

Cautionary Statement

A number of statements in our presentations, the accompanying slides and the responses to your questions are "forward-looking statements." Words such as "estimate," "forecast," "project," "anticipate," "likely," "target," "expect," "intend," "continue," "seek," "believe," "plan," "goal," "could," "should," "would," "may," "might," "will," "strategy," "synergies," "opportunities," "trends," "future" and words of similar meaning signify forward-looking statements. These statements relate to, among other things, The Bank of New York Mellon Corporation's (the "Corporation") expectations regarding: capital plans, strategic priorities, financial goals, organic growth and efficiency, expenses, deposits, taxes, business opportunities, economic and market impact on our business, preliminary business metrics and regulatory capital ratios; and statements regarding the Corporation's aspirations, as well as the Corporation's overall plans, strategies, goals, objectives, expectations, outlooks, estimates, intentions, targets, opportunities and initiatives. These forward-looking statements are based on assumptions that involve risks and uncertainties and that are subject to change based on various important factors (some of which are beyond the Corporation's control).

Actual outcomes may differ materially from those expressed or implied as a result of the factors described under "Forward Looking Statements" and "Risk Factors" in the Corporation's Annual Report on Form 10-K for the year ended December 31, 2017 (the "2017 Annual Report") and in other filings of the Corporation with the Securities and Exchange Commission (the "SEC"). Such forward-looking statements speak only as of January 16, 2019, and the Corporation undertakes no obligation to update any forward-looking statement to reflect events or circumstances after that date or to reflect the occurrence of unanticipated events. For additional information regarding the Corporation, please refer to the Corporation's SEC filings available at www.bnymellon.com/investorrelations.

Non-GAAP Measures: In this presentation we discuss some non-GAAP measures in detailing the Corporation's performance, which exclude certain items or otherwise include components that differ from GAAP. We believe these measures are useful to the investment community in analyzing the financial results and trends of ongoing operations. We believe they facilitate comparisons with prior periods and reflect the principal basis on which our management monitors financial performance. Additional disclosures relating to non-GAAP measures are contained in the Corporation's reports filed with the SEC, including the 2017 Annual Report, and are available at www.bnymellon.com/investorrelations.

Financial Highlights

- Fourth quarter GAAP earnings of \$832 million, or \$0.84 per common share, down 22%
 - Notable items impacted both the fourth quarter of 2018 and 2017

(\$ in millions, except per share data)	Reven	ue E	xpense	Net Income	EPS
4Q18	\$	— \$	269	\$ (155)	\$ (0.16)
4Q17	\$ (3	320)\$	282	\$ 181	\$ 0.17

- 4Q18 results include severance, real estate and litigation expenses, offset by adjustments to estimates for U.S. tax legislation and other changes
- 4Q17 results include a net benefit of the U.S. tax legislation, offset by severance, litigation expense and other charges
- Repurchased \$1.37 billion of common shares, including \$830 million of incremental buybacks, and paid dividends of \$278 million to common shareholders

Note: See Appendix for additional details on Notable items

Fourth Quarter 2018 - GAAP Financial Highlights

		Grow	th vs.
(\$ in millions, except per share data)	4Q18	3Q18	4Q17
Total revenue	\$ 4,007	(2)%	7%
Fee revenue	3,146	(1)	9
Net interest revenue	885	(1)	4
Provision for credit losses		N/M	N/M
Noninterest expense	2,987	9	(1)
Income before income taxes	\$ 1,020	(24)%	40%
Net income applicable to common shareholders	\$ 832	(23)%	(26)%
Operating leverage (a)		(1061) bps	+811 bps
Pre-tax operating margin	25%	(736) bps	+590 bps
Earnings per common share	\$ 0.84	(21)%	(22)%
Common Equity Tier 1 ("CET1 ratio") (b)	10.6%	(57) bps	+37 bps
Return on common equity ^(c)	8.7%	(251) bps	(338) bps
Return on tangible common equity ("ROTCE") (d)	17.9%	(521) bps	(808) bps
Net interest margin	1.24%	(3) bps	+10 bps

Financial Performance Drivers

- Fee revenue, up 9%
 - Primarily reflecting notable items recorded in 4Q17
- Net interest revenue, up 4%
 - Primarily driven by higher interest rates and a lease-related adjustment recorded in 4Q17
 - Partially offset by lower noninterestbearing deposits
- Noninterest expense, down 1%
 - Primarily reflecting investments in technology, which were more than offset by lower other expenses
 - The impact of the notable items in both periods was substantially the same

Fourth Quarter 2018 - Non-GAAP Financial Highlights

(\$ in millions, except per share data)	4Q18	4Q17
Total revenue	\$ 4,007	(1)%
Fee revenue	3,146	(1)
Net interest revenue	885	4
Provision for credit losses	_	N/M
Noninterest expense	2,718	_
Income before income taxes	\$ 1,289	(3)%
Net income applicable to common shareholders	\$ 987	4%
Operating leverage ^(a)		(79) bps
Pre-tax operating margin	32%	(69) bps
Earnings per common share	\$ 0.99	9%
Net interest margin	1.24%	+10 bps

Financial Performance Drivers

- Fee revenue, down 1%
 - Primarily reflecting lower investment management fees and investment and other income
 - Partially offset by higher corporate actions in Issuer Services and growth in clearance and collateral management
- Net interest revenue, up 4%
 - Primarily driven by higher interest rates and a lease-related adjustment recorded in 4Q17
 - Partially offset by lower noninterestbearing deposits
- Noninterest expense, down slightly
 - Primarily reflecting investments in technology, which were more than offset by lower other expenses

Note: See page 14 in the Appendix for corresponding footnotes and page 15 for additional information on Non-GAAP measures. N/M - not meaningful; bps - basis points.

Full Year 2018 - GAAP Financial Highlights

		Growth vs.
(\$ in millions, except per share data)	FY18	FY17
Total revenue	\$ 16,392	5%
Fee revenue	12,842	6
Net interest revenue	3,611	9
Provision for credit losses	(11)	N/M
Noninterest expense	11,211	2
Income before income taxes	\$ 5,192	13%
Net income applicable to common shareholders	\$ 4,097	5%
Operating leverage (a)		+314 bps
Pre-tax operating margin	32%	+201 bps
Earnings per common share	\$ 4.04	9%
Return on common equity	10.8%	0 bps
Return on tangible common equity (b)	22.5%	(141) bps

Notable items

(\$ in millions, except per share data)	R	Revenue	Ex	pense	N	et Income	EPS
FY18 ^(c)	\$	(13)	\$	343	\$	(168) \$	(0.17)
FY17 ^(d)	\$	(320)	\$	309	\$	160 \$	0.15

Financial Performance Drivers

- Fee revenue, up 6%
 - Primarily reflecting the notable items recorded in 4Q17
- Net interest revenue, up 9%
 - Driven by higher interest rates
- Noninterest expense, up 2%
 - Primarily driven by investments in technology, expenses associated with consolidating real estate and the unfavorable impact of a weaker U.S. dollar
 - Partially offset by lower bank assessment charges
- Repurchased \$3.3 billion in common shares and paid \$1.1 billion in dividends to common shareholders

Full Year 2018 - Non-GAAP Financial Highlights

		Growth vs.
(\$ in millions, except per share data)	FY18	FY17
Total revenue	\$ 16,405	3%
Fee revenue	12,855	3
Net interest revenue	3,611	9
Provision for credit losses	(11)	N/M
Noninterest expense	10,868	2
Income before income taxes	\$ 5,548	6%
Net income applicable to common shareholders	\$ 4,265	14%
Operating leverage (a)		+135 bps
Pre-tax operating margin	34%	+80 bps
Earnings per common share	\$ 4.21	18%

Financial Performance Drivers year-over-year

• Fee revenue up 3%

Growth vs

- Primarily reflecting growth in collateral management and higher Depositary Receipts revenue and investment management and performance fees
- Net interest revenue, up 9%
 - Driven by higher interest rates
- Noninterest expense, up 2%
 - Primarily driven by investments in technology and the unfavorable impact of a weaker U.S. dollar
 - Partially offset by lower bank assessment charges

Investment Services Business Highlights

		Growt	th vs.
Financial Highlights (\$ millions)	4Q18	3Q18	4Q17
Total revenue by line of business:	<u> </u>	<u> </u>	
Asset Servicing	\$ 1,435	(2)%	(2)%
Pershing	558	_	(2)
Issuer Services	441	(3)	25
Treasury Services	328	1	2
Clearance and Collateral Management	278	5	10
Total revenue by line of business	3,040	(1)	3
Provision for credit losses	6	N/M	N/M
Noninterest expense	2,112	4	11
Income before taxes	\$ 922	(10)%	7 %
Pre-tax operating margin	30%	(323) bps	126 bps

			in vs.
	4Q18	3Q18	4Q17
\$ \$	163 43	1 % (17)%	(3)% (4)%
\$ \$	35,540 203,416	1 % 6 %	(9)% (1)%
\$ \$	33.1 373	(4)% (10)%	(1)% (9)%
•	6,125	— %	— %
\$	489,491 10,921	(<i>1</i>)% 2 %	(4)% 11 %
\$	3.2	6 %	22 %
	\$ \$\$ \$ \$ \$ \$ \$	\$ 163 \$ 43 \$ 35,540 \$ 203,416 \$ 33.1 \$ 373 6,125 \$ 489,491 \$ 10,921 \$ 3.2	\$ 163 1 % \$ 43 (17)% \$ 35,540 1 % \$ 203,416 6 % \$ 33.1 (4)% \$ 373 (10)% 6,125 — % \$ 489,491 (7)% \$ 10,921 2 %

Note: See page 14 for corresponding footnotes in Appendix. N/M - not meaningful; bps - basis points

Business Performance Drivers

- Asset Servicing, down 2%
 - Primarily reflects lower client assets and activity and the unfavorable impact of a stronger U.S. dollar, partially offset by higher net interest revenue
- Pershing, down 2%
 - Primarily reflects the previously disclosed lost business, partially offset by higher clearance volumes and net interest revenue
- Issuer Services, up 25%
 - Primarily reflects higher Depositary Receipts revenue driven by corporate actions and higher volumes and a smaller volume increase in Corporate Trust
- Treasury Services, up 2%
 - Primarily reflects higher payment volumes and net interest revenue
- Clearance and Collateral Management, up 10%
 - Primarily reflect growth in clearance and collateral management and higher net interest revenue
- Noninterest expense, up 1%
 - Primarily driven by investments in technology, partially offset by the impact of notable items
- AUC/A of \$33.1 trillion, down 1%
 - Primarily reflecting lower market values and the unfavorable impact of a stronger U.S. dollar, partially offset by new business

Investment Management Business Highlights

			Growt	h vs.
Financial Highlights (\$ millions)	4	4Q18	3Q18	4Q17
Total revenue by line of business:				
Asset Management	\$	660	(6)%	(11)%
Wealth Management		303	(3)	(2)
Total revenue by line of business		963	(5)	(8)
Provision for credit losses		1	N/M	N/M
Noninterest expense		715	2	(7)
Income before taxes	\$	247	(22)%	(11)%
Pre-tax operating margin Adjusted pre-tax operating margin – Non-GAAP ^(a)		26% 29%	(546) bps (602) bps	(64) bps (81) bps

		Growt	th vs.
Key Metrics (\$ millions unless otherwise noted)	4Q18	3Q18	4Q17
Average loans	\$ 16,485	(2)%	(2)%
Average deposits	\$ 14,893	2 %	28 %
Wealth Management client assets (in billions) (b)	\$ 239	(8)%	(5)%
Changes in AUM (in billions): (c)			
Beginning balance of AUM	\$ 1,828	\$1,805	\$1,824
Net (outflows) inflows:			
Equity	(8)	(2)	(6)
Fixed income	(1)	2	(2)
Liability-driven investments	14	16	23
Multi-asset and alternative investments	(2)	2	2
Index	(11)	(3)	(1)
Total long-term strategies (outflows) inflows	(8)	15	16
Cash	(10)		(4)
Total net (outflows) inflows	(18)	15	12
Net market impact	(69)	18	47
Net currency impact	(19)	(10)	10
Ending balance of AUM	\$ 1,722	\$1,828	\$1,893

Business Performance Driversyear-over-year

- Asset Management, down 11%
 - Primarily reflects the impact of net outflows, lower equity markets, the divestiture of CenterSquare and the unfavorable impact of a stronger U.S. dollar
- Wealth Management, down 2%
 - Primarily reflects lower equity markets and net interest revenue
- Noninterest expense, down 7%
 - Primarily reflecting lower incentive expense and the divestiture of CenterSquare
- AUM of \$1.7 trillion, down 9%
 - Primarily reflecting the unfavorable impact of a stronger U.S. dollar, lower market values, net outflows and the divestiture of CenterSquare and other changes

Note: See page 14 for corresponding footnotes in Appendix. N/M - not meaningful; bps - basis points

Other Segment

Financial Highlights (\$ millions)	4	4Q18		3Q18		Q17
Fee revenue (loss)	\$	29	\$	7	\$	(221)
Net securities (losses)		_		_		(26)
Total fee and other revenue (loss)		29		7		(247)
Net interest (expense)		(15)		(13)		(36)
Total revenue (loss)		14		(6)		(283)
Provision for credit losses		(7)		(2)		(5)
Noninterest expense		160		6		135
(Loss) before taxes	\$	(139)	\$	(10)	\$	(413)

Business Performance Driversyear-over-year

- Fee revenue increased primarily reflecting the impact of U.S. tax legislation on our renewable energy investments
- Net interest expense decreased primarily resulting from the leasing-related adjustments recorded in 4Q17
- Noninterest expense increased primarily reflecting the expenses associated with relocating our corporate headquarters and higher severance

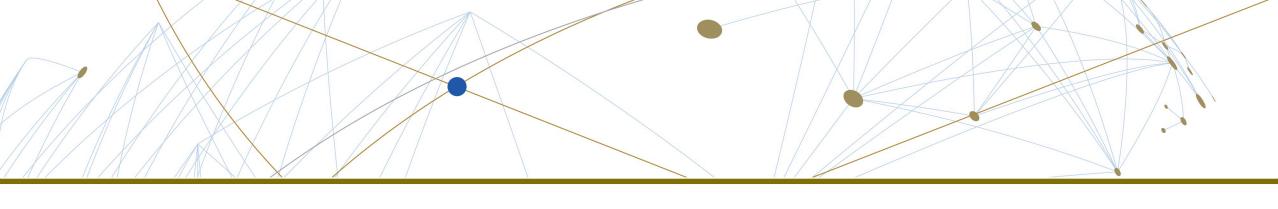
Capital and Liquidity

	De	c. 31, 2018		Sept. 30, 2018	Dec. 31, 2017
Consolidated regulatory capital ratios: (a)					fully phased-in ^(b)
CET1 ratio		10.6%	11.2%	10.3%	
Tier 1 capital ratio		12.7		13.3	12.3
Total capital ratio		13.5	14.1	13.0	
Tier 1 leverage ratio		6.6	7.0	6.4	
Supplementary leverage ratio ("SLR")		6.0	6.4	5.9	
Average liquidity coverage ratio ("LCR")		118%	/ 0	121%	118%
Book value per common share (c)	\$	38.63	\$	38.45	\$ 37.21
Tangible book value per common share – Non-GAAP (c)	\$	19.04	\$	19.35	\$ 18.24
Cash dividends per common share	\$	0.28	\$	0.28	\$ 0.24
Common dividend payout ratio		33%		26%	22%
Common shares outstanding (in thousands)		960,426	6	988,777	1,013,442

Noninterest Expense

(\$ in millions)	4Q18	3Q18	4Q17
Staff	\$ 1,602	8%	(2)%
Professional, legal and other purchased services	383	15	13
Software and equipment	300	15	1
Net occupancy	196	41	28
Sub-custodian and clearing	115	8	13
Distribution and servicing	95	(4)	(10)
Business development	64	25	(3)
Bank assessment charges	22	(55)	(58)
Amortization of intangible assets	35	(27)	(33)
Other	175	1	(17)
Total noninterest expense	\$ 2,987	9%	(1)%

- Noninterest expense, down 1%
- Excluding notable items, noninterest expense down slightly
 - The impact of the notable items in both periods was substantially the same
 - Investments in technology were more than offset by lower staff expense, the favorable impact of a stronger U.S. dollar and lower bank assessment charges, primarily due to lower FDIC assessments



Appendix

Footnotes

Fourth Quarter 2018 - GAAP Financial Highlights, Page 4

- (a) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.
- (b) Regulatory capital ratios for Dec. 31, 2018 are preliminary. For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under the U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches, which for each of the periods noted was the Advanced Approach.
- (c) Quarterly returns are annualized.
- (d) Quarterly returns are annualized. Represents a Non-GAAP measure. See the Appendix for a reconciliation.

Fourth Quarter 2018 - Non-GAAP Financial Highlights, Page 5

(a) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

Full Year 2018 - GAAP Financial Highlights, Page 6

- (a) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.
- (b) Represents a Non-GAAP measure. See the Appendix for a reconciliation.
- (c) Includes adjustments to provisional estimates for U.S. tax legislation and other changes, severance, expenses associated with consolidating real estate and litigation expense, each recorded in 4Q18. Also includes expenses associated with consolidating real estate recorded in 2Q18 and adjustments to provisional estimates for U.S. tax legislation and other changes and litigation expense, both recorded in 3Q18.
- (d) Includes the estimated net benefit of U.S. tax legislation, severance, an asset impairment and investment securities losses related to the sale of certain securities, each recorded in 4Q17, and litigation expense recorded in 2017.

Full Year 2018 - Non-GAAP Financial Highlights, Page 7

(a) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

Investment Services Business Highlights, Page 8

- (a) Current period is preliminary. Includes the AUC/A of CIBC Mellon Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of \$1.2 trillion at Dec. 31, 2018, \$1.4 trillion at Sept. 30, 2018 and \$1.3 trillion at Dec. 31, 2017.
- (b) Represents the total amount of securities on loan in our agency securities lending program managed by the Investment Services business. Excludes securities for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, which totaled \$58 billion at Dec. 31, 2018, \$69 billion at Sept. 30, 2018 and \$71 billion at Dec. 31, 2017.

Investment Management Business Highlights, Page 9

- (a) Net of distribution and servicing expense. See the Appendix for reconciliation of this Non-GAAP measure. In 1Q18, the adjusted pre-tax operating margin Non-GAAP for prior periods was restated to include amortization of intangible assets and the provision for credit losses.
- (b) Current period is preliminary. Includes AUM and AUC/A in the Wealth Management business.
- (c) Current period is preliminary. Excludes securities lending cash management assets and assets managed in the Investment Services business.

Capital and Liquidity, Page 11

- (a) Regulatory capital ratios for Dec. 31, 2018 are preliminary. For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under the U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches, which for the periods included was the Advanced Approaches.
- (b) On a transitional basis at Dec. 31, 2017, the CET1 ratio was 10.7%, the Tier 1 capital ratio was 12.7%, the Total capital ratio was 13.4%, the Tier 1 leverage ratio was 6.6% and the SLR was 6.1%.
- (c) Tangible book value per common share Non-GAAP excludes goodwill and intangible assets, net of deferred tax liabilities. See the Appendix for reconciliation of this Non-GAAP measure.

Fourth Quarter Results - Impact of Notable Items

		4Q18					4Q17		4Q18 vs. 4Q17			
(\$ in millions, except per share data)	Results - GAAP	Notable items ^(a)		esults - Non- GAAP	R	Results - GAAP	Notable Items ^(b)	esults - Non- GAAP	GAAP	Non- GAAP		
Fee revenue	\$ 3,146	\$ —	\$	3,146	\$	2,886	\$ (279)	\$ 3,165	9 %	(1)%		
Net securities gains (losses)	_	_				(26)	(37)	11	N/M	N/M		
Total fee and other revenue	3,146	_		3,146		2,860	(316)	3,176	10	(1)		
(Loss) income from consolidated investment management funds	(24)	_		(24)		17	_	17	N/M	N/M		
Net interest revenue	885	_		885		851	(4)	855	4	4		
Total revenue	4,007	_		4,007		3,728	(320)	4,048	7	(1)		
Provision for credit losses	_	_		_		(6)	_	(6)	N/M	N/M		
Noninterest expense	2,987	269		2,718		3,006	282	2,724	(1)	_		
Income (loss) before income taxes	1,020	(269))	1,289		728	(602)	1,330	40	(3)		
Provision (benefit) for income taxes	150	(114))	264		(453)	(783)	330	N/M	(20)		
Net income (loss)	\$ 870	\$ (155)) \$	1,025	\$	1,181	\$ 181	\$ 1,000	(26)%	3 %		
Net income (loss) applicable to common shareholders	\$ 832	\$ (155)) \$	987	\$	1,126	\$ 181	\$ 945	(26)%	4 %		
Operating leverage ^(c)									811 bps	(79) bps		
Diluted earnings per common share ^(d)	\$ 0.84	\$ (0.16)) \$	0.99	\$	1.08	\$ 0.17	\$ 0.91	(22)%	9 %		
Average common shares and equivalents outstanding - diluted	988,650)			,	1,030,404						
Pre-tax operating margin	25%	6		32%	, D	20%)	33%				

⁽a) Includes adjustments to provisional estimates for U.S. tax legislation and other changes, severance, expenses associated with consolidating real estate and litigation expense.

⁽b) Includes the estimated net benefit of U.S. tax legislation, severance, litigation expense, an asset impairment and investment securities losses related to the sale of certain securities.

⁽c) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

⁽d) May not foot due to rounding

Fourth Quarter Impact of Notable Items - Business Segments

Business Segments	4Q18							4Q17												
(\$ in millions)	vestment nagement	_	estment ervices		Other		Total		nvestment anagement	In S	vestment ervices ^(a)		Other ^(a)	-	Total					
Fee and other revenue	\$ _	\$	_	\$	_	\$	_	\$	_	\$	_	\$	(316)	\$	(316)					
Net interest revenue			_		_		_		_		_		(4)		(4)					
Total revenue			_		_		_		_		_		(320)		(320)					
Total noninterest expense	28		110		131		269		30		199		53		282					
Income before taxes	\$ (28)	\$	(110)	\$	(131)	\$	(269)	\$	(30)) \$	(199)) \$	(373)	\$	(602)					

⁽a) The impact on noninterest expense from the notable items reported in 4Q17 was immaterially adjusted in 4Q18 for Investment Services and Other with no impact to the reported segment results or in total.

Full Year Results - Impact of Notable Items

	FY18									FY17	FY18 vs FY17			
(\$ in millions, except per share data)		esults - GAAP		lotable tems ^(a)		Results Non- GAAP	F	Results - GAAP		Notable items ^(b)	Results Non- GAAP	GAAP	Non- GAAP	
Fee revenue	\$	12,842	\$	(13)	\$	12,855	\$	12,162	\$	(279)	\$ 12,441	6%	3%	
Net securities losses (gains)		(48)		_		(48)		3		(37)	40	N/M	N/M	
Total fee and other revenue		12,794		(13)		12,807		12,165		(316)	12,481	5	3	
(Loss) income from consolidated investment management funds		(13)				(13)		70		_	70	N/M	N/M	
Net interest revenue		3,611		_		3,611		3,308		(4)	3,312	9	9	
Total revenue		16,392		(13)		16,405		15,543		(320)	15,863	5	3	
Provision for credit losses		(11)		_		(11)		(24)		_	(24)	N/M	N/M	
Noninterest expense		11,211		343		10,868		10,957		309	10,648	2	2	
Income (loss) before income taxes		5,192		(356)		5,548		4,610		(629)	5,239	13	6	
Provision (benefit) for income taxes		938		(188)		1,126		496		(789)	1,285	N/M	(12)	
Net income (loss)	\$	4,254	\$	(168)	\$	4,422	\$	4,114	\$	160	\$ 3,954	3%	12%	
Net income applicable to common shareholders	\$	4,097	\$	(168)	\$	4,265	\$	3,915	\$	160	\$ 3,755	5%	14%	
Operating leverage (c)												314 bps	135 bps	
Diluted earnings per common share	\$	4.04	\$	(0.17)	\$	4.21	\$	3.72	\$	0.15	\$ 3.57	9%	18%	
Average common shares and equivalents outstanding - diluted	1	,007,141						1,040,290)					
Pre-tax operating margin		32%)			34%)	30%	0		33%			

⁽a) Includes adjustments to provisional estimates for U.S. tax legislation and other changes, severance, expenses associated with consolidating real estate and litigation expense, each recorded in 4Q18. Also includes expenses associated with consolidating real estate recorded in 2Q18 and adjustments to provisional estimates for U.S. tax legislation and other changes and litigation expense, both recorded in 3Q18.



⁽b) Includes the estimated net benefit of U.S. tax legislation, severance, an asset impairment and investment securities losses related to the sale of certain securities, each recorded in 4Q17, and litigation expense recorded in 2017.

⁽c) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

Return on Common Equity and Tangible Common Equity Reconciliation

(\$ in millions)	4Q18		3Q18		4Q17		FY18		FY17
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	\$ 832	\$	1,075	\$	1,126	\$	4,097	\$	3,915
Add: Amortization of intangible assets	35		48		52		180		209
Less: Tax impact of amortization of intangible assets	8		11		18		42		72
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation, excluding amortization of intangible assets – Non-GAAP	\$ 859	\$	1,112	\$	1,160	\$	4,235	\$	4,052
Average common shareholders' equity	\$ 37,886	\$	38,036	\$	36,952	\$	37,818	\$	36,145
Less: Average goodwill	17,358		17,391		17,518		17,458		17,441
Average intangible assets	3,239		3,283		3,437		3,314		3,508
Add: Deferred tax liability – tax deductible goodwill (a)	1,072		1,066		1,034		1,072		1,034
Deferred tax liability – intangible assets (a)	692		699		718		692		718
Average tangible common shareholders' equity – Non-GAAP	\$ 19,053	\$	19,127	\$	17,749	\$	18,810	\$	16,948
Return on common equity (quarterly results are annualized) – GAAP	8.7%	,)	11.2%	6	12.1%)	10.8%)	10.8%
Return on tangible common equity (quarterly results are annualized) – Non-GAAP	17.9%	,)	23.1%	6	25.9%)	22.5%)	23.9%

Book Value and Tangible Book Value Per Share Reconciliation

(\$ in millions, except common shares)	De	c. 31, 2018	Sept. 30, 2018	Dec. 31, 2017
BNY Mellon shareholders' equity at period end – GAAP	\$	40,638	\$ 41,560	\$ 41,251
Less: Preferred stock		3,542	3,542	3,542
BNY Mellon common shareholders' equity at period end – GAAP		37,096	38,018	37,709
Less: Goodwill		17,350	17,390	17,564
Intangible assets		3,220	3,258	3,411
Add: Deferred tax liability – tax deductible goodwill (b)		1,072	1,066	1,034
Deferred tax liability – intangible assets (b)		692	699	718
BNY Mellon tangible common shareholders' equity at period end – Non-GAAP	\$	18,290	\$ 19,135	\$ 18,486
Period-end common shares outstanding (in thousands)		960,426	988,777	1,013,442
Book value per common share – GAAP	\$	38.63	\$ 38.45	\$ 37.21
Tangible book value per common share – Non-GAAP	\$	19.04	\$ 19.35	\$ 18.24

(a) Deferred tax liabilities for the periods in 2017 are based on fully phased-in U.S. capital rules. (b) Deferred tax liabilities at Dec. 31, 2017 are based on fully phased-in U.S. capital rules.



Pre-tax Operating Margin Reconciliation - Investment Management Business

(\$ in millions)	4Q18		3Q18		4Q17
Income before income taxes – GAAP	\$ 247	\$	316	\$	276
Total revenue – GAAP	\$ 963	\$	1,015	\$	1,048
Less: Distribution and servicing expense	95		99		107
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP	\$ 868	\$	916	\$	941
Pre-tax operating margin – GAAP ^(a)	26%	, 0	31%	, D	26%
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP (a)	29%	0	35%	, D	29%

⁽a) Income before taxes divided by total revenue.