make certain fiduciary decisions related to the continued prudence of offering the common stock of BNY Mellon or its affiliates as an investment option under the plans other than with respect to plan sponsor decisions, and (ii) select and monitor any managed investments (active or passive, including mutual funds) of BNY Mellon or its affiliates to be offered to participants as investment options under the plans.

Note 19 - Company financial information (Parent Corporation)

Our bank subsidiaries are subject to dividend limitations under the Federal Reserve Act, as well as national and state banking laws. Under these statutes, prior regulatory consent is required for dividends in any year that would exceed the bank's net profits for

such year combined with retained net profits for the prior two years. Additionally, such bank subsidiaries may not declare dividends in excess of net profits on hand, as defined, after deducting the amount by which the principal amount of all loans, on which interest is past due for a period of six months or more, exceeds the allowance for credit losses.

The payment of dividends also is limited by minimum capital requirements imposed on banks. As of Dec. 31, 2015, BNY Mellon's bank subsidiaries exceeded these minimum requirements.

Subsequent to Dec. 31, 2015, our bank subsidiaries could declare dividends to the Parent of approximately \$3.1 billion without the need for a regulatory waiver. In addition, at Dec. 31, 2015, non-bank subsidiaries of the Parent had liquid assets of approximately \$1.3 billion.

The bank subsidiaries declared dividends of \$182 million in 2015, \$809 million in 2014 and \$1.0 billion in 2013. The Federal Reserve and the OCC have issued additional guidelines that require bank holding companies and national banks to continually evaluate the level of cash dividends in relation to their respective operating income, capital needs, asset quality and overall financial condition.

The Federal Reserve policy with respect to the payment of cash dividends by bank holding companies provides that, as a matter of prudent banking, a bank holding company should not maintain a rate of cash dividends unless its net income available to common shareholders has been sufficient to fully fund the dividends, and the prospective rate of earnings retention appears to be consistent with the holding company's capital needs, asset quality and overall financial condition. The Federal Reserve can also prohibit a dividend if payment would constitute an unsafe or unsound banking practice. Any increase in BNY Mellon's ongoing quarterly dividends would require approval from the Federal Reserve. The Federal Reserve's current guidance provides that, for large bank holding companies like us, dividend payout ratios exceeding 30% of projected after-tax net income will receive particularly close scrutiny.

The Federal Reserve requires U.S. bank holding companies with total consolidated assets of \$50 billion or more, like BNY Mellon, to submit annual capital plans for review. The Federal Reserve will

evaluate the bank holding companies' capital adequacy, internal capital adequacy assessment processes, and their plans to make capital distributions, such as dividend payments or stock repurchases.

BNY Mellon and other affected BHCs may pay dividends, repurchase stock, and make other capital distributions only in accordance with a capital plan that has been reviewed by the Federal Reserve and as to which the Federal Reserve has not objected. The Federal Reserve may object to a capital plan if the plan does not show that the covered BHC will meet, for each quarter throughout the nine-quarter planning horizon covered by the capital plan, all minimum regulatory capital ratios under applicable capital rules as in effect for that quarter on a *pro forma* basis under the base case and stressed scenarios (including a severely adverse scenario provided by the Federal Reserve). The capital plan rules also stipulate that a covered BHC may not make a capital distribution unless after giving effect to the distribution it will meet all minimum regulatory capital ratios. As part of this process, BNY Mellon also provides the Federal Reserve with estimates of the composition and levels of regulatory capital, risk-weighted assets and other measures under Basel III under an identified scenario. In March 2015, BNY Mellon received confirmation that the Federal Reserve did not object to our 2015 capital plan. The board of directors subsequently approved the repurchase of up to \$3.1 billion worth of common stock for a five-quarter period beginning in the second quarter of 2015 and continuing through the second quarter of 2016, including employee benefit plan repurchases. Of the \$3.1 billion authorization, common stock repurchases of \$700 million were contingent on a prior issuance of \$1 billion of qualifying preferred stock, which issuance was completed in April 2015.

The Federal Reserve Act limits and requires collateral for extensions of credit by our insured subsidiary banks to BNY Mellon and certain of its non-bank

affiliates. Also, there are restrictions on the amounts of investments by such banks in stock and other securities of BNY Mellon and such affiliates, and restrictions on the acceptance of their securities as collateral for loans by such banks. Extensions of credit by the banks to each of our affiliates are limited to 10% of such bank's regulatory capital, and in the aggregate for BNY Mellon and all such affiliates to 20%, and collateral must be between 100% and 130% of the amount of the credit, depending on the type of collateral.

Our insured subsidiary banks are required to maintain reserve balances with Federal Reserve Banks under the Federal Reserve Act and Regulation D. Required balances averaged \$6.5 billion and \$6.3 billion for the years 2015 and 2014, respectively.

In the event of impairment of the capital stock of one of the Parent's national banks or The Bank of New York Mellon, the Parent, as the banks' stockholder, could be required to pay such deficiency.

The Parent guarantees the debt issued by Mellon Funding Corporation, a wholly-owned financing subsidiary of the Company. The Parent also guarantees committed and uncommitted lines of credit of Pershing LLC and Pershing Limited subsidiaries. The Parent guarantees described above are full and unconditional and contain the standard provisions relating to parent guarantees of subsidiary debt. Additionally, the Parent guarantees or indemnifies obligations of its consolidated subsidiaries as needed. Generally, there are no stated notional amounts included in these indemnifications and the contingencies triggering the obligation for indemnification are not expected to occur. As a result, we are unable to develop an estimate of the maximum payout under these indemnifications. However, we believe the possibility is remote that we will have to make any material payment under these guarantees and indemnifications.

The Parent's condensed financial statements are as follows:

Condensed Income Statement—The Bank of New York Mellon Corporation (Parent Corporation)

<i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Dividends from bank subsidiaries	\$ 145	\$ 775	\$ 1,010
Dividends from nonbank subsidiaries	207	44	210
Interest revenue from bank subsidiaries	68	67	60
Interest revenue from nonbank subsidiaries	91	98	101
Gain on securities held for sale	3	1	32
Other revenue	25	24	26
Total revenue	539	1,009	1,439
Interest (including, \$69, \$62, \$50, to subsidiaries, respectively)	288	257	245
Other expense	64	71	94
Total expense	352	328	339
Income before income taxes and equity in undistributed net income of subsidiaries	187	681	1,100
Provision (benefit) for income taxes	(98)	(155)	(93)
Equity in undistributed net income:			
Bank subsidiaries	2,004	910	184
Nonbank subsidiaries	869	821	727
Net income	3,158	2,567	2,104
Preferred stock dividends	(105)	(73)	(64)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	\$ 3,053	\$ 2,494	\$ 2,040

Condensed Balance Sheet—The Bank of New York Mellon Corporation (Parent Corporation)

<i>(in millions)</i>	Dec. 31,	
	2015	2014
Assets:		
Cash and due from banks	\$ 9,383	\$ 7,517
Securities	26	30
Loans, net of allowance	20	76
Investment in and advances to subsidiaries and associated companies:		
Banks	30,156	28,600
Other	27,405	26,471
Subtotal	57,561	55,071
Corporate-owned life insurance	728	712
Other assets	1,509	1,361
Total assets	\$ 69,227	\$ 64,767
Liabilities:		
Deferred compensation	\$ 473	\$ 501
Affiliate borrowings	8,243	6,120
Other liabilities	1,623	1,194
Long-term debt	20,851	19,511
Total liabilities	31,190	27,326
Shareholders' equity	38,037	37,441
Total liabilities and shareholders' equity	\$ 69,227	\$ 64,767

Condensed Statement of Cash Flows—The Bank of New York Mellon Corporation (Parent Corporation)

<i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Operating activities:			
Net income	\$ 3,158	\$ 2,567	\$ 2,104
Adjustments to reconcile net income to net cash provided by/ (used in) operating activities:			
Amortization	—	—	1
Equity in undistributed net (income) of subsidiaries	(2,873)	(1,731)	(911)
Change in accrued interest receivable	(4)	23	21
Change in accrued interest payable	15	18	(5)
Change in taxes payable (a)	132	91	63
Other, net	66	2	(22)
Net cash provided by operating activities	494	970	1,251
Investing activities:			
Proceeds from sales of securities	3	7	67
Change in loans	56	(57)	(6)
Acquisitions of, investments in, and advances to subsidiaries	(358)	(1,603)	722
Other, net	14	107	11
Net cash (used in) provided by investing activities	(285)	(1,546)	794
Financing activities:			
Net change in commercial paper	—	(96)	(242)
Proceeds from issuance of long-term debt	4,986	4,686	3,892
Repayments of long-term debt	(3,650)	(4,071)	(2,023)
Change in advances from subsidiaries	2,123	2,704	78
Issuance of common stock	352	396	288
Treasury stock acquired	(2,355)	(1,669)	(1,026)
Issuance of preferred stock	990	—	494
Cash dividends paid	(865)	(833)	(744)
Tax benefit realized on share based payment awards	76	17	15
Net cash provided by financing activities	1,657	1,134	732
Change in cash and due from banks	1,866	558	2,777
Cash and due from banks at beginning of year	7,517	6,959	4,182
Cash and due from banks at end of year	\$ 9,383	\$ 7,517	\$ 6,959
Supplemental disclosures			
Interest paid	\$ 302	\$ 275	\$ 241
Income taxes paid	158	946	94
Income taxes refunded	103	54	14

(a) Includes payments received from subsidiaries for taxes of \$24 million in 2015, \$452 million in 2014 and \$192 million in 2013.

Note 20 - Fair value measurement

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. A three-level hierarchy for fair value measurements is utilized based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. BNY Mellon's

own creditworthiness is considered when valuing liabilities.

Fair value focuses on exit price in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date under current market conditions. If there has been a significant decrease in the volume and level of activity for the asset or liability, a change in valuation technique or the use of multiple valuation techniques may be appropriate. In such instances, determining the price at which willing market participants would transact at the measurement date under current market conditions depends on the facts and circumstances and requires the use of significant judgment. The objective is to determine from weighted indicators of fair value a reasonable point within the range that is most representative of fair value under current market conditions.

Determination of fair value

We have established processes for determining fair values. Fair value is based upon quoted market prices in active markets, where available. For financial instruments where quotes from recent exchange transactions are not available, we determine fair value based on discounted cash flow analysis, comparison to similar instruments, and the use of financial models. Discounted cash flow analysis is dependent upon estimated future cash flows and the level of interest rates. Model-based pricing uses inputs of observable prices, where available, for interest rates, foreign exchange rates, option volatilities and other factors. Models are benchmarked and validated by an independent internal risk management function. Our valuation process takes into consideration factors such as counterparty credit quality, liquidity, concentration concerns, and observability of model parameters. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value.

Most derivative contracts are valued using internally developed models which are calibrated to observable market data and employ standard market pricing theory for their valuations. An initial “risk-neutral” valuation is performed on each position assuming time-discounting based on an AA credit curve. Then, to arrive at a fair value that incorporates counter-party credit risk, a credit adjustment is made to these results by discounting each trade’s expected exposures to the counterparty using the counterparty’s credit spreads,

as implied by the credit default swap market. We also adjust expected liabilities to the counterparty using BNY Mellon’s own credit spreads, as implied by the credit default swap market. Accordingly, the valuation of our derivative position is sensitive to the current changes in our own credit spreads as well as those of our counterparties.

In certain cases, recent prices may not be observable for instruments that trade in inactive or less active markets. Upon evaluating the uncertainty in valuing financial instruments subject to liquidity issues, we make an adjustment to their value. The determination of the liquidity adjustment includes the availability of external quotes, the time since the latest available quote and the price volatility of the instrument.

Certain parameters in some financial models are not directly observable and, therefore, are based on management’s estimates and judgments. These financial instruments are normally traded less actively. We apply valuation adjustments to mitigate the possibility of error and revision in the model based estimate value. Examples include products where parameters such as correlation and recovery rates are unobservable.

The methods described above for instruments that trade in inactive or less active markets may produce a current fair value calculation that may not be indicative of net realizable value or reflective of future fair values. We believe our methods of determining fair value are appropriate and consistent with other market participants. However, the use of different methodologies or different assumptions to value certain financial instruments could result in a different estimate of fair value.

Valuation hierarchy

A three-level valuation hierarchy is used for disclosure of fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are described below.

Level 1: Inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets. Level 1 assets and liabilities include certain debt and equity securities, derivative financial instruments actively traded on exchanges and U.S. Treasury securities that are

actively traded in highly liquid over-the-counter markets.

Level 2: Observable inputs other than Level 1 prices, for example, quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs that are observable or can be corroborated, either directly or indirectly, for substantially the full term of the financial instrument. Level 2 assets and liabilities include debt instruments that are traded less frequently than exchange-traded securities and derivative instruments whose model inputs are observable in the market or can be corroborated by market-observable data. Examples in this category are agency and non-agency mortgage-backed securities, corporate debt securities and over-the-counter derivative contracts.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Examples in this category include certain private equity investments, derivative contracts that are highly structured or long-dated, and interests in certain securitized financial assets.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Following is a description of the valuation methodologies used for instruments measured at fair value, as well as the general classification of such instruments pursuant to the valuation hierarchy.

Securities

Where quoted prices are available in an active market, we classify the securities within Level 1 of the valuation hierarchy. Securities include both long and short positions. Level 1 securities include highly liquid government bonds, money market funds, foreign covered bonds and exchange-traded equities.

If quoted market prices are not available, we estimate fair values using pricing models, quoted prices of securities with similar characteristics or discounted cash flows. Examples of such instruments, which would generally be classified within Level 2 of the valuation hierarchy, include agency and non-agency mortgage-backed securities, state and political subdivisions, commercial mortgage-backed

securities, sovereign debt, corporate bonds and foreign covered bonds.

For securities where quotes from recent transactions are not available for identical securities, we determine fair value primarily based on pricing sources with reasonable levels of price transparency that employ financial models or obtain comparison to similar instruments to arrive at "consensus" prices.

Specifically, the pricing sources obtain recent transactions for similar types of securities (e.g., vintage, position in the securitization structure) and ascertain variables such as discount rate and speed of prepayment for the types of transaction and apply such variables to similar types of bonds. We view these as observable transactions in the current marketplace and classify such securities as Level 2. Pricing sources discontinue pricing any specific security whenever they determine there is insufficient observable data to provide a good faith opinion on price.

In addition, we have significant investments in more actively traded agency RMBS and other types of securities such as sovereign debt. The pricing sources derive the prices for these securities largely from quotes they obtain from three major inter-dealer brokers. The pricing sources receive their daily observed trade price and other information feeds from the inter-dealer brokers.

For securities with bond insurance, the financial strength of the insurance provider is analyzed and that information is included in the fair value assessment for such securities.

In certain cases where there is limited activity or less transparency around inputs to the valuation, we classify those securities in Level 3 of the valuation hierarchy. Securities classified within Level 3 may include securities of state and political subdivisions and distressed debt securities.

At Dec. 31, 2015, all of our securities were valued by pricing sources with reasonable levels of price transparency. We have no instruments included in Level 3 of the valuation hierarchy.

Consolidated collateralized loan obligations

BNY Mellon values assets in consolidated CLOs using observable market prices observed from the

secondary loan market. The returns to the note holders are solely dependent on the assets and accordingly equal the value of those assets. Based on the structure of the CLOs, the valuation of the assets is attributable to the note holders. Changes in the values of assets and liabilities are reflected in the income statement as investment and other income and interest of investment management fund note holders, respectively. Assets in consolidated CLOs are generally classified within Level 2 of the valuation hierarchy.

Derivatives

We classify exchange-traded derivatives valued using quoted prices in Level 1 of the valuation hierarchy. Examples include exchange-traded equity and foreign exchange options. Since few other classes of derivative contracts are listed on an exchange, most of our derivative positions are valued using internally developed models that use as their basis readily observable market parameters, and we classify them in Level 2 of the valuation hierarchy. Such derivatives include swaps and options, foreign exchange spot and forward contracts and credit default swaps.

Derivatives valued using models with significant unobservable market parameters in markets that lack two-way flow are classified in Level 3 of the valuation hierarchy. Examples include long-dated swaps and options, where parameters may be unobservable for longer maturities; and certain highly structured products, where correlation risk is unobservable. As of Dec. 31, 2015 we have no Level 3 derivatives. Additional disclosures of derivative instruments are provided in Note 23 of the Notes to Consolidated Financial Statements.

Loans and unfunded lending-related commitments

Where quoted market prices are not available, we generally base the fair value of loans and unfunded lending-related commitments on observable market prices of similar instruments, including bonds, credit derivatives and loans with similar characteristics. If observable market prices are not available, we base the fair value on estimated cash flows adjusted for credit risk which are discounted using an interest rate appropriate for the maturity of the applicable loans or the unfunded lending-related commitments.

Unrealized gains and losses, if any, on unfunded lending-related commitments carried at fair value are classified in other assets and other liabilities, respectively. Loans and unfunded lending-related commitments carried at fair value are generally classified within Level 2 of the valuation hierarchy.

Seed capital

In our Investment Management business, we manage investment assets, including equities, fixed income, money market and alternative investment funds for institutions and other investors. As part of that activity, we make seed capital investments in certain funds. Seed capital is included in other assets. When applicable, we value seed capital based on the published NAV of the fund.

For other types of investments in funds, we consider all of the rights and obligations inherent in our ownership interest, including the reported NAV as well as other factors that affect the fair value of our interest in the fund.

Certain interests in securitizations

For certain interests in securitizations that are classified in securities available-for-sale, trading assets and long-term debt, we use discounted cash flow models, which generally include assumptions of projected finance charges related to the securitized assets, estimated net credit losses, prepayment assumptions and estimates of payments to third-party investors. When available, we compare our fair value estimates and assumptions to market activity and to the actual results of the securitized portfolio.

Private equity investments

Our Other segment includes holdings of nonpublic private equity investments through funds managed by third-party investment managers. We value private equity investments initially based upon the transaction price, which we subsequently adjust to reflect expected exit values as evidenced by financing and sale transactions with third parties or through ongoing reviews by the investment managers.

Private equity investments also include publicly held equity investments, generally obtained through the initial public offering of privately held equity investments. These equity investments are often held in a partnership structure. Publicly held investments

are marked-to-market at the quoted public value less adjustments for regulatory or contractual sales restrictions or adjustments to reflect the difficulty in selling a partnership interest.

Discounts for restrictions are quantified by analyzing the length of the restriction period and the volatility of the equity security. Publicly held private equity investments are primarily classified in Level 2 of the valuation hierarchy.

The following tables present the financial instruments carried at fair value at Dec. 31, 2015 and Dec. 31, 2014, by caption on the consolidated balance sheet and by valuation hierarchy (as described above). We have included credit ratings information in certain of the tables because the information indicates the degree of credit risk to which we are exposed, and significant changes in ratings classifications could result in increased risk for us. There were no material transfers between Level 1 and Level 2 during 2015.

Assets measured at fair value on a recurring basis at Dec. 31, 2015

<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Available-for-sale securities:					
U.S. Treasury	\$ 12,832	\$ —	\$ —	\$ —	\$ 12,832
U.S. Government agencies	—	387	—	—	387
Sovereign debt/sovereign guaranteed	35	13,182	—	—	13,217
State and political subdivisions (b)	—	4,046	—	—	4,046
Agency RMBS	—	23,501	—	—	23,501
Non-agency RMBS	—	793	—	—	793
Other RMBS	—	1,061	—	—	1,061
Commercial MBS	—	1,392	—	—	1,392
Agency commercial MBS	—	4,020	—	—	4,020
Asset-backed CLOs	—	2,351	—	—	2,351
Other asset-backed securities	—	2,893	—	—	2,893
Equity securities	4	—	—	—	4
Money market funds (b)	886	—	—	—	886
Corporate bonds	—	1,752	—	—	1,752
Other debt securities	—	2,775	—	—	2,775
Foreign covered bonds	1,966	202	—	—	2,168
Non-agency RMBS (c)	—	1,789	—	—	1,789
Total available-for-sale securities	15,723	60,144	—	—	75,867
Trading assets:					
Debt and equity instruments (b)	1,232	2,167	—	—	3,399
Derivative assets not designated as hedging:					
Interest rate	10	10,034	—	(8,071)	1,973
Foreign exchange	—	4,905	—	(2,981)	1,924
Equity and other contracts	15	120	—	(63)	72
Total derivative assets not designated as hedging	25	15,059	—	(11,115)	3,969
Total trading assets	1,257	17,226	—	(11,115)	7,368
Loans	—	422	—	—	422
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	497	—	—	497
Foreign exchange	—	219	—	—	219
Total derivative assets designated as hedging	—	716	—	—	716
Other assets (d)	192	62	—	—	254
Other assets measured at net asset value	—	—	—	—	117
Total other assets	192	778	—	—	1,087
Subtotal assets of operations at fair value	17,172	78,570	—	(11,115)	84,744
Percentage of assets prior to netting	18%	82%	—%		
Assets of consolidated investment management funds:					
Trading assets	455	773	—	—	1,228
Other assets	157	16	—	—	173
Total assets of consolidated investment management funds	612	789	—	—	1,401
Total assets	\$ 17,784	\$ 79,359	\$ —	\$ (11,115)	\$ 86,145
Percentage of assets prior to netting	18%	82%	—%		

Notes to Consolidated Financial Statements (continued)

Liabilities measured at fair value on a recurring basis at Dec. 31, 2015

<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Trading liabilities:					
Debt and equity instruments	\$ 422	\$ 152	\$ —	\$ —	\$ 574
Derivative liabilities not designated as hedging:					
Interest rate	5	9,957	—	(8,235)	1,727
Foreign exchange	—	4,682	—	(2,567)	2,115
Equity and other contracts	5	147	—	(67)	85
Total derivative liabilities not designated as hedging	10	14,786	—	(10,869)	3,927
Total trading liabilities	432	14,938	—	(10,869)	4,501
Long-term debt (b)	—	359	—	—	359
Other liabilities - derivative liabilities designated as hedging:					
Interest rate	—	372	—	—	372
Foreign exchange	—	20	—	—	20
Total other liabilities - derivative liabilities designated as hedging	—	392	—	—	392
Subtotal liabilities of operations at fair value	432	15,689	—	(10,869)	5,252
Percentage of liabilities prior to netting	3%	97%	—%		
Liabilities of consolidated investment management funds:					
Trading liabilities	—	229	—	—	229
Other liabilities	1	16	—	—	17
Total liabilities of consolidated investment management funds	1	245	—	—	246
Total liabilities	\$ 433	\$ 15,934	\$ —	\$ (10,869)	\$ 5,498
Percentage of liabilities prior to netting	3%	97%	—%		

(a) ASC 815 permits the netting of derivative receivables and derivative payables under legally enforceable master netting agreements and permits the netting of cash collateral. Netting is applicable to derivatives not designated as hedging instruments included in trading assets or trading liabilities, and derivatives designated as hedging instruments included in other assets or other liabilities. Netting is allocated to the derivative products based on the net fair value of each product.

(b) Includes certain interests in securitizations.

(c) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(d) Includes private equity investments and seed capital.

Notes to Consolidated Financial Statements (continued)

Assets measured at fair value on a recurring basis at Dec. 31, 2014

<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Available-for-sale securities:					
U.S. Treasury	\$ 19,997	\$ —	\$ —	\$ —	\$ 19,997
U.S. Government agencies	—	343	—	—	343
Sovereign debt/sovereign guaranteed	40	17,244	—	—	17,284
State and political subdivisions (b)	—	5,236	11	—	5,247
Agency RMBS	—	32,600	—	—	32,600
Non-agency RMBS	—	953	—	—	953
Other RMBS	—	1,551	—	—	1,551
Commercial MBS	—	1,959	—	—	1,959
Agency commercial MBS	—	3,132	—	—	3,132
Asset-backed CLOs	—	2,130	—	—	2,130
Other asset-backed securities	—	3,240	—	—	3,240
Equity securities	95	—	—	—	95
Money market funds (b)	763	—	—	—	763
Corporate bonds	—	1,785	—	—	1,785
Other debt securities	—	2,169	—	—	2,169
Foreign covered bonds	2,250	618	—	—	2,868
Non-agency RMBS (c)	—	2,214	—	—	2,214
Total available-for-sale securities	23,145	75,174	11	—	98,330
Trading assets:					
Debt and equity instruments (b)	2,204	2,217	—	—	4,421
Derivative assets not designated as hedging:					
Interest rate	7	17,137	6	(13,942)	3,208
Foreign exchange	—	6,280	—	(4,246)	2,034
Equity	96	278	3	(159)	218
Total derivative assets not designated as hedging	103	23,695	9	(18,347)	5,460
Total trading assets	2,307	25,912	9	(18,347)	9,881
Loans	—	21	—	—	21
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	477	—	—	477
Foreign exchange	—	374	—	—	374
Total derivative assets designated as hedging	—	851	—	—	851
Other assets (d)(e)	174	514	35	—	723
Other assets measured at net asset value (e)	—	—	—	—	342
Total other assets	174	1,365	35	—	1,916
Subtotal assets of operations at fair value	25,626	102,472	55	(18,347)	110,148
Percentage of assets prior to netting	20%	80%	—%		
Assets of consolidated investment management funds:					
Trading assets	100	8,578	—	—	8,678
Other assets	457	147	—	—	604
Total assets of consolidated investment management funds	557	8,725	—	—	9,282
Total assets	\$ 26,183	\$ 111,197	\$ 55	\$ (18,347)	\$ 119,430
Percentage of assets prior to netting	19%	81%	—%		

Notes to Consolidated Financial Statements (continued)

Liabilities measured at fair value on a recurring basis at Dec. 31, 2014

<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Trading liabilities:					
Debt and equity instruments	\$ 367	\$ 294	\$ —	\$ —	\$ 661
Derivative liabilities not designated as hedging:					
Interest rate	3	17,645	6	(14,467)	3,187
Foreign exchange	—	6,367	—	(3,149)	3,218
Equity and other contracts	47	499	3	(181)	368
Total derivative liabilities not designated as hedging	50	24,511	9	(17,797)	6,773
Total trading liabilities	417	24,805	9	(17,797)	7,434
Long-term debt (b)	—	347	—	—	347
Other liabilities:					
Derivative liabilities designated as hedging:					
Interest rate	—	385	—	—	385
Foreign exchange	—	62	—	—	62
Total derivative liabilities designated as hedging	—	447	—	—	447
Other liabilities	4	—	—	—	4
Total other liabilities	4	447	—	—	451
Subtotal liabilities of operations at fair value	421	25,599	9	(17,797)	8,232
Percentage of liabilities prior to netting	2%	98%	—%		
Liabilities of consolidated investment management funds:					
Trading liabilities	—	7,660	—	—	7,660
Other liabilities	1	8	—	—	9
Total liabilities of consolidated investment management funds	1	7,668	—	—	7,669
Total liabilities	\$ 422	\$ 33,267	\$ 9	\$ (17,797)	\$ 15,901
Percentage of liabilities prior to netting	1%	99%	—%		

- (a) ASC 815 permits the netting of derivative receivables and derivative payables under legally enforceable master netting agreements and permits the netting of cash collateral. Netting is applicable to derivatives not designated as hedging instruments included in trading assets or trading liabilities, and derivatives designated as hedging instruments included in other assets or other liabilities. Netting is allocated to the derivative products based on the net fair value of each product.
- (b) Includes certain interests in securitizations.
- (c) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.
- (d) Includes private equity investments and seed capital.
- (e) Other assets measured at fair value at Dec. 31, 2014 were restated to reflect the retrospective application of adopting new disclosure guidance contained in ASU 2015-07 related to investments in certain entities that use NAV as a practical expedient when measuring fair value. See Note 2 of the Notes to Consolidated Financial Statements for additional information.

Notes to Consolidated Financial Statements (continued)

Details of certain items measured at fair value on a recurring basis	Dec. 31, 2015					Dec. 31, 2014				
	Total carrying value (a)	Ratings				Total carrying value (a)	Ratings			
		AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower		AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower
<i>(dollar amounts in millions)</i>										
Non-agency RMBS, originated in:										
2007	\$ 66	—%	—%	—%	100%	\$ 78	—%	—%	—%	100%
2006	115	—	—	—	100	138	—	—	—	100
2005	234	19	9	13	59	284	—	21	19	60
2004 and earlier	378	4	4	26	66	453	3	5	27	65
Total non-agency RMBS	\$ 793	8%	4%	16%	72%	\$ 953	1%	9%	19%	71%
Commercial MBS - Domestic, originated in:										
2009-2015	\$ 626	83%	17%	—%	—%	\$ 639	83%	17%	—%	—%
2008	16	100	—	—	—	19	100	—	—	—
2007	304	62	22	16	—	353	65	21	14	—
2006	384	76	24	—	—	599	83	17	—	—
2005 and earlier	—	—	—	—	—	277	100	—	—	—
Total commercial MBS - Domestic	\$ 1,330	76%	20%	4%	—%	\$ 1,887	82%	15%	3%	—%
Foreign covered bonds:										
Canada	\$ 1,014	100%	—%	—%	—%	\$ 1,266	100%	—%	—%	—%
United Kingdom	363	100	—	—	—	690	100	—	—	—
Netherlands	214	100	—	—	—	244	100	—	—	—
Other	577	100	—	—	—	668	100	—	—	—
Total foreign covered bonds	\$ 2,168	100%	—%	—%	—%	\$ 2,868	100%	—%	—%	—%
European floating rate notes - available-for-sale:										
United Kingdom	\$ 780	85%	15%	—%	—%	\$ 1,172	83%	17%	—%	—%
Netherlands	222	100	—	—	—	296	100	—	—	—
Ireland	121	—	45	55	—	144	—	—	—	100
Other	—	—	—	—	—	25	99	1	—	—
Total European floating rate notes - available-for-sale	\$ 1,123	79%	15%	6%	—%	\$ 1,637	79%	12%	—%	9%
Sovereign debt/sovereign guaranteed:										
United Kingdom	\$ 2,941	100%	—%	—%	—%	\$ 5,076	100%	—%	—%	—%
France	2,008	100	—	—	—	3,550	100	—	—	—
Spain	1,955	—	—	100	—	1,978	—	—	100	—
Germany	1,683	100	—	—	—	1,522	100	—	—	—
Italy	1,398	—	—	100	—	1,427	—	—	100	—
Belgium	1,108	100	—	—	—	829	100	—	—	—
Netherlands	1,055	100	—	—	—	1,800	100	—	—	—
Ireland	772	—	—	100	—	672	—	—	100	—
Other	297	68	—	32	—	430	81	—	19	—
Total sovereign debt/sovereign guaranteed	\$ 13,217	68%	—%	32%	—%	\$ 17,284	76%	—%	24%	—%
Non-agency RMBS (b), originated in:										
2007	\$ 502	—%	—%	—%	100%	\$ 620	—%	—%	—%	100%
2006	530	—	1	—	99	653	—	—	1	99
2005	580	—	2	1	97	727	—	3	1	96
2004 and earlier	177	—	3	9	88	214	—	4	7	89
Total non-agency RMBS (b)	\$ 1,789	—%	1%	1%	98%	\$ 2,214	—%	1%	1%	98%

(a) At Dec. 31, 2015 and Dec. 31, 2014, foreign covered bonds and sovereign debt were included in Level 1 and Level 2 in the valuation hierarchy. All other assets in the table are Level 2 assets in the valuation hierarchy.

(b) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

Changes in Level 3 fair value measurements

Our classification of a financial instrument in Level 3 of the valuation hierarchy is based on the significance of the unobservable factors to the overall fair value measurement. However, these instruments generally include other observable components that are actively quoted or validated to third-party sources; accordingly, the gains and losses in the table below include changes in fair value due to observable parameters as well as the unobservable parameters in our valuation methodologies. We also frequently manage the risks of Level 3 financial instruments

using securities and derivatives positions that are Level 1 or 2 instruments which are not included in the table; accordingly, the gains or losses below do not reflect the effect of our risk management activities related to the Level 3 instruments.

The Company has a Level 3 Pricing Committee which evaluates the valuation techniques used in determining the fair value of Level 3 assets and liabilities.

The tables below include a roll forward of the balance sheet amounts for the years ended Dec. 31, 2015 and 2014 (including the change in fair value), for financial instruments classified in Level 3 of the valuation hierarchy. There were no Level 3 instruments as of Dec. 31, 2015.

Fair value measurements for assets using significant unobservable inputs for the year ended Dec. 31, 2015

<i>(in millions)</i>	Available-for-sale securities		Trading assets		Other assets	Total assets		
	State and political subdivisions		Derivative assets	(a)				
Fair value at Dec. 31, 2014	\$	11	\$	9	\$	35	\$	55
Transfers out of Level 3		—		(3)		—		(3)
Total gains or (losses) for the period:								
Included in earnings (or changes in net assets)		— (b)		(1) (c)		10 (d)		9
Purchases, sales and settlements:								
Purchases		—		—		3		3
Sales		—		—		(48)		(48)
Settlements		(11)		(5)		—		(16)
Fair value at Dec. 31, 2015	\$	—	\$	—	\$	—	\$	—
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period			\$	—	\$	—	\$	—

(a) *Derivative assets are reported on a gross basis.*

(b) *Realized gains (losses) are reported in securities gains (losses). Unrealized gains (losses) are reported in accumulated other comprehensive income (loss) except for the credit portion of OTTI losses which are recorded in securities gains (losses).*

(c) *Reported in foreign exchange and other trading revenue.*

(d) *Reported in investment and other income.*

Fair value measurements for liabilities using significant unobservable inputs for the year ended Dec. 31, 2015

<i>(in millions)</i>	Trading liabilities	
	Derivative liabilities	(a)
Fair value at Dec. 31, 2014	\$	9
Transfers out of Level 3		(3)
Total (gains) or losses for the period:		
Included in earnings (or changes in net liabilities)		(1) (b)
Settlements		(5)
Fair value at Dec. 31, 2015	\$	—
Change in unrealized (gains) or losses for the period included in earnings (or changes in net assets) for liabilities held at the end of the reporting period	\$	—

(a) *Derivative liabilities are reported on a gross basis.*

(b) *Reported in foreign exchange and other trading revenue.*

Fair value measurements for assets using significant unobservable inputs for the year ended Dec. 31, 2014

<i>(in millions)</i>	Available-for-sale securities		Trading assets		Other assets	Total assets <i>(b)</i>
	State and political subdivisions	Debt and equity instruments	Derivative assets <i>(a)</i>			
Fair value at Dec. 31, 2013	\$ 11	\$ 1	\$ 22	\$ —	\$ —	\$ 34
Transfers out of Level 3	—	—	(12)	—	—	(12)
Transfers into Level 3	—	—	—	—	38	38
Total gains or (losses) for the period:						
Included in earnings (or changes in net assets)	— <i>(c)</i>	— <i>(d)</i>	12 <i>(d)</i>	—	(2) <i>(e)</i>	10
Purchases, sales and settlements:						
Purchases	—	—	—	—	1	1
Sales	—	—	—	—	(2)	(2)
Settlements	—	(1)	(13)	—	—	(14)
Fair value at Dec. 31, 2014	\$ 11	\$ —	\$ 9	\$ —	\$ 35	\$ 55
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period		\$ —	\$ 13	\$ —	\$ (2)	\$ 11

(a) Derivative assets are reported on a gross basis.

(b) Total assets measured at fair value at Dec. 31, 2014 were restated to reflect the retrospective application of adopting new disclosure guidance contained in ASU 2015-07 related to investments in certain entities that use NAV as a practical expedient when measuring fair value. See Note 2 for additional information.

(c) Realized gains (losses) are reported in securities gains (losses). Unrealized gains (losses) are reported in accumulated other comprehensive income (loss) except for the credit portion of OTTI losses which are recorded in securities gains (losses).

(d) Reported in foreign exchange and other trading revenue.

(e) Reported in investment and other income.

Fair value measurements for liabilities using significant unobservable inputs for the year ended Dec. 31, 2014

<i>(in millions)</i>	Trading liabilities	
	Derivative liabilities <i>(a)</i>	
Fair value at Dec. 31, 2013	\$ 75	
Transfers out of Level 3		(39)
Total (gains) or losses for the period:		
Included in earnings (or changes in net liabilities)		(14) <i>(b)</i>
Purchases and settlements:		
Purchases		3
Settlements		(16)
Fair value at Dec. 31, 2014	\$ 9	
Change in unrealized (gains) or losses for the period included in earnings (or changes in net assets) for liabilities held at the end of the reporting period	\$ 9	

(a) Derivative liabilities are reported on a gross basis.

(b) Reported in foreign exchange and other trading revenue.

Assets and liabilities measured at fair value on a nonrecurring basis

Under certain circumstances, we make adjustments to fair value our assets, liabilities and unfunded lending-related commitments although they are not measured at fair value on an ongoing basis. An example would be the recording of an impairment of an asset.

The following tables present the financial instruments carried on the consolidated balance sheet by caption and by level in the fair value hierarchy as of Dec. 31, 2015 and Dec. 31, 2014, for which a nonrecurring change in fair value has been recorded during the years ended Dec. 31, 2015 and Dec. 31, 2014.

Assets measured at fair value on a nonrecurring basis at Dec. 31, 2015					Total carrying value
<i>(in millions)</i>	Level 1	Level 2	Level 3		
Loans <i>(a)</i>	\$ —	\$ 97	\$ 174	\$ —	\$ 271
Other assets <i>(b)</i>	—	6	—	—	6
Total assets at fair value on a nonrecurring basis	\$ —	\$ 103	\$ 174	\$ —	\$ 277

Assets measured at fair value on a nonrecurring basis at Dec. 31, 2014 (in millions)	Level 1	Level 2	Level 3	Total carrying value
Loans (a)	\$ —	\$ 112	\$ 2	\$ 114
Other assets (b)	—	6	—	6
Total assets at fair value on a nonrecurring basis	\$ —	\$ 118	\$ 2	\$ 120

(a) During the years ended Dec. 31, 2015 and Dec. 31, 2014, the fair value of these loans decreased \$2 million and \$6 million, respectively, based on the fair value of the underlying collateral as allowed by ASC 310, Accounting by Creditors for Impairment of a loan, with an offset to the allowance for credit losses.

(b) Includes other assets received in satisfaction of debt and loans held for sale. Loans held for sale are carried on the balance sheet at the lower of cost or fair value.

Estimated fair value of financial instruments

The carrying amounts of our financial instruments (i.e., monetary assets and liabilities) are determined under different accounting methods - see Note 1 of the Notes to Consolidated Financial Statements. The following disclosure discusses these instruments on a uniform fair value basis. However, active markets do not exist for a significant portion of these instruments. For financial instruments where quoted prices from identical assets and liabilities in active markets do not exist, we determine fair value based on discounted cash flow analysis and comparison to similar instruments. Discounted cash flow analysis is dependent upon estimated future cash flows and the level of interest rates. Other judgments would result in different fair values. The fair value information supplements the basic financial statements and other traditional financial data presented throughout this report.

A summary of the practices used for determining fair value and the respective level in the valuation hierarchy for financial assets and liabilities not recorded at fair value follows.

Interest-bearing deposits with the Federal Reserve and other central banks and interest-bearing deposits with banks

The estimated fair value of interest-bearing deposits with the Federal Reserve and other central banks is equal to the book value as these interest-bearing deposits are generally considered cash equivalents. These instruments are classified as Level 2 within the valuation hierarchy. The estimated fair value of interest-bearing deposits with banks is generally determined using discounted cash flows and duration of the instrument to maturity. The primary inputs used to value these transactions are interest rates based on current LIBOR market rates and time to maturity. Interest-bearing deposits with banks are classified as Level 2 within the valuation hierarchy.

Federal funds sold and securities purchased under resale agreements

The estimated fair value of federal funds sold and securities purchased under resale agreements is based on inputs such as interest rates and tenors. Federal funds sold and securities purchased under resale agreements are classified as Level 2 within the valuation hierarchy.

Securities held-to-maturity

Where quoted prices are available in an active market for identical assets and liabilities, we classify the securities as Level 1 within the valuation hierarchy. Level 1 securities include U.S. Treasury securities and foreign covered bonds.

If quoted market prices are not available for identical assets, we estimate fair value using pricing models, quoted prices of securities with similar characteristics or discounted cash flows. Examples of such instruments, which would generally be classified as Level 2 within the valuation hierarchy, include certain agency and non-agency mortgage-backed securities, commercial mortgage-backed securities and state and political subdivision securities. For securities where quotes from active markets are not available for identical securities, we determine fair value primarily based on pricing sources with reasonable levels of price transparency that employ financial models or obtain comparison to similar instruments to arrive at “consensus” prices.

Specifically, the pricing sources obtain active market prices for similar types of securities (e.g., vintage, position in the securitization structure) and ascertain variables such as discount rate and speed of prepayment for the types of transaction and apply such variables to similar types of bonds. We view these as observable transactions in the current marketplace and classify such securities as Level 2 within the valuation hierarchy.

Loans

For residential mortgage loans, fair value is estimated using discounted cash flow analysis, adjusting where appropriate for prepayment estimates, using interest rates currently being offered for loans with similar terms and maturities to borrowers. The estimated fair value of margin loans and overdrafts is equal to the book value due to the short-term nature of these assets. The estimated fair value of other types of loans, including our term loan program, is determined using discounted cash flows. Inputs include current LIBOR market rates adjusted for credit spreads. These loans are generally classified as Level 2 within the valuation hierarchy.

Other financial assets

Other financial assets include cash, the Federal Reserve Bank stock and accrued interest receivable. Cash is classified as Level 1 within the valuation hierarchy. The Federal Reserve Bank stock is not redeemable or transferable. The estimated fair value of the Federal Reserve Bank stock is based on the issue price and is classified as Level 2 within the valuation hierarchy. Accrued interest receivable is generally short-term. As a result, book value is considered to equal fair value. Accrued interest receivable is included as Level 2 within the valuation hierarchy.

Noninterest-bearing and interest-bearing deposits

Interest-bearing deposits are comprised of money market rate and demand deposits, savings deposits and time deposits. Except for time deposits, book value is considered to equal fair value for these deposits due to their short duration to maturity or payable on demand feature. The fair value of interest-bearing time deposits is determined using discounted cash flow analysis. Inputs primarily consist of current LIBOR market rates and time to maturity. For all noninterest-bearing deposits, book value is considered to equal fair value as a result of the short duration of the deposit. Interest-bearing and noninterest-bearing deposits are classified as Level 2 within the valuation hierarchy.

Federal funds purchased and securities sold under repurchase agreements

The estimated fair value of federal funds purchased and securities sold under repurchase agreements is based on inputs such as interest rates and tenors. Federal funds purchased and securities sold under repurchase agreements are classified as Level 2 within the valuation hierarchy.

Payables to customers and broker-dealers

The estimated fair value of payables to customers and broker-dealers is equal to the book value, due to the demand feature of the payables to customers and broker-dealers, and are classified as Level 2 within the valuation hierarchy.

Borrowings

Borrowings primarily consist of overdrafts of subcustodian account balances in our Investment Services businesses and accrued interest payable. The estimated fair value of overdrafts of subcustodian account balances in our Investment Services businesses is considered to equal book value as a result of the short duration of the overdrafts and is included as Level 2 within the valuation hierarchy. Overdrafts are typically repaid within two days. Accrued interest payable is generally short-term. As a result, book value is considered to equal fair value. Accrued interest payable is included as Level 2 within the valuation hierarchy.

Long-term debt

The estimated fair value of long-term debt is based on current rates for instruments of the same remaining maturity or quoted market prices for the same or similar issues. Long-term debt is classified as Level 2 within the valuation hierarchy.

The following tables present the estimated fair value and the carrying amount of financial instruments not carried at fair value on the consolidated balance sheet at Dec. 31, 2015 and Dec. 31, 2014, by caption on the consolidated balance sheet and by the valuation hierarchy.

Notes to Consolidated Financial Statements (continued)

Summary of financial instruments <i>(in millions)</i>	Dec. 31, 2015				
	Level 1	Level 2	Level 3	Total estimated fair value	Carrying amount
Assets:					
Interest-bearing deposits with the Federal Reserve and other central banks	\$ —	\$ 113,203	\$ —	\$ 113,203	\$ 113,203
Interest-bearing deposits with banks	—	15,150	—	15,150	15,146
Federal funds sold and securities purchased under resale agreements	—	24,373	—	24,373	24,373
Securities held-to-maturity	11,376	31,828	—	43,204	43,312
Loans	—	61,421	—	61,421	61,267
Other financial assets	6,537	1,096	—	7,633	7,633
Total	\$ 17,913	\$ 247,071	\$ —	\$ 264,984	\$ 264,934
Liabilities:					
Noninterest-bearing deposits	\$ —	\$ 96,277	\$ —	\$ 96,277	\$ 96,277
Interest-bearing deposits	—	182,410	—	182,410	183,333
Federal funds purchased and securities sold under repurchase agreements	—	15,002	—	15,002	15,002
Payables to customers and broker-dealers	—	21,900	—	21,900	21,900
Borrowings	—	698	—	698	698
Long-term debt	—	21,494	—	21,494	21,188
Total	\$ —	\$ 337,781	\$ —	\$ 337,781	\$ 338,398

Summary of financial instruments <i>(in millions)</i>	Dec. 31, 2014				
	Level 1	Level 2	Level 3	Total estimated fair value	Carrying amount
Assets:					
Interest-bearing deposits with the Federal Reserve and other central banks	\$ —	\$ 96,682	\$ —	\$ 96,682	\$ 96,682
Interest-bearing deposits with banks	—	19,505	—	19,505	19,495
Federal funds sold and securities purchased under resale agreements	—	20,302	—	20,302	20,302
Securities held-to-maturity	5,063	16,064	—	21,127	20,933
Loans	—	56,840	—	56,840	56,749
Other financial assets	6,970	1,121	—	8,091	8,091
Total	\$ 12,033	\$ 210,514	\$ —	\$ 222,547	\$ 222,252
Liabilities:					
Noninterest-bearing deposits	\$ —	\$ 104,240	\$ —	\$ 104,240	\$ 104,240
Interest-bearing deposits	—	160,688	—	160,688	161,629
Federal funds purchased and securities sold under repurchase agreements	—	11,469	—	11,469	11,469
Payables to customers and broker-dealers	—	21,181	—	21,181	21,181
Borrowings	—	956	—	956	956
Long-term debt	—	20,401	—	20,401	19,917
Total	\$ —	\$ 318,935	\$ —	\$ 318,935	\$ 319,392

The table below summarizes the carrying amount of the hedged financial instruments, the notional amount of the hedge and the unrealized gain (loss) (estimated fair value) of the derivatives.

Hedged financial instruments <i>(in millions)</i>	Carrying amount	Notional amount of hedge	Unrealized	
			Gain	(Loss)
Dec. 31, 2015				
Securities available-for-sale	\$ 7,978	\$ 7,918	\$ 16	\$ (359)
Long-term debt	18,231	17,850	479	(14)
Dec. 31, 2014				
Securities available-for-sale	\$ 7,294	\$ 7,045	\$ 4	\$ (370)
Long-term debt	16,469	16,100	470	(14)

Note 21 - Fair value option

We elected fair value as an alternative measurement for selected financial assets, financial liabilities, unrecognized firm commitments and written loan commitments.

The following table presents the assets and liabilities, by type, of consolidated investment management funds recorded at fair value.

Assets and liabilities of consolidated investment management funds, at fair value		
<i>(in millions)</i>	Dec. 31,	
	2015	2014
Assets of consolidated investment management funds:		
Trading assets	\$ 1,228	\$ 8,678
Other assets	173	604
Total assets of consolidated investment management funds	\$ 1,401	\$ 9,282
Liabilities of consolidated investment management funds:		
Trading liabilities	\$ 229	\$ 7,660
Other liabilities	17	9
Total liabilities of consolidated investment management funds	\$ 246	\$ 7,669

BNY Mellon values the assets and liabilities of its consolidated asset management funds using quoted prices for identical assets or liabilities in active markets or observable inputs such as quoted prices for similar assets or liabilities. Quoted prices for either identical or similar assets or liabilities in inactive markets may also be used. Accordingly, fair value best reflects the interests BNY Mellon holds in the economic performance of the consolidated asset management funds. Changes in the value of the assets and liabilities are recorded in the income statement as investment income of consolidated investment management funds and in the interest of investment management fund note holders, respectively.

We have elected the fair value option on \$419 million and \$21 million of loans at Dec. 31, 2015 and Dec. 31, 2014, respectively. The fair value of these loans was \$422 million at Dec. 31, 2015 and \$21 million at Dec. 31, 2014. The loans were valued using observable market inputs to discount expected loan cash flows. These loans are included in Level 2 of the valuation hierarchy.

We have elected the fair value option on \$240 million of long-term debt. The fair value of this long-term

debt was \$359 million at Dec. 31, 2015 and \$347 million at Dec. 31, 2014. The long-term debt is valued using observable market inputs and is included in Level 2 of the valuation hierarchy.

The following table presents the changes in fair value of the loans and long-term debt and the location of the changes in the consolidated income statement.

<i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Loans:			
Investment and other income	\$ 3	\$ —	\$ —
Long-term debt:			
Foreign exchange and other trading revenue	\$ (12)	\$ (26)	\$ 24

(a) The changes in fair value of the loans and long-term debt are approximately offset by economic hedges included in foreign exchange and other trading revenue.

Note 22 - Commitments and contingent liabilities

In the normal course of business, various commitments and contingent liabilities are outstanding that are not reflected in the accompanying consolidated balance sheets.

Our significant trading and off-balance sheet risks are securities, foreign currency and interest rate risk management products, commercial lending commitments, letters of credit and securities lending indemnifications. We assume these risks to reduce interest rate and foreign currency risks, to provide customers with the ability to meet credit and liquidity needs and to hedge foreign currency and interest rate risks. These items involve, to varying degrees, credit, foreign currency and interest rate risk not recognized in the balance sheet. Our off-balance sheet risks are managed and monitored in manners similar to those used for on-balance sheet risks. Significant industry concentrations related to credit exposure at Dec. 31, 2015 are disclosed in the financial institutions portfolio exposure table and the commercial portfolio exposure table below.

Financial institutions portfolio exposure (in billions)	Dec. 31, 2015		
	Loans	Unfunded commitments	Total exposure
Securities industry	\$ 3.1	\$ 20.6	\$ 23.7
Banks	9.4	2.1	11.5
Asset managers	2.0	5.6	7.6
Insurance	0.2	4.5	4.7
Government	0.1	1.9	2.0
Other	1.1	1.3	2.4
Total	\$ 15.9	\$ 36.0	\$ 51.9

Commercial portfolio exposure (in billions)	Dec. 31, 2015		
	Loans	Unfunded commitments	Total exposure
Manufacturing	\$ 0.6	\$ 6.3	\$ 6.9
Services and other	0.8	5.5	6.3
Energy and utilities	0.6	4.9	5.5
Media and telecom	0.3	1.5	1.8
Total	\$ 2.3	\$ 18.2	\$ 20.5

Major concentrations in securities lending are primarily to broker-dealers and are generally collateralized with cash. Securities lending transactions are discussed below.

The following table presents a summary of our off-balance sheet credit risks, net of participations.

Off-balance sheet credit risks (in millions)	Dec. 31,	
	2015	2014
Lending commitments	\$ 54,505	\$ 33,273
Standby letters of credit (a)	4,915	5,767
Commercial letters of credit	303	255
Securities lending indemnifications (b)	294,108	304,386

(a) Net of participations totaling \$809 million at Dec. 31, 2015 and \$894 million at Dec. 31, 2014.

(b) Excludes the indemnification for securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled \$54 billion at Dec. 31, 2015 and \$64 billion at Dec. 31, 2014.

Beginning in 2015, lending commitments include secured intraday credit provided to dealers in connection with their tri-party repo activity. The committed credit requires dealers to fully secure the outstanding intraday credit with high-quality liquid assets having a market value in excess of the amount of the outstanding credit. At Dec. 31, 2015, the secured intraday credit provided to dealers in connection with their tri-party repo activity totaled \$19.6 billion.

Also included in lending commitments are facilities that provide liquidity for variable rate tax-exempt securities wrapped by monoline insurers. The credit

approval for these facilities is based on an assessment of the underlying tax-exempt issuer and considers factors other than the financial strength of the monoline insurer.

The total potential loss on undrawn lending commitments, standby and commercial letters of credit, and securities lending indemnifications is equal to the total notional amount if drawn upon, which does not consider the value of any collateral.

Since many of the commitments are expected to expire without being drawn upon, the total amount does not necessarily represent future cash requirements. A summary of lending commitment maturities is as follows: \$31.1 billion in less than one year, \$23.2 billion in one to five years and \$242 million over five years.

Standby letters of credit ("SBLC") principally support corporate obligations and were collateralized with cash and securities of \$299 million and \$421 million at Dec. 31, 2015 and Dec. 31, 2014, respectively. At Dec. 31, 2015, \$2.8 billion of the SBLCs will expire within one year and \$2.1 billion in one to five years.

We must recognize, at the inception of standby letters of credit and foreign and other guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantee. The fair value of the liability, which was recorded with a corresponding asset in other assets, was estimated as the present value of contractual customer fees.

The estimated liability for losses related to these commitments and SBLCs, if any, is included in the allowance for lending-related commitments. The allowance for lending-related commitments was \$118 million at Dec. 31, 2015 and \$89 million at Dec. 31, 2014.

Payment/performance risk of SBLCs is monitored using both historical performance and internal ratings criteria. BNY Mellon's historical experience is that SBLCs typically expire without being funded. SBLCs below investment grade are monitored closely for payment/performance risk. The table below shows SBLCs by investment grade:

Standby letters of credit	Dec. 31,	
	2015	2014
Investment grade	86%	88%
Non-investment grade	14%	12%

A commercial letter of credit is normally a short-term instrument used to finance a commercial contract for the shipment of goods from a seller to a buyer. Although the commercial letter of credit is contingent upon the satisfaction of specified conditions, it represents a credit exposure if the buyer defaults on the underlying transaction. As a result, the total contractual amounts do not necessarily represent future cash requirements. Commercial letters of credit totaled \$303 million at Dec. 31, 2015 compared with \$255 million at Dec. 31, 2014.

A securities lending transaction is a fully collateralized transaction in which the owner of a security agrees to lend the security (typically through an agent, in our case, The Bank of New York Mellon), to a borrower, usually a broker-dealer or bank, on an open, overnight or term basis, under the terms of a prearranged contract, which normally matures in less than 90 days.

We typically lend securities with indemnification against borrower default. We generally require the borrower to provide collateral with a minimum value of 102% of the fair value of the securities borrowed, which is monitored on a daily basis, thus reducing credit risk. Market risk can also arise in securities lending transactions. These risks are controlled through policies limiting the level of risk that can be undertaken. Securities lending transactions are generally entered into only with highly-rated counterparties. Securities lending indemnifications were secured by collateral of \$306 billion at Dec. 31, 2015 and \$316 billion at Dec. 31, 2014.

CIBC Mellon, a joint venture between BNY Mellon and the Canadian Imperial Bank of Commerce (“CIBC”), engages in securities lending activities. CIBC Mellon, BNY Mellon, and CIBC jointly and severally indemnify securities lenders against specific types of borrower default. At Dec. 31, 2015 and Dec. 31, 2014, \$54 billion and \$64 billion, respectively, of borrowings at CIBC Mellon for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, were secured by collateral of \$56 billion and \$67 billion, respectively. If, upon a default, a borrower’s collateral was not sufficient to cover its related

obligations, certain losses related to the indemnification could be covered by the indemnitors.

We expect many of these guarantees to expire without the need to advance any cash. The revenue associated with guarantees frequently depends on the credit rating of the obligor and the structure of the transaction, including collateral, if any.

Operating leases

Net rent expense for premises and equipment was \$329 million in 2015, \$328 million in 2014 and \$335 million in 2013.

At Dec. 31, 2015, we were obligated under various noncancelable lease agreements, some of which provide for additional rents based upon real estate taxes, insurance and maintenance and for various renewal options. A summary of the future minimum rental commitments under noncancelable operating leases, net of related sublease revenue, is as follows: 2016—\$343 million; 2017—\$323 million; 2018—\$228 million; 2019—\$213 million; 2020—\$193 million and 2021 and thereafter—\$773 million.

Exposure for certain administrative errors

In connection with certain offshore tax-exempt funds that we manage, we may be liable to the funds for certain administrative errors. The errors relate to the resident status of such funds, potentially exposing the Company to a tax liability related to the funds’ earnings. The Company is in discussions with tax authorities regarding the funds. With the charge recorded in 2014 for this matter, we believe we are appropriately accrued and the additional reasonably possible exposure is not significant.

Indemnification arrangements

We have provided standard representations for underwriting agreements, acquisition and divestiture agreements, sales of loans and commitments, and other similar types of arrangements and customary indemnification for claims and legal proceedings related to providing financial services that are not otherwise included above. Insurance has been purchased to mitigate certain of these risks. Generally, there are no stated or notional amounts included in these indemnifications and the contingencies triggering the obligation for indemnification are not expected to occur.

Furthermore, often counterparties to these transactions provide us with comparable indemnifications. We are unable to develop an estimate of the maximum payout under these indemnifications for several reasons. In addition to the lack of a stated or notional amount in a majority of such indemnifications, we are unable to predict the nature of events that would trigger indemnification or the level of indemnification for a certain event. We believe, however, that the possibility that we will have to make any material payments for these indemnifications is remote. At Dec. 31, 2015 and Dec. 31, 2014, we have not recorded any material liabilities under these arrangements.

Clearing and settlement exchanges

We are a noncontrolling equity investor in, and/or member of, several industry clearing or settlement exchanges through which foreign exchange, securities, derivatives or other transactions settle. Certain of these industry clearing and settlement exchanges require their members to guarantee their obligations and liabilities or to provide financial support in the event other members do not honor their obligations. We believe the likelihood that a clearing or settlement exchange (of which we are a member) would become insolvent is remote. Additionally, certain settlement exchanges have implemented loss allocation policies that enable the exchange to allocate settlement losses to the members of the exchange. It is not possible to quantify such mark-to-market loss until the loss occurs. In addition, any ancillary costs that occur as a result of any mark-to-market loss cannot be quantified. At Dec. 31, 2015 and Dec. 31, 2014, we have not recorded any material liabilities under these arrangements.

Legal proceedings

In the ordinary course of business, BNY Mellon and its subsidiaries are routinely named as defendants in or made parties to pending and potential legal actions. We also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal). Claims for significant monetary damages are often asserted in many of these legal actions, while claims for disgorgement, restitution, penalties and/or other remedial actions or sanctions may be sought in regulatory matters. It is inherently difficult to predict the eventual outcomes of such matters given their complexity and the particular facts and

circumstances at issue in each of these matters. However, on the basis of our current knowledge and understanding, we do not believe that judgments, settlements or orders, if any, arising from these matters (either individually or in the aggregate, after giving effect to applicable reserves and insurance coverage) will have a material adverse effect on the consolidated financial position or liquidity of BNY Mellon, although they could have a material effect on net income in a given period.

In view of the inherent unpredictability of outcomes in litigation and governmental and regulatory matters, particularly where (i) the damages sought are substantial or indeterminate, (ii) the proceedings are in the early stages, or (iii) the matters involve novel legal theories or a large number of parties, as a matter of course there is considerable uncertainty surrounding the timing or ultimate resolution of litigation and governmental and regulatory matters, including a possible eventual loss, fine, penalty or business impact, if any, associated with each such matter. In accordance with applicable accounting guidance, BNY Mellon establishes accruals for litigation and governmental and regulatory matters when those matters proceed to a stage where they present loss contingencies that are both probable and reasonably estimable. In such cases, there may be a possible exposure to loss in excess of any amounts accrued. BNY Mellon will continue to monitor such matters for developments that could affect the amount of the accrual, and will adjust the accrual amount as appropriate. If the loss contingency in question is not both probable and reasonably estimable, BNY Mellon does not establish an accrual and the matter will continue to be monitored for any developments that would make the loss contingency both probable and reasonably estimable. BNY Mellon believes that its accruals for legal proceedings are appropriate and, in the aggregate, are not material to the consolidated financial position of BNY Mellon, although future accruals could have a material effect on net income in a given period.

For certain of those matters described here for which a loss contingency may, in the future, be reasonably possible (whether in excess of a related accrued liability or where there is no accrued liability), BNY Mellon is currently unable to estimate a range of reasonably possible loss. For those matters described here where BNY Mellon is able to estimate a reasonably possible loss, the aggregate range of such reasonably possible loss is up to \$640 million in

excess of the accrued liability (if any) related to those matters.

The following describes certain judicial, regulatory and arbitration proceedings involving BNY Mellon:

Sentinel Matters

On Jan. 18, 2008, The Bank of New York Mellon filed a proof of claim in the Chapter 11 bankruptcy proceeding of Sentinel Management Group, Inc. (“Sentinel”) pending in federal court in the Northern District of Illinois, seeking to recover approximately \$312 million loaned to Sentinel and secured by securities and cash in an account maintained by Sentinel at The Bank of New York Mellon. On March 3, 2008, the bankruptcy trustee filed an adversary complaint against The Bank of New York Mellon seeking to disallow The Bank of New York Mellon’s claim and seeking damages for The Bank of New York Mellon’s allegedly aiding and abetting Sentinel insiders in misappropriating customer assets and improperly using those assets as collateral for the loan. In a decision dated Nov. 3, 2010, the court found for The Bank of New York Mellon and against the bankruptcy trustee, holding that The Bank of New York Mellon’s loan to Sentinel is valid, fully secured and not subject to equitable subordination. The bankruptcy trustee appealed this decision, and on Aug. 9, 2012, the United States Court of Appeals for the Seventh Circuit issued a decision affirming the trial court’s judgment. On Sept. 7, 2012, the bankruptcy trustee filed a petition for rehearing and, on Nov. 30, 2012, the Court of Appeals withdrew its opinion and vacated its judgment. On Aug. 26, 2013, the Court of Appeals reversed its own prior decision and the district court’s decision, and remanded the case to the district court for further proceedings. On Dec. 10, 2014, the district court issued a decision in favor of The Bank of New York Mellon holding that the transfers from Sentinel cannot be reversed and that The Bank of New York Mellon’s lien is valid and not subject to equitable subordination. The bankruptcy trustee appealed the decision. On Jan. 8, 2016, the Court of Appeals invalidated The Bank of New York Mellon’s lien but rejected the trustee’s request for equitable subordination. The impact of this decision is that The Bank of New York Mellon will have an unsecured claim in the Sentinel bankruptcy.

In November 2009, the Division of Enforcement of the U.S. Commodities Futures Trading Commission (“CFTC”) indicated that it is considering a

recommendation to the CFTC that it file a civil enforcement action against The Bank of New York Mellon for possible violations of the Commodity Exchange Act and CFTC regulations in connection with its relationship to Sentinel. The Bank of New York Mellon responded in writing to the CFTC on Jan. 29, 2010 and provided an explanation as to why an enforcement action is unwarranted.

Standing Instruction Matters

Beginning in December 2009, government authorities conducted inquiries seeking information relating primarily to standing instruction foreign exchange transactions in connection with custody services BNY Mellon provides to custody clients. On various dates beginning in 2009, BNY Mellon was named as a defendant in lawsuits by various government and private entities alleging BNY Mellon’s pricing of standing instruction foreign exchange transactions was improper.

On March 19, 2015, BNY Mellon announced that it had resolved substantially all of the pending standing instruction-related actions, resulting in a total of \$714 million in settlement payments. On May 21, 2015, BNY Mellon settled a putative class action lawsuit asserting securities law violations. The settlements are now final, except for an agreement in principle with the SEC staff to pay a \$30 million penalty, which is subject to Commission approval. With these settlements, BNY Mellon has effectively resolved virtually all of the standing instruction FX-related actions, with the exception of several lawsuits brought by individual customers or shareholders asserting derivative claims.

Tax Litigation

On Aug. 17, 2009, BNY Mellon received a Statutory Notice of Deficiency disallowing tax benefits for the 2001 and 2002 tax years in connection with a 2001 transaction that involved the payment of UK corporate income taxes that were credited against BNY Mellon’s U.S. corporate income tax liability. The Notice alleged that the transaction lacked economic substance and business purpose. On Nov. 10, 2009, BNY Mellon filed a petition with the U.S. Tax Court contesting the disallowance of the benefits. Following a trial, the Tax Court upheld the IRS’s Notice of Deficiency and disallowed BNY Mellon’s tax credits and associated transaction costs on Feb. 11, 2013. On Sept. 23, 2013, the Tax Court issued a supplemental opinion, partially reducing the tax implications to BNY Mellon of its earlier decision.

The Tax Court entered a decision formally implementing its prior rulings on Feb. 20, 2014. BNY Mellon appealed the decision to the Second Circuit Court of Appeals. On Sept. 9, 2015, the Second Circuit affirmed the Tax Court decision. BNY Mellon has sought review by the United States Supreme Court. See Note 12 of the Notes to Consolidated Financial Statements for additional information.

Mortgage-Securitization Trusts Proceedings

The Bank of New York Mellon has been named as a defendant in a number of legal actions brought by MBS investors alleging that the trustee has expansive duties under the governing agreements, including the duty to investigate and pursue breach of representation and warranty claims against other parties to the MBS transactions. These actions include a lawsuit brought in New York State court on June 18, 2014, and later re-filed in federal court, by a group of institutional investors who purport to sue on behalf of 260 MBS trusts.

Matters Related to R. Allen Stanford

In late December 2005, Pershing LLC became a clearing firm for Stanford Group Co. (“SGC”), a registered broker dealer that was part of a group of entities ultimately controlled by R. Allen Stanford. Stanford International Bank (“SIB”), also controlled by Stanford, issued certificates of deposit (“CDs”). Some investors allegedly wired funds from their SGC accounts to purchase CDs. In 2009, the SEC charged Stanford with operating a Ponzi scheme in connection with the sale of CDs, and SGC was placed into receivership. Alleged purchasers of CDs have filed 12 pending lawsuits against Pershing in Texas, including a putative class action. The purchasers allege that Pershing, as SGC’s clearing firm, assisted Stanford in a fraudulent scheme and assert contractual, statutory and common law claims. In addition, five FINRA arbitration claims brought by alleged purchasers remain pending.

Brazilian Postalis Litigation

BNY Mellon Servicos Financeiros DTVM S.A. (“DTVM”), a subsidiary that provides a number of asset services in Brazil, acts as administrator for certain investment funds in which the exclusive investor is a public pension fund for postal workers called Postalis-Instituto de Seguridade Social dos Correios e Telégrafos (“Postalis”). On Aug. 22, 2014, Postalis sued DTVM in Brazil for losses related to a Postalis investment fund for which DTVM serves as

fund administrator. Postalis alleges that DTVM failed to properly perform alleged duties, including duties to conduct due diligence of and exert control over the fund manager, Atlântica Administração de Recursos (“Atlântica”), and Atlântica’s investments. On March 12, 2015, Postalis filed a lawsuit in Brazil against DTVM and BNY Mellon Administração de Ativos Ltda. (“Ativos”) alleging failure to properly perform alleged duties relating to another fund of which DTVM is administrator and Ativos is investment manager. On Dec. 14, 2015, Associação Dos Profissionais Dos Correiros, a Brazilian postal workers association, filed a lawsuit in Brazil against DTVM and other defendants alleging that DTVM improperly contributed to investment losses in the Postalis portfolio. On Dec. 17, 2015, Postalis filed three additional lawsuits in Brazil against DTVM and Ativos alleging failure to properly perform alleged duties with respect to investments in several other funds. On Feb. 4, 2016, Postalis filed another lawsuit in Brazil against DTVM, Ativos and BNY Mellon Alocação de Patrimônio Ltda., an investment management subsidiary, alleging failure to properly perform duties with respect to investments in various other funds of which defendants were administrator and/or manager.

Depository Receipt Matters

Between late December 2015 and February 2016, four putative class action lawsuits were filed against BNY Mellon in federal courts in the Southern and Eastern Districts of New York asserting claims relating to BNY Mellon’s foreign exchange pricing when converting dividends and other distributions from non-U.S. companies in its role as depository bank to Depository Receipt issuers. The primary claims are for breach of contract and violations of ERISA. The lawsuits are in their earliest stages.

Note 23 - Derivative instruments

We use derivatives to manage exposure to market risk including interest rate risk, equity price risk and foreign currency risk, as well as credit risk. Our trading activities are focused on acting as a market-maker for our customers and facilitating customer trades in compliance with the Volcker Rule.

The notional amounts for derivative financial instruments express the dollar volume of the transactions; however, credit risk is much smaller. We perform credit reviews and enter into netting agreements and collateral arrangements to minimize

the credit risk of derivative financial instruments. We enter into offsetting positions to reduce exposure to foreign currency, interest rate and equity price risk.

Use of derivative financial instruments involves reliance on counterparties. Failure of a counterparty to honor its obligation under a derivative contract is a risk we assume whenever we engage in a derivative contract. Recoveries of less than \$1 million were recorded in 2015. There were \$5 million of counterparty default losses, net of recoveries, recorded in 2014.

Hedging derivatives

We utilize interest rate swap agreements to manage our exposure to interest rate fluctuations. For hedges of available-for-sale investment securities, deposits and long-term debt, the hedge documentation specifies the terms of the hedged items and the interest rate swaps and indicates that the derivative is hedging a fixed rate item and is a fair value hedge, that the hedge exposure is to the changes in the fair value of the hedged item due to changes in benchmark interest rates, and that the strategy is to eliminate fair value variability by converting fixed rate interest payments to LIBOR.

The available-for-sale investment securities hedged consist of sovereign debt, U.S. Treasury bonds, agency commercial mortgage-backed securities and covered bonds that had original maturities of 30 years or less at initial purchase. The swaps on all of these investment securities are not callable. All of these securities are hedged with “pay fixed rate, receive variable rate” swaps of similar maturity, repricing and fixed rate coupon. At Dec. 31, 2015, \$7.8 billion face amount of securities were hedged with interest rate swaps that had notional values of \$7.9 billion.

The fixed rate long-term debt instruments hedged generally have original maturities of five to 30 years. We issue both callable and non-callable debt. The non-callable debt is hedged with “receive fixed rate, pay variable rate” swaps with similar maturity, repricing and fixed rate coupon. Callable debt is hedged with callable swaps where the call dates of the swaps exactly match the call dates of the debt. At Dec. 31, 2015, \$17.9 billion par value of debt was hedged with interest rate swaps that had notional values of \$17.9 billion.

In addition, we enter into foreign exchange hedges. We use forward foreign exchange contracts with

maturities of nine months or less to hedge our British pound sterling, euro, Hong Kong dollar, Indian rupee and Singapore dollar foreign exchange exposure with respect to foreign currency forecasted revenue and expense transactions in entities that have the U.S. dollar as their functional currency. As of Dec. 31, 2015, the hedged forecasted foreign currency transactions and designated forward foreign exchange contract hedges were \$274 million (notional), with a pre-tax loss of less than \$1 million recorded in accumulated other comprehensive income. This loss will be reclassified to income or expense over the next nine months.

Forward foreign exchange contracts are also used to hedge the value of our net investments in foreign subsidiaries. These forward foreign exchange contracts have maturities of less than two years. The derivatives employed are designated as hedges of changes in value of our foreign investments due to exchange rates. Changes in the value of the forward foreign exchange contracts offset the changes in value of the foreign investments due to changes in foreign exchange rates. The change in fair market value of these forward foreign exchange contracts is deferred and reported within accumulated translation adjustments in shareholders’ equity, net of tax. At Dec. 31, 2015, forward foreign exchange contracts with notional amounts totaling \$6.6 billion were designated as hedges.

In addition to forward foreign exchange contracts, we also designate non-derivative financial instruments as hedges of our net investments in foreign subsidiaries. Those non-derivative financial instruments designated as hedges of our net investments in foreign subsidiaries were all long-term liabilities of BNY Mellon in various currencies, and, at Dec. 31, 2015, had a combined U.S. dollar equivalent value of \$462 million.

Ineffectiveness related to derivatives and hedging relationships was recorded in income as follows:

Ineffectiveness <i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Fair value hedges of securities	\$ 4.1	\$ (20.6)	\$ 14.1
Fair value hedges of deposits and long-term debt	(6.3)	(14.6)	3.7
Cash flow hedges	—	0.1	(0.1)
Other <i>(a)</i>	—	(0.1)	0.1
Total	\$ (2.2)	\$ (35.2)	\$ 17.8

(a) Includes ineffectiveness recorded on foreign exchange hedges.

Notes to Consolidated Financial Statements (continued)

The following table summarizes the notional amount and credit exposure of our total derivative portfolio at Dec. 31, 2015 and Dec. 31, 2014.

Impact of derivative instruments on the balance sheet <i>(in millions)</i>	Notional value		Asset derivatives fair value		Liability derivatives fair value	
	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2014
Derivatives designated as hedging instruments (a):						
Interest rate contracts	\$ 25,768	\$ 23,145	\$ 497	\$ 477	\$ 372	\$ 385
Foreign exchange contracts	6,839	7,344	219	374	20	62
Total derivatives designated as hedging instruments			\$ 716	\$ 851	\$ 392	\$ 447
Derivatives not designated as hedging instruments (b):						
Interest rate contracts	\$ 519,428	\$ 731,628	\$ 10,044	\$ 17,150	\$ 9,962	\$ 17,654
Foreign exchange contracts	576,253	528,401	4,905	6,280	4,682	6,367
Equity contracts	1,923	10,842	127	377	151	549
Credit contracts	319	—	8	—	1	—
Total derivatives not designated as hedging instruments			\$ 15,084	\$ 23,807	\$ 14,796	\$ 24,570
Total derivatives fair value (c)			\$ 15,800	\$ 24,658	\$ 15,188	\$ 25,017
Effect of master netting agreements (d)			(11,115)	(18,347)	(10,869)	(17,797)
Fair value after effect of master netting agreements			\$ 4,685	\$ 6,311	\$ 4,319	\$ 7,220

- (a) The fair value of asset derivatives and liability derivatives designated as hedging instruments is recorded as other assets and other liabilities, respectively, on the balance sheet.
- (b) The fair value of asset derivatives and liability derivatives not designated as hedging instruments is recorded as trading assets and trading liabilities, respectively, on the balance sheet.
- (c) Fair values are on a gross basis, before consideration of master netting agreements, as required by ASC 815.
- (d) Effect of master netting agreements includes cash collateral received and paid of \$792 million and \$546 million, respectively, at Dec. 31, 2015, and \$1,589 million and \$1,039 million, respectively, at Dec. 31, 2014.

At Dec. 31, 2015, \$273 billion (notional) of interest rate contracts will mature within one year, \$142 billion between one and five years and \$130 billion after five years. At Dec. 31, 2015, \$572 billion (notional) of foreign exchange contracts will mature within one year, \$7 billion between one and five years and \$4 billion after five years.

Impact of derivative instruments on the income statement
(in millions)

Derivatives in fair value hedging relationships	Location of gain or (loss) recognized in income on derivatives	Gain or (loss) recognized in income on derivatives Year ended Dec. 31,			Location of gain or (loss) recognized in income on hedged item	Gain or (loss) recognized in hedged item Year ended Dec. 31,		
		2015	2014	2013		2015	2014	2013
Interest rate contracts	Net interest revenue	\$ (85)	\$ (921)	\$ 486	Net interest revenue	\$ 83	\$ 886	\$ (468)

Derivatives in cash flow hedging relationships	Gain or (loss) recognized in accumulated OCI on derivatives (effective portion) Year ended Dec. 31,			Location of gain or (loss) reclassified from accumulated OCI into income (effective portion)	Gain or (loss) reclassified from accumulated OCI into income (effective portion) Year ended Dec. 31,			Location of gain or (loss) recognized in income on derivatives (ineffective portion and amount excluded from effectiveness testing)	Gain or (loss) recognized in income on derivatives and amount excluded from effectiveness testing) Year ended Dec. 31,		
	2015	2014	2013		2015	2014	2013		2015	2014	2013
FX contracts	\$ (1)	\$ (2)	\$ (27)	Net interest revenue	\$ (1)	\$ (2)	\$ (28)	Net interest revenue	\$ —	\$ —	\$ —
FX contracts	—	(6)	(3)	Other revenue	—	(3)	(1)	Other revenue	—	0.1	(0.1)
FX contracts	9	36	154	Trading revenue	9	36	154	Trading revenue	—	—	—
FX contracts	(8)	(6)	7	Salary expense	(19)	10	(1)	Salary expense	—	—	—
Total	\$ —	\$ 22	\$ 131		\$ (11)	\$ 41	\$ 124		\$ —	\$ 0.1	\$ (0.1)

Derivatives in net investment hedging relationships	Gain or (loss) recognized in accumulated OCI on derivatives (effective portion) Year ended Dec. 31,			Location of gain or (loss) reclassified from accumulated OCI into income (effective portion)	Gain or (loss) reclassified from accumulated OCI into income (effective portion) Year ended Dec. 31,			Location of gain or (loss) recognized in income on derivative (ineffective portion and amount excluded from effectiveness testing)	Gain or (loss) recognized in income on derivatives (ineffectiveness portion and amount excluded from effectiveness testing) Year ended Dec. 31,		
	2015	2014	2013		2015	2014	2013		2015	2014	2013
FX contracts	\$ 474	\$ (367)	\$ (50)	Net interest revenue	\$ 1	\$ (1)	\$ 2	Other revenue	\$ —	\$ (0.1)	\$ 0.1

Trading activities (including trading derivatives)

We manage trading risk through a system of position limits, a VaR methodology based on Monte Carlo simulations, stop loss advisory triggers and other market sensitivity measures. Risk is monitored and reported to senior management by a separate unit on a daily basis. Based on certain assumptions, the VaR methodology is designed to capture the potential overnight pre-tax dollar loss from adverse changes in fair values of all trading positions. The calculation assumes a one-day holding period for most instruments, utilizes a 99% confidence level and incorporates the non-linear characteristics of options. The VaR model is one of several statistical models used to develop economic capital results, which is allocated to lines of business for computing risk-adjusted performance.

As the VaR methodology does not evaluate risk attributable to extraordinary financial, economic or other occurrences, the risk assessment process includes a number of stress scenarios based upon the risk factors in the portfolio and management's assessment of market conditions. Additional stress scenarios based upon historical market events are also performed. Stress tests, by their design, incorporate the impact of reduced liquidity and the breakdown of observed correlations. The results of these stress tests are reviewed weekly with senior management.

Revenue from foreign exchange and other trading included the following:

Foreign exchange and other trading revenue (in millions)	Year ended Dec. 31,		
	2015	2014	2013
Foreign exchange	\$ 743	\$ 578	\$ 608
Other trading revenue (loss)	25	(8)	66
Total foreign exchange and other trading revenue	\$ 768	\$ 570	\$ 674

Foreign exchange includes income from purchasing and selling foreign currencies and currency forwards, futures and options. Other trading revenue (loss)

reflects results from futures and forward contracts, interest rate swaps, structured foreign currency swaps, options, equity derivatives and fixed income and equity securities.

Counterparty credit risk and collateral

We assess credit risk of our counterparties through regular examination of their financial statements, confidential communication with the management of those counterparties and regular monitoring of publicly available credit rating information. This and other information is used to develop proprietary credit rating metrics used to assess credit quality.

Collateral requirements are determined after a comprehensive review of the credit quality of each counterparty. Collateral is generally held or pledged in the form of cash or highly liquid government securities. Collateral requirements are monitored and adjusted daily.

Additional disclosures concerning derivative financial instruments are provided in Note 20 of the Notes to Consolidated Financial Statements.

Disclosure of contingent features in over-the-counter ("OTC") derivative instruments

Certain OTC derivative contracts and/or collateral agreements of The Bank of New York Mellon, our largest banking subsidiary and the subsidiary through which BNY Mellon enters into the substantial majority of its OTC derivative contracts and/or collateral agreements, contain provisions that may require us to take certain actions if The Bank of New York Mellon's public debt rating fell to a certain level. Early termination provisions, or "close-out" agreements, in those contracts could trigger immediate payment of outstanding contracts that are in net liability positions. Certain collateral agreements would require The Bank of New York Mellon to immediately post additional collateral to cover some or all of The Bank of New York Mellon's liabilities to a counterparty.

The following table shows the fair value of contracts falling under early termination provisions that were in net liability positions as of Dec. 31, 2015 for three key ratings triggers:

If The Bank of New York Mellon's rating was changed to (Moody's/S&P)	Potential close-out exposures (fair value) (a)
A3/A-	\$ 117 million
Baa2/BBB	\$ 1,076 million
Ba1/BB+	\$ 2,061 million

(a) *The amounts represent potential total close-out values if The Bank of New York Mellon's rating were to immediately drop to the indicated levels.*

The aggregated fair value of contracts impacting potential trade close-out amounts and collateral obligations can fluctuate from quarter to quarter due to changes in market conditions, changes in the composition of counterparty trades, new business, or changes to the agreement definitions establishing close-out or collateral obligations.

Additionally, if The Bank of New York Mellon's debt rating had fallen below investment grade on Dec. 31, 2015, existing collateral arrangements would have required us to have posted an additional \$243 million of collateral.

Offsetting assets and liabilities

The following tables present derivative instruments and financial instruments that are either subject to an enforceable netting agreement or offset by collateral arrangements. There were no derivative instruments or financial instruments subject to a netting agreement for which we are not currently netting.

Offsetting of derivative assets and financial assets at Dec. 31, 2015							
<i>(in millions)</i>	Gross assets recognized	Gross amounts offset in the balance sheet	<i>(a)</i>	Net assets recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
					Financial instruments	Cash collateral received	
Derivatives subject to netting arrangements:							
Interest rate contracts	\$ 9,554	\$ 8,071		\$ 1,483	\$ 432	\$ —	\$ 1,051
Foreign exchange contracts	3,981	2,981		1,000	63	—	937
Equity and other contracts	123	63		60	—	—	60
Total derivatives subject to netting arrangements	13,658	11,115		2,543	495	—	2,048
Total derivatives not subject to netting arrangements	2,142	—		2,142	—	—	2,142
Total derivatives	15,800	11,115		4,685	495	—	4,190
Reverse repurchase agreements	17,088	357	<i>(b)</i>	16,731	16,726	—	5
Securities borrowing	7,630	—		7,630	7,373	—	257
Total	\$ 40,518	\$ 11,472		\$ 29,046	\$ 24,594	\$ —	\$ 4,452

(a) *Includes the effect of netting agreements and net cash collateral received. The offset related to the over-the-counter derivatives was allocated to the various types of derivatives based on the net positions.*

(b) *Offsetting of reverse repurchase agreements relates to our involvement in the Fixed Income Clearing Corporation, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.*

Offsetting of derivative assets and financial assets at Dec. 31, 2014

<i>(in millions)</i>	Gross assets recognized	Gross amounts offset in the balance sheet	<i>(a)</i>	Net assets recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
					Financial instruments	Cash collateral received	
Derivatives subject to netting arrangements:							
Interest rate contracts	\$ 15,457	\$ 13,942		\$ 1,515	\$ 408	\$ —	\$ 1,107
Foreign exchange contracts	5,291	4,246		1,045	176	—	869
Equity contracts	303	159		144	6	—	138
Total derivatives subject to netting arrangements	21,051	18,347		2,704	590	—	2,114
Total derivatives not subject to netting arrangements	3,607	—		3,607	—	—	3,607
Total derivatives	24,658	18,347		6,311	590	—	5,721
Reverse repurchase agreements	11,634	434	<i>(b)</i>	11,200	11,198	—	2
Securities borrowing	9,033	—		9,033	8,733	—	300
Total	\$ 45,325	\$ 18,781		\$ 26,544	\$ 20,521	\$ —	\$ 6,023

(a) Includes the effect of netting agreements and net cash collateral received. The offset related to the over-the-counter derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of reverse repurchase agreements relates to our involvement in the Fixed Income Clearing Corporation, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Offsetting of derivative liabilities and financial liabilities at Dec. 31, 2015

<i>(in millions)</i>	Gross liabilities recognized	Gross amounts offset in the balance sheet	<i>(a)</i>	Net liabilities recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
					Financial instruments	Cash collateral pledged	
Derivatives subject to netting arrangements:							
Interest rate contracts	\$ 10,188	\$ 8,235		\$ 1,953	\$ 1,795	\$ —	\$ 158
Foreign exchange contracts	3,409	2,567		842	274	—	568
Equity and other contracts	145	67		78	71	—	7
Total derivatives subject to netting arrangements	13,742	10,869		2,873	2,140	—	733
Total derivatives not subject to netting arrangements	1,446	—		1,446	—	—	1,446
Total derivatives	15,188	10,869		4,319	2,140	—	2,179
Repurchase agreements	7,737	357	<i>(b)</i>	7,380	7,380	—	—
Securities lending	1,801	—		1,801	1,727	—	74
Total	\$ 24,726	\$ 11,226		\$ 13,500	\$ 11,247	\$ —	\$ 2,253

(a) Includes the effect of netting agreements and net cash collateral paid. The offset related to the over-the-counter derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of repurchase agreements relates to our involvement in the Fixed Income Clearing Corporation, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Offsetting of derivative liabilities and financial liabilities at Dec. 31, 2014

<i>(in millions)</i>	Gross liabilities recognized	Gross amounts offset in the balance sheet	Net liabilities recognized on the balance sheet <i>(a)</i>	Gross amounts not offset in the balance sheet		Net amount
				Financial instruments	Cash collateral pledged	
Derivatives subject to netting arrangements:						
Interest rate contracts	\$ 16,884	\$ 14,467	\$ 2,417	\$ 1,815	\$ —	\$ 602
Foreign exchange contracts	4,241	3,149	1,092	399	—	693
Equity contracts	481	181	300	250	—	50
Total derivatives subject to netting arrangements	21,606	17,797	3,809	2,464	—	1,345
Total derivatives not subject to netting arrangements	3,411	—	3,411	—	—	3,411
Total derivatives	25,017	17,797	7,220	2,464	—	4,756
Repurchase agreements	9,160	434 <i>(b)</i>	8,726	8,722	—	4
Securities lending	2,571	—	2,571	2,494	—	77
Total	\$ 36,748	\$ 18,231	\$ 18,517	\$ 13,680	\$ —	\$ 4,837

(a) Includes the effect of netting agreements and net cash collateral paid. The offset related to the over-the-counter derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of repurchase agreements relates to our involvement in the Fixed Income Clearing Corporation, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Secured borrowings

The following table presents the contract value of repurchase agreements and securities lending transactions accounted for as secured borrowings by the type of collateral provided to counterparties.

Repurchase agreements and securities lending transactions accounted for as secured borrowings at Dec. 31, 2015

<i>(in millions)</i>	Remaining contractual maturity of the agreements			Total
	Overnight and continuous	Up to 30 days	30 days or more	
Repurchase agreements:				
U.S. Treasury	\$ 2,226	\$ —	\$ —	\$ 2,226
U.S. Government agencies	319	42	5	366
Agency RMBS	3,158	—	—	3,158
Corporate bonds	372	—	665	1,037
Other debt securities	106	—	149	255
Equity securities	664	—	31	695
Total	\$ 6,845	\$ 42	\$ 850	\$ 7,737
Securities lending:				
U.S. Government agencies	\$ 35	\$ —	\$ —	\$ 35
Other debt securities	254	—	—	254
Equity securities	1,512	—	—	1,512
Total	\$ 1,801	\$ —	\$ —	\$ 1,801
Total borrowings	\$ 8,646	\$ 42	\$ 850	\$ 9,538

BNY Mellon's repurchase agreements and securities lending transactions primarily encounter risk associated with liquidity. We are required to pledge collateral based on predetermined terms within the agreements. If we were to experience a decline in the fair value of the collateral pledged for these transactions, additional collateral could be required to

be provided to the counterparty; therefore, decreasing the amount of assets available for other liquidity needs that may arise. BNY Mellon also offers tri-party collateral agency services in the tri-party repo market where we are exposed to credit risk. In order to mitigate this risk, we require dealers to fully secure intraday credit.

Note 24 - Lines of business

We have an internal information system that produces performance data along product and services lines for our two principal businesses and the Other segment.

Business accounting principles

Our business data has been determined on an internal management basis of accounting, rather than the generally accepted accounting principles used for consolidated financial reporting. These measurement principles are designed so that reported results of the businesses will track their economic performance.

Business results are subject to reclassification when organizational changes are made or whenever improvements are made in the measurement principles. On July 31, 2015, BNY Mellon completed the sale of Meriten, a German-based investment management boutique. In 2015, we reclassified the results of Meriten from the Investment Management business to the Other segment. The reclassifications did not impact the consolidated results. All prior periods have been restated.

The accounting policies of the businesses are the same as those described in Note 1 of the Notes to Consolidated Financial Statements.

The primary types of revenue for our two principal businesses and the Other segment are presented below:

Business	Primary types of revenue
Investment Management	<ul style="list-style-type: none"> • Investment management and performance fees from: <ul style="list-style-type: none"> Mutual funds Institutional clients Private clients High-net-worth individuals and families, endowments and foundations and related entities • Distribution and servicing fees
Investment Services	<ul style="list-style-type: none"> • Asset servicing fees, including institutional trust and custody fees, broker-dealer services, global collateral services and securities lending • Issuer services fees, including Corporate Trust and Depositary Receipts • Clearing services fees, including broker-dealer services, registered investment advisor services and prime brokerage services • Treasury services fees, including global payment services and working capital solutions • Foreign exchange
Other segment	<ul style="list-style-type: none"> • Credit-related activities • Leasing operations • Corporate treasury activities • Derivatives business • Global markets and institutional banking services • Business exits

The results of our businesses are presented and analyzed on an internal management reporting basis:

- Revenue amounts reflect fee and other revenue generated by each business. Fee and other revenue transferred between businesses under revenue transfer agreements is included within other revenue in each business.
- Revenues and expenses associated with specific client bases are included in those businesses. For example, foreign exchange activity associated with clients using custody products is allocated to Investment Services.
- Net interest revenue is allocated to businesses based on the yields on the assets and liabilities

generated by each business. We employ a funds transfer pricing system that matches funds with the specific assets and liabilities of each business based on their interest sensitivity and maturity characteristics.

- Incentive expense related to restricted stock and certain corporate overhead charges are allocated to the businesses.
- Support and other indirect expenses are allocated to businesses based on internally-developed methodologies.
- Recurring FDIC expense is allocated to the businesses based on average deposits generated within each business.

- Litigation expense is generally recorded in the business in which the charge occurs.
- Management of the investment securities portfolio is a shared service contained in the Other segment. As a result, gains and losses associated with the valuation of the securities portfolio are included in the Other segment.
- Client deposits serve as the primary funding source for our investment securities portfolio. We typically allocate all interest revenue to the businesses generating the deposits. Accordingly, accretion related to the portion of the investment securities portfolio restructured in 2009 has been included in the results of the businesses.
- M&I expense is a corporate level item and is recorded in the Other segment.
- Restructuring charges recorded in 2014 relate to corporate-level initiatives and were therefore recorded in the Other segment. In the fourth quarter of 2013, restructuring charges were recorded in the businesses. Prior to the fourth quarter of 2013, restructuring charges were reported in the Other segment.
- Balance sheet assets and liabilities and their related income or expense are specifically assigned to each business. Businesses with a net liability position have been allocated assets.
- Goodwill and intangible assets are reflected within individual businesses.

Total revenue includes approximately \$2.3 billion in 2015, \$2.3 billion in 2014 and \$2.3 billion in 2013 of international operations domiciled in the UK which comprised 15%, 15% and 15% of total revenue, respectively.

The following consolidating schedules show the contribution of our businesses to our overall profitability.

For the year ended Dec. 31, 2015 <i>(dollar amounts in millions)</i>	Investment Management	Investment Services	Other	Consolidated
Fee and other revenue	\$ 3,600 (a)	\$ 8,026	\$ 474	\$ 12,100 (a)
Net interest revenue	319	2,495	212	3,026
Total revenue	3,919 (a)	10,521	686	15,126 (a)
Provision for credit losses	—	—	160	160
Noninterest expense	2,869	7,383	543	10,795 (b)
Income (loss) before taxes	\$ 1,050 (a)	\$ 3,138	\$ (17)	\$ 4,171 (a)(b)
Pre-tax operating margin (c)	27%	30%	N/M	28%
Average assets	\$ 30,928	\$ 283,886	\$ 57,373	\$ 372,187

(a) Both fee and other revenue and total revenue include the net income from consolidated investment management funds of \$18 million, representing \$86 million of income and noncontrolling interests of \$68 million. Income before taxes is net of noncontrolling interests of \$68 million.

(b) Includes a loss attributable to noncontrolling interest of \$4 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

For the year ended Dec. 31, 2014 <i>(dollar amounts in millions)</i>	Investment Management	Investment Services	Other	Consolidated
Fee and other revenue	\$ 3,672 (a)	\$ 7,719	\$ 1,337	\$ 12,728 (a)
Net interest revenue	274	2,339	267	2,880
Total revenue	3,946 (a)	10,058	1,604	15,608 (a)
Provision for credit losses	—	—	(48)	(48)
Noninterest expense	3,049	8,116	1,012	12,177
Income before taxes	\$ 897 (a)	\$ 1,942	\$ 640	\$ 3,479 (a)
Pre-tax operating margin (b)	23%	19%	N/M	22%
Average assets	\$ 37,655	\$ 266,495	\$ 68,416	\$ 372,566

(a) Both fee and other revenue and total revenue include the net income from consolidated investment management funds of \$79 million, representing \$163 million of income and noncontrolling interests of \$84 million. Income before taxes is net of noncontrolling interests of \$84 million.

(b) Income before taxes divided by total revenue.

For the year ended Dec. 31, 2013 <i>(dollar amounts in millions)</i>	Investment Management		Investment Services		Other	Consolidated
Fee and other revenue	\$	3,608 (a)	\$	7,640	\$	711 \$ 11,959 (a)
Net interest revenue		260		2,514		235 3,009
Total revenue		3,868 (a)		10,154		946 14,968 (a)
Provision for credit losses		—		1		(36) (35)
Noninterest expense		2,903		7,398		1,005 11,306
Income (loss) before taxes	\$	965 (a)	\$	2,755	\$	(23) \$ 3,697 (a)
Pre-tax operating margin (b)		25%		27%		N/M 25%
Average assets	\$	38,420	\$	247,431	\$	56,460 \$ 342,311

(a) Both fee and other revenue and total revenue include net income from consolidated investment management funds of \$103 million, representing \$183 million of income and noncontrolling interests of \$80 million. Income before taxes is net of noncontrolling interests of \$80 million.

(b) Income before taxes divided by total revenue.

Note 25 - International operations

International activity includes Investment Management and Investment Services fee revenue generating businesses, foreign exchange trading activity, loans and other revenue producing assets and transactions in which the customer is domiciled outside of the United States and/or the international activity is resident at an international entity. Due to the nature of our international and domestic activities, it is not possible to precisely distinguish between internationally and domestically domiciled customers.

As a result, it is necessary to make certain subjective assumptions such as:

- Income from international operations is determined after internal allocations for interest revenue, taxes, expenses and provision for credit losses.
- Expense charges to international operations include those directly incurred in connection with such activities, as well as an allocable share of general support and overhead charges.

Total assets, total revenue, income before income taxes and net income of our international operations are shown in the table below.

International operations <i>(in millions)</i>	International			Total International	Total Domestic	Total
	EMEA	APAC	Other			
2015						
Total assets at period end (a)	\$ 76,679 (b)	\$ 17,829	\$ 1,176	\$ 95,684	\$ 298,096	\$ 393,780
Total revenue	3,932 (b)	904	577	5,413	9,781	15,194
Income before income taxes	1,436	451	269	2,156	2,079	4,235
Net income	1,163	365	218	1,746	1,476	3,222
2014						
Total assets at period end (a)	\$ 86,189 (b)	\$ 16,812	\$ 1,516	\$ 104,517	\$ 280,786	\$ 385,303
Total revenue	3,931 (b)	1,383	645	5,959	9,733	15,692
Income before income taxes	985	913	365	2,263	1,300	3,563
Net income	775	719	287	1,781	870	2,651
2013						
Total assets at period end (a)	\$ 70,046 (b)	\$ 20,498	\$ 1,808	\$ 92,352	\$ 282,164	\$ 374,516
Total revenue	3,821 (b)	936	738	5,495	9,553	15,048
Income before income taxes	1,015	493	414	1,922	1,855	3,777
Net income	822	399	335	1,556	629	2,185

(a) Total assets include long-lived assets, which are not considered by management to be significant in relation to total assets. Long-lived assets are primarily located in the United States.

(b) Includes revenue of approximately \$2.3 billion, \$2.3 billion and \$2.3 billion and assets of approximately \$33.2 billion, \$46.2 billion and \$36.4 billion in 2015, 2014, and 2013, respectively, of international operations domiciled in the UK, which is 15%, 15% and 15% of total revenue and 8%, 12% and 10% of total assets, respectively.

Note 26 - Supplemental information to the Consolidated Statement of Cash Flows

Noncash investing and financing transactions that, appropriately, are not reflected in the Consolidated Statement of Cash Flows are listed below.

Noncash investing and financing transactions <i>(in millions)</i>	Year ended Dec. 31,		
	2015	2014	2013
Transfers from loans to other assets for other real estate owned (“OREO”)	\$ 7	\$ 4	\$ 5
Change in assets of consolidated VIEs	7,881	1,990	209
Change in liabilities of consolidated VIEs	7,423	2,462	50
Change in noncontrolling interests of consolidated VIEs	295	250	50
Securities purchased not settled	—	55	518
Securities sales not settled	11	750	88
Available-for-sale securities transferred to held-to-maturity	11,602	—	7,032
Premises and equipment/capitalized software funded by capital lease obligations	49	31	26

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
The Bank of New York Mellon Corporation:

We have audited the accompanying consolidated balance sheets of The Bank of New York Mellon Corporation and subsidiaries (“BNY Mellon”) as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2015. These consolidated financial statements are the responsibility of BNY Mellon’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of BNY Mellon as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), BNY Mellon’s internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 26, 2016 expressed an unqualified opinion on the effectiveness of BNY Mellon’s internal control over financial reporting.

/s/ KPMG LLP

New York, New York
February 26, 2016

Effective February 26, 2016

Directors

Nicholas M. Donofrio

Retired Executive Vice President,
Innovation and Technology
IBM Corporation
Developer, manufacturer and provider of
advanced information technologies and services

Joseph J. Echevarria

Retired Chief Executive Officer
Deloitte LLP
Global provider of audit, consulting, financial
advisory, risk management, tax and related
services

Edward P. Garden

Chief Investment Officer and a founding partner,
Triam Fund Management, L.P.
Alternative investment management firm

Jeffrey A. Goldstein

Managing Director, Hellman & Friedman LLC
Private equity firm

Gerald L. Hassell

Chairman and Chief Executive Officer
The Bank of New York Mellon Corporation

John M. Hinshaw

Executive Vice President and
Chief Customer Officer at
Hewlett Packard Enterprise Company
Global provider of IT, technology and enterprise
products and solutions

Edmund F. (Ted) Kelly

Retired Chairman
Liberty Mutual Group
Multi-line insurance company

Richard J. Kogan

Retired Chairman, President and
Chief Executive Officer
Schering-Plough Corporation
Global healthcare company

John A. Luke, Jr.

Non-Executive Chairman
WestRock Company
Global paper and packaging company

Mark A. Nordenberg

Chancellor Emeritus,
Chair of the Institute of Politics and
Distinguished Service Professor of Law
University of Pittsburgh
Major public research university

Catherine A. Rein

Retired Senior Executive Vice President and
Chief Administrative Officer
MetLife, Inc.
Insurance and financial services company

William C. Richardson

President and Chief Executive Officer Emeritus
The W. K. Kellogg Foundation
Retired Chairman and Co-Trustee of
The W. K. Kellogg Foundation Trust
Private foundation

Samuel C. Scott III

Retired Chairman, President and
Chief Executive Officer
Ingredion Incorporated (formerly Corn Products
International, Inc.)
Global ingredient solutions provider

Wesley W. von Schack

Chairman
AEGIS Insurance Services, Inc.
Mutual liability and property insurance company

Executive Committee and Other Executive Officers**Gerald L. Hassell ***

Chairman and Chief Executive Officer

Michael Cole-Fontayn

Chairman,
Europe, Middle East and Africa

Thomas P. (Todd) Gibbons *

Chief Financial Officer

Mitchell E. Harris *

Chief Executive Officer,
Investment Management

Monique R. Herena *

Chief Human Resources Officer

Kurtis R. Kurimsky *

Corporate Controller

Suresh Kumar

Chief Information Officer

Stephen D. Lackey

Chairman,
Asia Pacific

J. Kevin McCarthy *

General Counsel

Michelle M. Neal *

President,
BNY Mellon Markets Group

Karen B. Peetz *

President

Brian T. Shea *

Chief Executive Officer,
Investment Services

Douglas H. Shulman

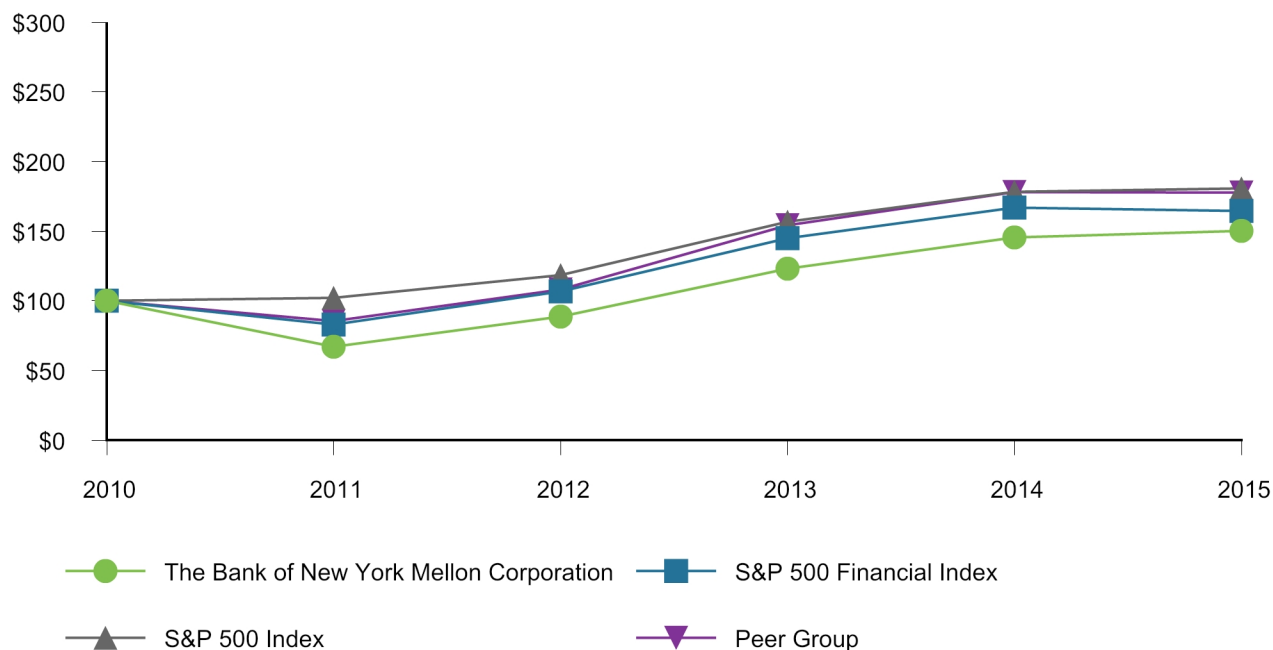
Head of Client Service Delivery

James S. Wiener *

Chief Risk Officer

* Designated as an Executive Officer.

Cumulative Total Shareholder Return (5 Years)



Cumulative shareholder returns (a) (in dollars)	Dec. 31,					
	2010	2011	2012	2013	2014	2015
The Bank of New York Mellon Corporation	\$ 100.0	\$ 67.2	\$ 88.7	\$ 123.0	\$ 145.5	\$ 150.3
S&P 500 Financial Index	100.0	82.9	106.8	144.9	166.9	164.4
S&P 500 Index	100.0	102.1	118.5	156.8	178.3	180.8
Peer Group	100.0	85.5	108.2	154.3	178.1	177.8

(a) Returns are weighted by market capitalization at the beginning of the measurement period.

This graph shows The Bank of New York Mellon Corporation’s cumulative total shareholder returns over the five-year period from Dec. 31, 2010 to Dec. 31, 2015. Our peer group is composed of financial services companies which provide investment management and investment servicing. We also utilize the S&P 500 Financial Index as a benchmark against our performance. The graph shows the cumulative total returns for the same five-year period of the S&P 500 Financial Index, the S&P 500 Index as well as our peer group listed below. The comparison assumes a \$100 investment on Dec. 31, 2010 in The Bank of New York Mellon Corporation common stock, in the S&P 500 Financial Index, in the S&P 500 Index and in the peer group detailed below and assumes that all dividends were reinvested.

Peer Group

BlackRock, Inc.	Morgan Stanley	State Street Corporation
The Charles Schwab Corporation	Northern Trust Corporation	U.S. Bancorp
Franklin Resources, Inc.	The PNC Financial Services Group, Inc.	Wells Fargo & Company
JPMorgan Chase & Co.	Prudential Financial, Inc.	

Corporate Information

BNY Mellon is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries and more than 100 markets. At December 31, 2015, BNY Mellon had \$28.9 trillion in assets under custody and/or administration, and \$1.6 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation (NYSE: BK). Additional information is available on www.bnymellon.com, or follow us on Twitter @BNYMellon.

CORPORATE HEADQUARTERS

225 Liberty Street, New York, NY 10286
+ 1 212 495 1784
www.bnymellon.com

ANNUAL MEETING

The Annual Meeting of Shareholders will be held in New York at 101 Barclay Street at 9 a.m. on Tuesday, April 12, 2016.

EXCHANGE LISTING

BNY Mellon's common stock is traded on the New York Stock Exchange under the trading symbol BK. Mellon Capital IV's 6.244% Fixed-to-Floating Rate Normal Preferred Capital Securities fully and unconditionally guaranteed by BNY Mellon (symbol BK/P) and depositary shares, each representing a 1/4,000th interest in a share of BNY Mellon's Series C Noncumulative Perpetual Preferred Stock (symbol BK PrC), also are listed on the New York Stock Exchange.

STOCK PRICES

Prices for BNY Mellon's common stock can be viewed at www.bnymellon.com/investorrelations.

CORPORATE GOVERNANCE

Corporate governance information is available at www.bnymellon.com/governance.

CORPORATE SOCIAL RESPONSIBILITY

Information about BNY Mellon's commitment to corporate social responsibility is available at www.bnymellon.com/csr.

BNY Mellon's Corporate Social Responsibility (CSR) Report, which includes our Equal Employment Opportunity/Affirmative Action policies, can be viewed and printed at www.bnymellon.com/csr.

INVESTOR RELATIONS

Visit www.bnymellon.com/investorrelations or call +1 212 635 1855.

COMMON STOCK DIVIDEND PAYMENTS

Subject to approval of the board of directors, dividends are paid on BNY Mellon's common stock quarterly in February, May, August and November.

FORM 10-K AND SHAREHOLDER PUBLICATIONS

For a free copy of BNY Mellon's Annual Report on Form 10-K, including the financial statements and the financial statement schedules, or quarterly reports on Form 10-Q as filed with the Securities and Exchange Commission, send a request by email to investorrelations@bnymellon.com, or by mail to Investor Relations at The Bank of New York Mellon Corporation, 225 Liberty Street, New York, NY 10286.

The 2015 Annual Report, as well as Forms 10-K, 10-Q and 8-K and quarterly earnings and other news releases can be viewed and printed at www.bnymellon.com/investorrelations.

TRANSFER AGENT AND REGISTRAR

Computershare
P.O. Box 30170
College Station, TX 77842
www.computershare.com

SHAREHOLDER SERVICES

Computershare maintains the records for our registered shareholders and can provide a variety of services such as those involving:

- Change of name or address
- Consolidation of accounts
- Duplicate mailings
- Dividend reinvestment enrollment
- Direct deposit of dividends
- Transfer of stock to another person

For assistance from Computershare, visit www.computershare.com or call +1 800 205 7699.

DIRECT STOCK PURCHASE AND DIVIDEND REINVESTMENT PLAN

The Direct Stock Purchase and Dividend Reinvestment Plan provides a way to purchase shares of common stock directly from BNY Mellon at the current market value. Nonshareholders may purchase their first shares of BNY Mellon's common stock through the Plan, and shareholders may increase their shareholding by reinvesting cash dividends and through optional cash investments. Plan details are in a prospectus, which may be viewed online at www.computershare.com, or obtained in printed form by calling +1 800 205 7699.

ELECTRONIC DEPOSIT OF DIVIDENDS

Registered shareholders may have quarterly dividends paid on BNY Mellon's common stock deposited electronically to their checking or savings accounts. To have dividends deposited electronically, go to www.computershare.com to set up your account(s) for direct deposit. If you prefer, you may also send a request by mail to Computershare, Shareholder Relations, P.O. Box 30170, College Station, TX 77842.

For more information, call +1 800 205 7699.

SHAREHOLDER ACCOUNT ACCESS

BY INTERNET

www.computershare.com

Shareholders can register to receive shareholder information electronically. To enroll, visit www.computershare.com.

BY PHONE

Toll-free in the U.S. +1 800 205 7699
Outside the U.S. +1 201 680 6578

Telecommunications Device for the Deaf (TDD) lines:

Toll-free in the U.S. +1 800 952 9245
Outside the U.S. +1 201 680 6610

BY MAIL

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