

# Bank of America 3Q18 Financial Results

October 15, 2018



# Third Quarter 2018 Highlights

(Comparisons to 3Q17)

## Earnings<sup>1</sup>

- Diluted earnings per share of \$0.66, up 43%
- Record net income of \$7.2B, up 32%
- Pretax income of \$9.0B, up 18%
- Total revenue of \$22.8B, up 4%
  - Net interest income up 6%
  - Noninterest income up 2%
- Noninterest expense of \$13.1B, down 2%
- Net charge-off ratio of 0.40%, up 1 bp

## Returns and Efficiency

- Return on average assets of 1.23%, improved 28 bps
- Return on average common shareholders' equity of 11.0%, increased 310 bps
- Return on average tangible common shareholders' equity of 15.5%, improved 450 bps<sup>2</sup>
- Efficiency ratio of 57%, improved 396 bps

## Client Balances

- Average loans and leases in business segments grew 3%
  - Consumer up 5% and commercial up 2%
- Average deposits increased 4%
- Merrill Edge brokerage assets increased 22%, crossing \$200B
- Client balances within Global Wealth & Investment Management increased to \$2.8T

## Capital and Liquidity

- \$164B of Common Equity Tier 1 Capital (CET1) and CET1 ratio of 11.4%<sup>3</sup>
- \$537B of average Global Liquidity Sources<sup>4</sup>
- Increased capital returned to shareholders
  - Repurchased \$14.9B of common shares and paid \$4.0B in common dividends year-to-date; returned 96% of net income available to common shareholders

<sup>1</sup> On December 22, 2017, the Tax Cuts and Jobs Act (the "Tax Act") was enacted, which included a lower U.S. corporate tax rate effective in 2018.

<sup>2</sup> Represents a non-GAAP financial measure. For important presentation information, see slide 28.

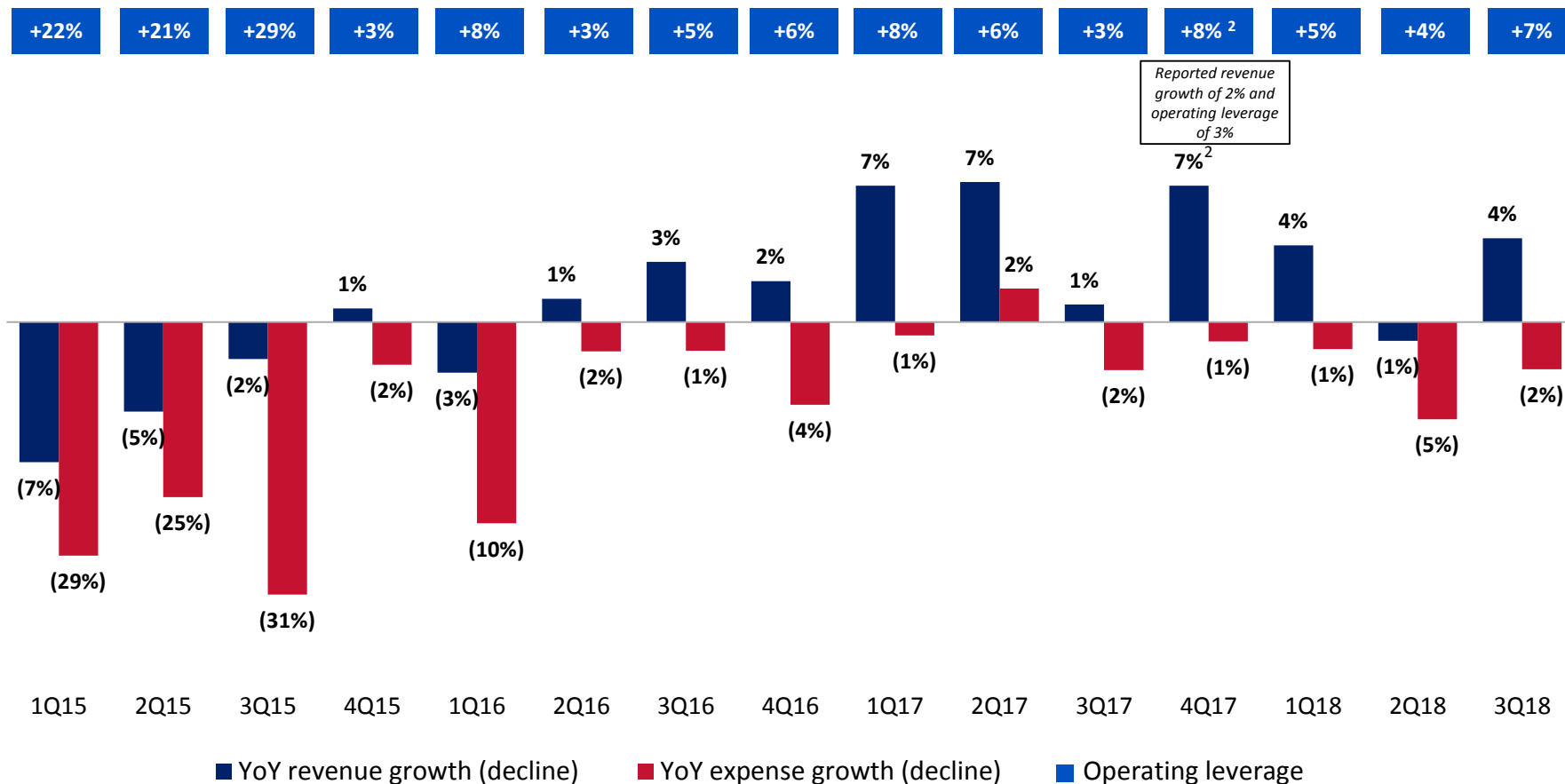
<sup>3</sup> Regulatory capital ratios at September 30, 2018 are preliminary. The Company reports regulatory capital ratios under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy, which for CET1 is the Standardized approach for 3Q18.

<sup>4</sup> See note A on slide 25 for definition of Global Liquidity Sources.



# Operating Leverage Trend

## Positive Operating Leverage for 15 Consecutive Quarters <sup>1</sup>



Note: Amounts may not total due to rounding.

<sup>1</sup> Operating leverage calculated as the year-over-year percentage change in revenue, net of interest expense, less the percentage change in noninterest expense. Quarterly expense for 2017 and 2016 has been restated to reflect the accounting change for retirement-eligible equity incentives adopted in 4Q17; 2015 and 2014 periods are as reported.

<sup>2</sup> Revenue growth and operating leverage adjusted to exclude the \$0.9B noninterest income charge in 4Q17 from the Tax Act; represents a non-GAAP financial measure.



# Investing for the Future

## Technology

- Consistent **\$3B annual technology new initiative investment spend** since 2012<sup>1</sup>
- Launched industry's only **AI virtual assistant (Erica)**; 3.4MM users since 2Q18 rollout
- Launched **Zelle P2P payments in 2017**; 4.3MM users since 2Q17 launch
- Deployed **digital mortgage and auto shopping** experiences within the only mobile banking app certified by J.D. Power
- Leveraging **mobile digital identity** including biometrics to provide access across all other channels starting with integration with our phone and call center platforms
- Enhanced common **Financial Wellness tools**
- **Seamless mobile integration across banking and investment applications** enabling clients to easily navigate across all of their relationships
- Enhanced **self-directed investing; crossed \$200B in Merrill Edge brokerage assets**
- Launched **Merrill Edge Guided Investing** in 1Q17, providing online investing and professional portfolio management
- Rolled out industry-leading **GWIM digital capabilities** including document scan/upload and introduced client-to-advisor texting capabilities
- Enhanced **CashPro Mobile** (+180% users YoY) and **CashPro Assistant** AI and predictive analytics capabilities; client logins and payment approvals both up 4x YoY
- **Reduced manual processes** across Global Banking and Markets through the use of AI, Robotics and Automation, saving 84,000 hours annually
- Migrated to **new cross asset trading platform** with enhanced functionality and reporting
- **Equities electronic trading platform upgraded to support 25x order volume** and **FX platform is now 50x faster** than 2 years ago
- **Migrated 70%** of BAC application workloads **to our internal private cloud**
- **Reduced data centers to 25 from 65 since 2007**
- **Replaced all major operating platforms** over past several years, including deposits, card, mortgage, investment advisory, trading, financial reporting, wholesale credit
- **Highest number of patents of any financial firm** (~3,400 patents awarded or pending, including 89 for Blockchain)

## People

### Investments in Client-Facing Professionals

- **Added 6,000 client professionals in Consumer Banking** since 2015 with plans for additional 5,000 to meet our clients' life priorities over next 4 years
- **Invested in world-class Wealth Advisor Development programs**; grew Merrill Lynch FAs at 3% CAGR and U.S. Trust Private Client Advisors at 9% CAGR over last 3 years
- Hired >450 commercial and business bankers since 2015 to **expand local coverage**; adding regional investment bankers

### Great Place to Work

- **Shared Success bonuses** and stock grants (90% of employees), led the industry on \$15 minimum wage, **parental leave** of 16 weeks for both parents, sabbaticals for certain employees, wellness initiatives
- **Pathways Program**: targeting hiring 10,000 associates from low- and moderate-income neighborhoods over next 5 years
- **Focused on diversity & inclusion**: more than 50% of our global workforce is women and 40% of our U.S.-based workforce is racially or ethnically diverse

## Physical Footprint/Infrastructure

- Opened 103 financial centers over the last 3 years with 53 over past 12 months; **Announced plans to open >500 new financial centers** over next 4 years
- **Expansion into new cities** with existing wealth mgmt. / commercial presence
  - Denver, Minneapolis / St. Paul, Indianapolis, Pittsburgh, Cincinnati, Cleveland, Columbus, Salt Lake City, Lexington
- **Redesigned ~700 financial centers** with new technology / layouts over past 3 years
  - ~1,200 more redesigns planned, including:
    - Opening 600 Merrill Edge investment centers by 2020
    - Opening 100 student centers by end of 2018
- **100% of ATMs cardless-enabled**
  - Replaced 75% of ATM network since 2015; plan to complete all by mid-2019



Note: GWIM defined as Global Wealth and Investment Management.

<sup>1</sup> \$3B annual technology initiative investment spend is a component of 2018 total technology budget of ~\$10B.

# Financial Results

<b>Summary Income Statement (\$B, except per share data)</b>	<b>3Q18</b>	<b>3Q17</b>	<b>% Inc / (Dec)</b>
Total revenue, net of interest expense	\$22.8	\$21.8	4 %
Noninterest expense	13.1	13.4	(2)
Provision for credit losses	0.7	0.8	(14)
Pretax income	9.0	7.6	18
Income tax expense	1.8	2.2	(16)
<b>Net income</b>	<b>\$7.2</b>	<b>\$5.4</b>	<b>32</b>
Diluted earnings per share	\$0.66	\$0.46	43
Average diluted common shares (in millions)	10,171	10,747	(5)

<b>Return Metrics and Efficiency</b>	<b>3Q18</b>	<b>3Q17</b>	<b>Inc / (Dec)</b>
Return on average assets	1.23 %	0.95 %	28 bps
Return on average common shareholders' equity	11.0	7.9	310
Return on average tangible common shareholders' equity <sup>1</sup>	15.5	11.0	450
Efficiency ratio	57	61	(396)

Note: Amounts may not total due to rounding.

<sup>1</sup> Represents a non-GAAP financial measure. For important presentation information, see slide 28.



# Balance Sheet, Liquidity and Capital

(EOP basis unless noted)

<b>Balance Sheet (\$B)</b>	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Total assets	\$2,338.8	\$2,291.7	\$2,284.2
Total loans and leases	929.8	935.8	927.1
Total loans and leases in business segments <sup>1</sup>	874.8	874.6	854.3
Total debt securities	446.1	438.3	439.2
<b>Funding &amp; Liquidity (\$B)</b>			
Total deposits	\$1,345.6	\$1,309.7	\$1,284.4
Long-term debt	234.1	226.6	228.7
Global Liquidity Sources (average) <sup>2</sup>	537	512	517
Liquidity coverage ratio (average) <sup>2,3</sup>	120 %	122 %	126 %
<b>Equity (\$B)</b>			
Common shareholders' equity	\$239.8	\$241.0	\$249.6
Common equity ratio	10.3 %	10.5 %	10.9 %
Tangible common shareholders' equity <sup>4</sup>	\$169.9	\$170.9	\$179.7
Tangible common equity ratio <sup>4</sup>	7.5 %	7.7 %	8.1 %
<b>Per Share Data</b>			
Book value per common share	\$24.33	\$24.07	\$23.87
Tangible book value per common share <sup>4</sup>	17.23	17.07	17.18
Common shares outstanding (in billions)	9.86	10.01	10.46

<b>Basel 3 Capital (\$B) <sup>3</sup></b>	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Common equity tier 1 capital (CET1)	\$164.4	\$164.9	\$173.6
<b>Standardized approach</b>			
Risk-weighted assets	\$1,440	\$1,444	\$1,420
CET1 ratio	11.4 %	11.4 %	12.2 %
<b>Advanced approaches</b>			
Risk-weighted assets	\$1,424	\$1,437	\$1,460
CET1 ratio	11.5 %	11.5 %	11.9 %
<b>Supplementary leverage</b>			
Supplementary leverage ratio (SLR)	6.7 %	6.7 %	n/a

Note: n/a = not applicable.

<sup>1</sup> Excludes loans and leases in All Other.

<sup>2</sup> See notes A and B on slide 25 for definitions of Global Liquidity Sources and Liquidity Coverage Ratio, respectively.

<sup>3</sup> Regulatory capital and liquidity ratios at September 30, 2018 are preliminary. The Company reports regulatory capital ratios under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy. Basel 3 transition provisions for regulatory capital adjustments and deductions were fully phased-in as of January 1, 2018. Prior periods are presented on a fully phased-in basis. SLR requirements became effective January 1, 2018.

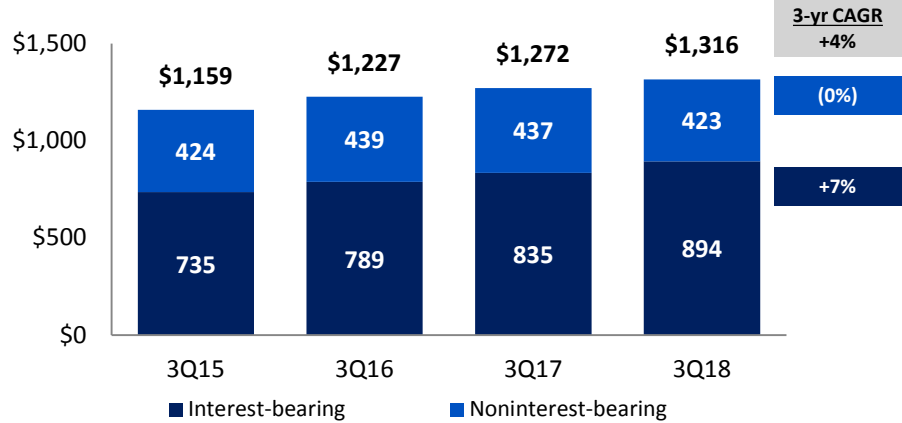
<sup>4</sup> Represents a non-GAAP financial measure. For important presentation information, see slide 28.



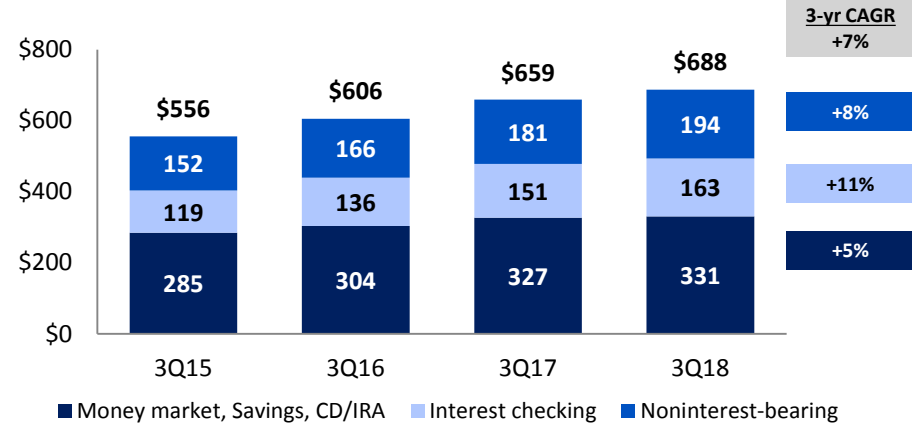
# Average Deposits

Bank of America Ranked #1 in U.S. Deposit Market Share <sup>1</sup>

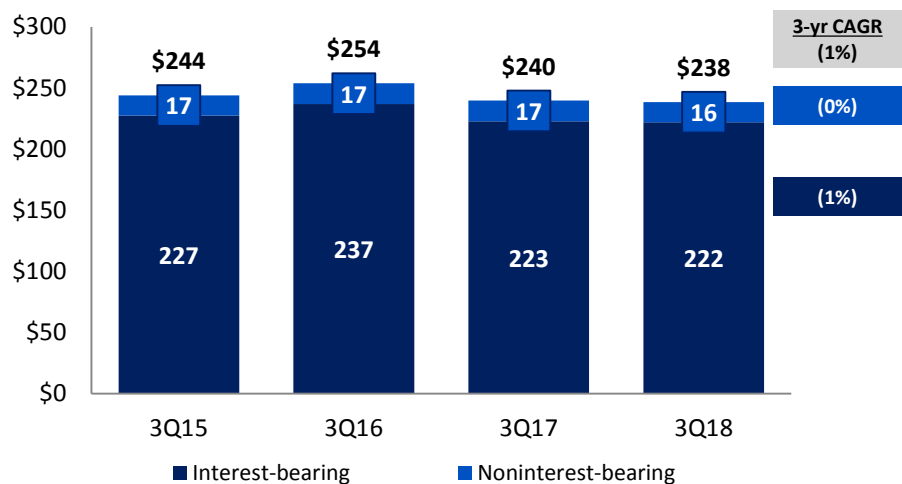
## Total Corporation (\$B)



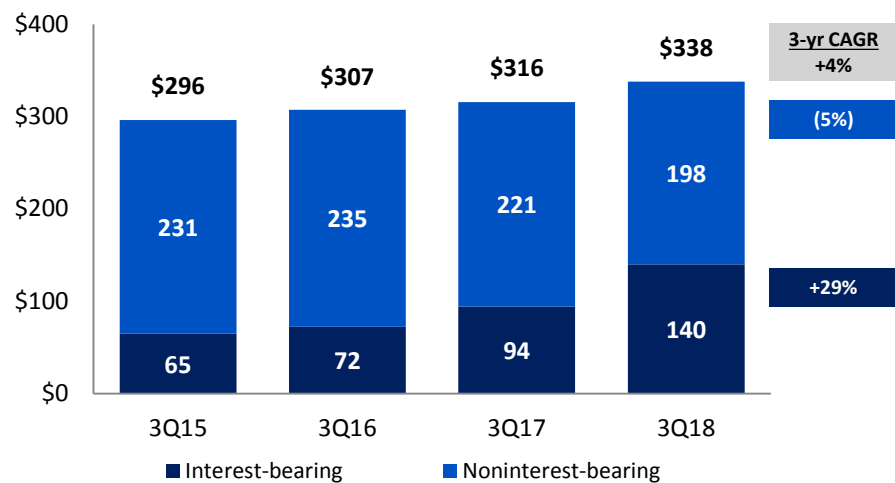
## Consumer Banking (\$B)



## GWIM (\$B)



## Global Banking (\$B)

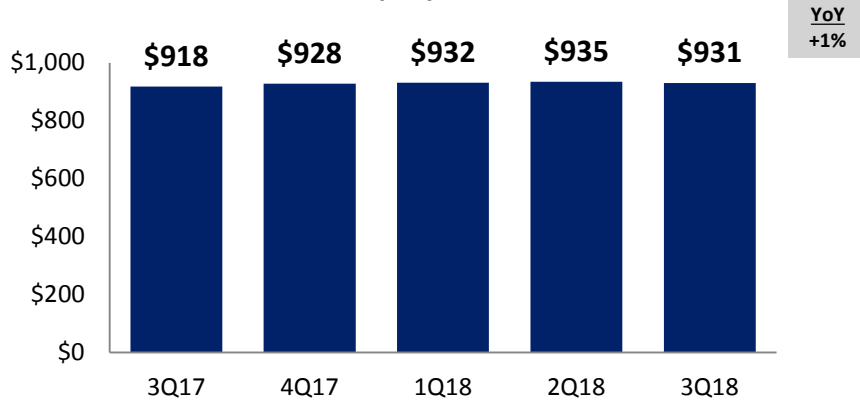


Note: Amounts may not total due to rounding. Total corporation includes Global Markets & All Other.

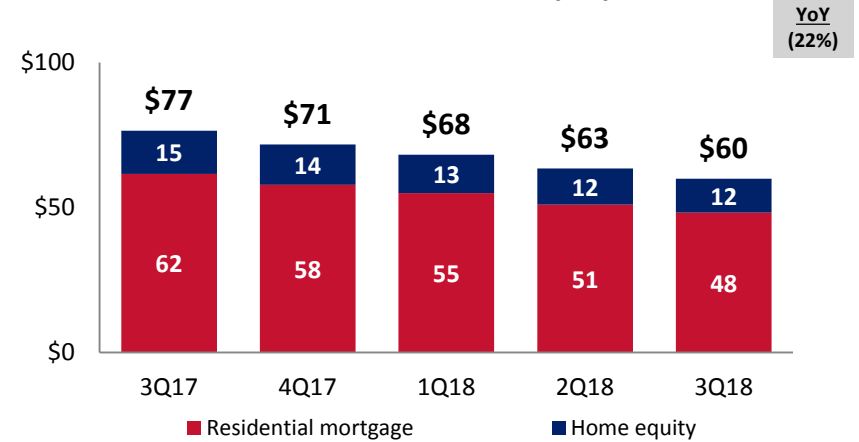
<sup>1</sup> Based on June 30, 2018 FDIC deposit data.

# Average Loans and Leases

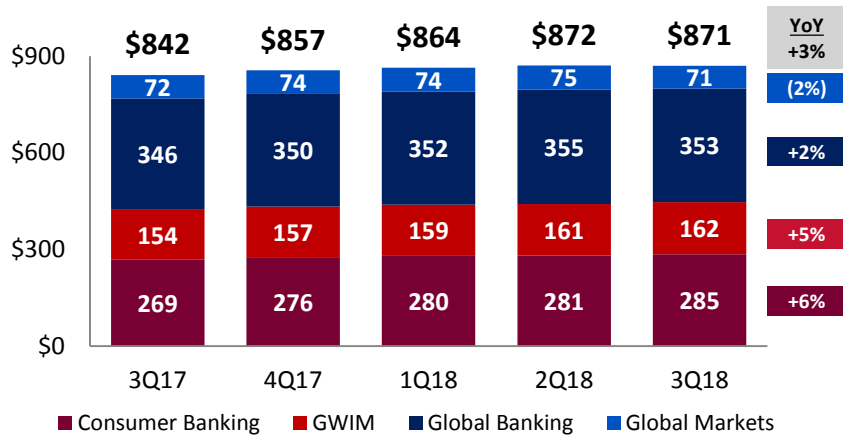
## Total Loans and Leases (\$B)



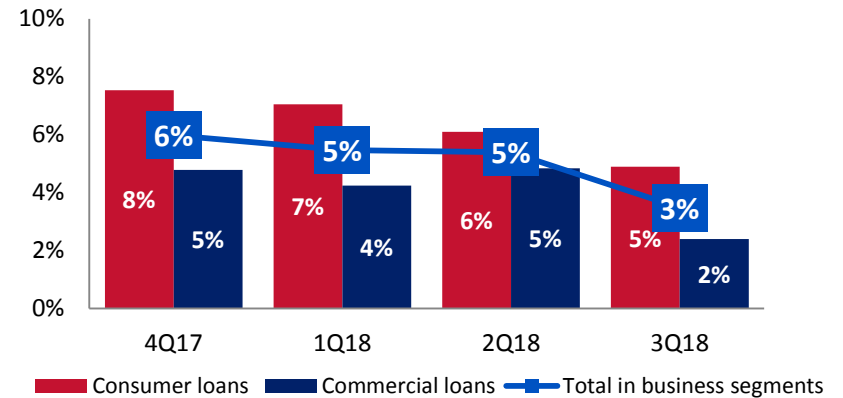
## Total Loans and Leases in All Other (\$B)



## Loans and Leases in Business Segments (\$B)



## Year-over-Year Growth in Business Segments

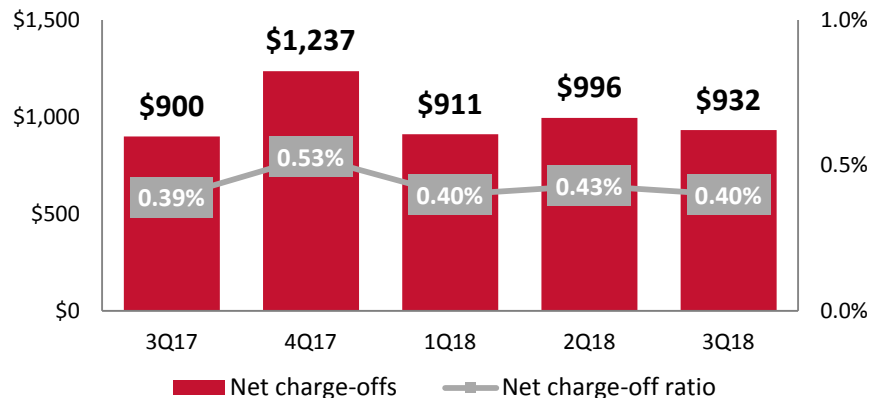


Note: Amounts may not total due to rounding.

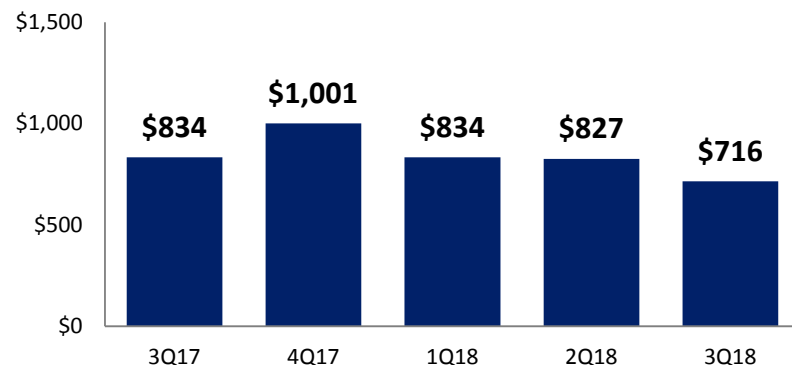


# Asset Quality

## Net Charge-offs (\$MM) <sup>1</sup>



## Provision for Credit Losses (\$MM)



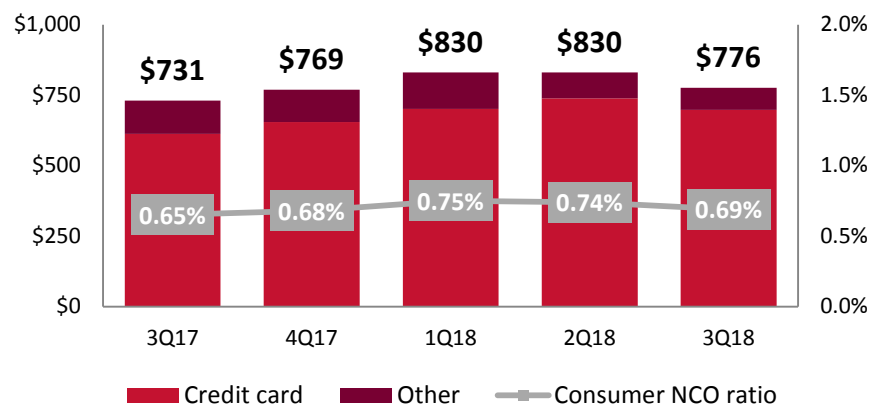
- Total net charge-offs decreased \$64MM from 2Q18; net charge-off ratio declined 3 bps to 0.40%
  - Consumer net charge-offs decreased \$54MM, reflecting seasonally lower losses in credit card
    - Net charge-off ratio of 0.69%, down 5 bps
  - Commercial net charge-offs decreased \$10MM
    - Net charge-off ratio of 0.13% (0.08% excl. small business), down 1 bp
- Provision expense decreased \$111MM from 2Q18
  - Net reserve release of \$216MM in 3Q18, reflected improvements in consumer real estate and energy
- Allowance for loan and lease losses of \$9.7B, represented 1.05% of total loans and leases <sup>1</sup>
- Nonperforming loans (NPLs) decreased \$743MM from 2Q18, driven by improvements in both consumer and commercial
  - 48% of consumer NPLs are contractually current
- Commercial reservable criticized utilized exposure decreased \$760MM from 2Q18, reflecting broad-based improvements



<sup>1</sup> Excludes loans measured at fair value.

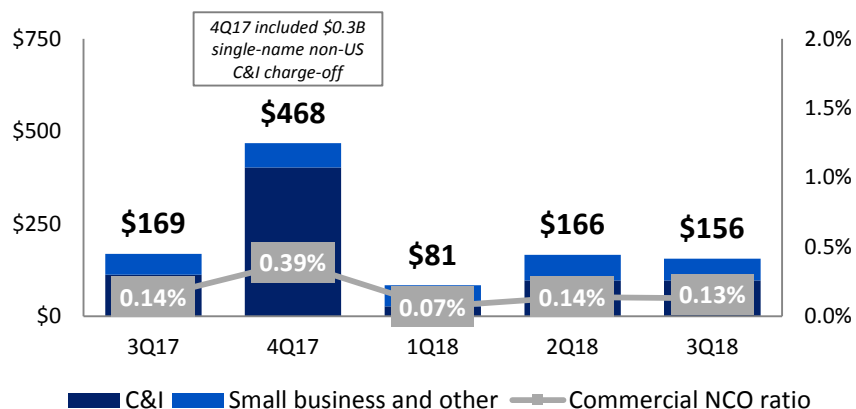
# Asset Quality – Consumer and Commercial Portfolios

## Consumer Net Charge-offs (\$MM)



Consumer Metrics (\$MM)	3Q18	2Q18	3Q17
Provision	\$710	\$757	\$730
Nonperforming loans and leases	4,306	4,639	5,252
% of loans and leases <sup>1</sup>	0.97 %	1.03 %	1.17 %
Consumer 30+ days performing past due	\$7,158	\$7,233	\$9,244
Fully-insured <sup>2</sup>	3,183	3,454	4,721
Non fully-insured	3,975	3,779	4,523
Allowance for loans and leases	4,980	5,140	5,582
% of loans and leases <sup>1</sup>	1.12 %	1.15 %	1.25 %
# times annualized NCOs	1.62 x	1.54 x	1.93 x

## Commercial Net Charge-offs (\$MM)



Commercial Metrics (\$MM)	3Q18	2Q18	3Q17
Provision	\$6	\$70	\$104
Reservable criticized utilized exposure	11,597	12,357	14,824
Nonperforming loans and leases	848	1,258	1,318
% of loans and leases <sup>1</sup>	0.18 %	0.26 %	0.28 %
Allowance for loans and leases	\$4,754	\$4,910	\$5,111
% of loans and leases <sup>1</sup>	0.99 %	1.02 %	1.08 %

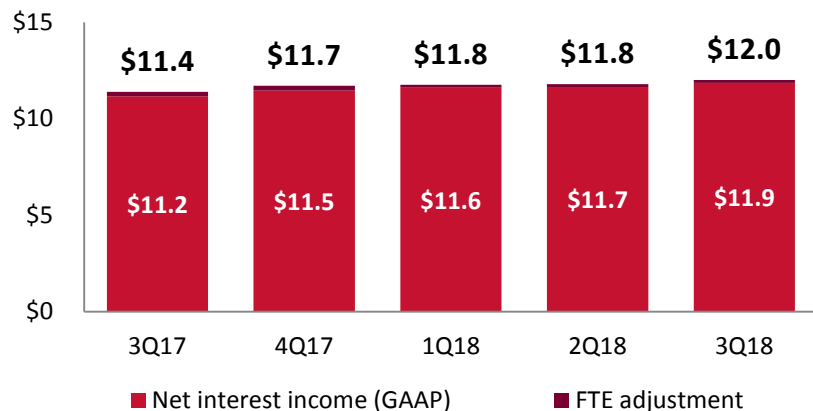


<sup>1</sup> Excludes loans measured at fair value.

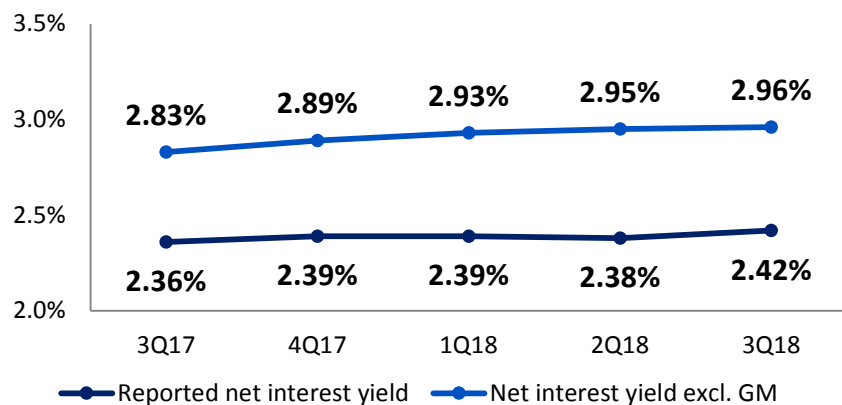
<sup>2</sup> Fully-insured loans are FHA-insured loans and other loans individually insured under long-term standby agreements.

# Net Interest Income

## Net Interest Income (FTE, \$B) <sup>1</sup>



## Net Interest Yield (FTE) <sup>1</sup>



- Net interest income of \$11.9B (\$12.0B FTE <sup>1</sup>)
  - Increased \$0.7B from 3Q17, reflecting the benefits from higher interest rates and loan and deposit growth, partially offset by higher funding costs in Global Markets
  - Increased \$0.2B from 2Q18, driven by securities growth, higher interest rates and one additional interest accrual day
- Net interest yield of 2.42% increased 6 bps from 3Q17
  - Reflected the benefits from spread improvement, partially offset by the impact of an increase in lower-yielding Global Markets assets
  - Excluding Global Markets, the net interest yield was 2.96%, up 13 bps from 3Q17 <sup>1</sup>
- Interest rate sensitivity as of September 30, 2018 <sup>2</sup>
  - Remain positioned for NII to benefit as rates move higher
  - +100 bps parallel shift in interest rate yield curve is estimated to benefit NII by \$2.9B over the next 12 months, driven primarily by sensitivity to short-end interest rates

Notes: FTE defined as fully taxable-equivalent basis. GM defined as Global Markets.

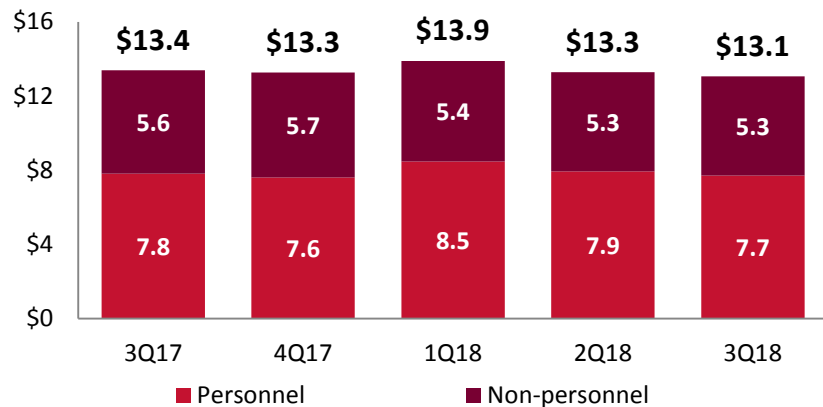
<sup>1</sup> Represent non-GAAP financial measures. Net interest yield adjusted to exclude Global Markets NII of \$754MM, \$801MM, \$870MM, \$932MM and \$899MM, and average earning assets of \$459B, \$490B, \$486B, \$464B and \$447B for 3Q18, 2Q18, 1Q18, 4Q17 and 3Q17, respectively. The Company believes the presentation of net interest yield excluding Global Markets provides investors with transparency of NII and net interest yield in core banking activities. For important presentation information, see slide 28.

<sup>2</sup> NII asset sensitivity represents banking book positions.



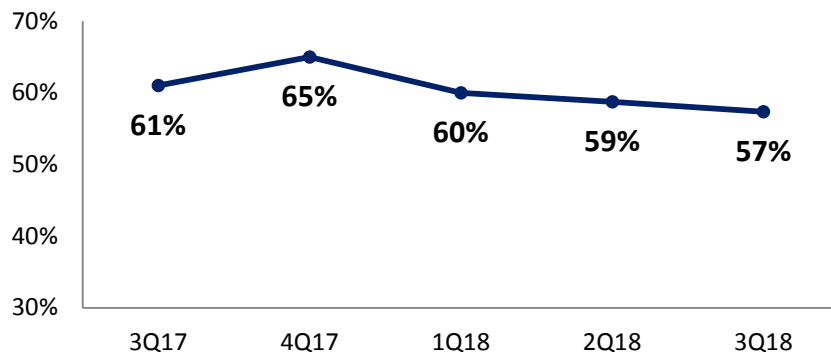
# Expense and Efficiency

## Total Noninterest Expense (\$B)



- Total noninterest expense of \$13.1B declined \$327MM, or 2%, from 3Q17, due to broad-based improvements in both personnel and non-personnel expense
  - Noninterest expense declined \$217MM from 2Q18, due primarily to lower personnel expense
- Efficiency ratio improved to 57% in 3Q18
- Total headcount of 205K declined 2% from 3Q17, reflecting declines in non-sales professionals as well as continued investments in primary sales professionals across Consumer Banking, GWIM and Global Banking

## Efficiency Ratio



Note: Amounts may not total due to rounding.

# Consumer Banking

Summary Income Statement (\$MM) <sup>1</sup>	3Q18	Inc / (Dec)	
		2Q18	3Q17
Total revenue, net of interest expense	\$9,403	\$192	\$629
Provision for credit losses	870	(74)	(97)
Noninterest expense	4,355	(40)	(106)
Pretax income	4,178	306	832
Income tax expense	1,065	77	(195)
Net income	\$3,113	\$229	\$1,027

Key Indicators (\$B)	3Q18	2Q18	3Q17
Average deposits	\$687.5	\$687.8	\$659.0
Rate paid on deposits	0.06 %	0.05 %	0.04 %
Cost of deposits <sup>2</sup>	1.52	1.55	1.59
Average loans and leases	\$285.0	\$280.7	\$268.8
Net charge-off ratio	1.19 %	1.28 %	1.18 %
Client brokerage assets	\$203.9	\$191.5	\$167.3
Active mobile banking users (MM)	25.9	25.3	23.6
% Consumer sales through digital channels	23 %	24 %	22 %
Number of financial centers	4,385	4,433	4,515
Combined credit / debit purchase volumes <sup>3</sup>	\$146.4	\$147.5	\$137.0
Total consumer credit card risk-adjusted margin <sup>3</sup>	8.15 %	8.07 %	8.63 %
Return on average allocated capital	33	31	22
Allocated capital	\$37	\$37	\$37
Efficiency ratio <sup>1</sup>	46 %	48 %	51 %

- Net income of \$3.1B increased 49% from 3Q17; ROAAC of 33%
  - 10% operating leverage (19<sup>th</sup> consecutive quarter of positive operating leverage)
- Revenue of \$9.4B increased \$0.6B, or 7%, from 3Q17
  - Strong NII growth, driven by higher interest rates and growth in deposits and loans
  - Noninterest income decreased modestly, as higher card income and service charges were more than offset by lower mortgage banking income
- Provision decreased \$0.1B from 3Q17, due primarily to a smaller reserve build in credit card
  - Net charge-offs increased \$0.1B to \$0.9B due to credit card portfolio seasoning and loan growth
- Noninterest expense declined \$0.1B, or 2%, from 3Q17, as investments for business growth were more than offset by improved productivity
  - Efficiency ratio improved 455 bps to 46%
  - Continued investment in financial center builds/renovations and digital capabilities
- Average deposits of \$688B grew \$29B, or 4%, from 3Q17
  - 51% of deposits in checking accounts; 91% primary accounts <sup>4</sup>
  - Average cost of deposits of 1.52% <sup>2</sup>; rate paid of 0.06%
- Average loans and leases of \$285B increased \$16B, or 6%, from 3Q17, driven by growth in residential mortgage and credit card
- Client brokerage assets of \$204B grew \$37B, or 22%, from 3Q17, driven by strong client flows and market performance
- Combined card spend grew 7% from 3Q17
- Active mobile banking users of 25.9MM, up 10% from 3Q17, and mobile channel usage up 17% from 3Q17

Note: ROAAC defined as return on average allocated capital.

<sup>1</sup> Revenue, pretax income, income tax expense and efficiency ratio shown on an FTE basis. Tax expense compared to prior year impacted by a lower U.S. corporate tax rate.

<sup>2</sup> Cost of deposits calculated as annualized noninterest expense as a percentage of total average deposits within the Deposits subsegment.

<sup>3</sup> Includes U.S. consumer credit card portfolios in Consumer Banking and GWIM.

<sup>4</sup> Represents the percentage of consumer checking accounts that are estimated to be the customer's primary account based on multiple relationship factors (e.g., linked to their direct deposit).

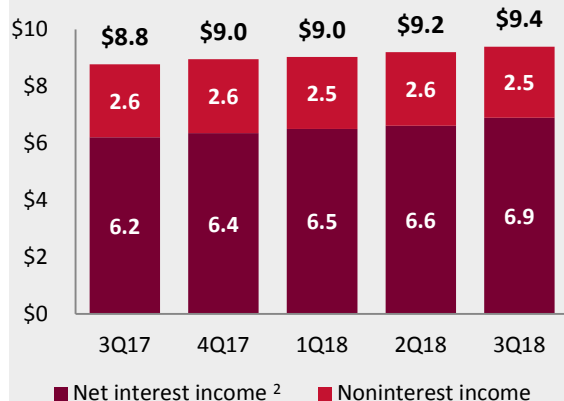


# Consumer Banking Trends

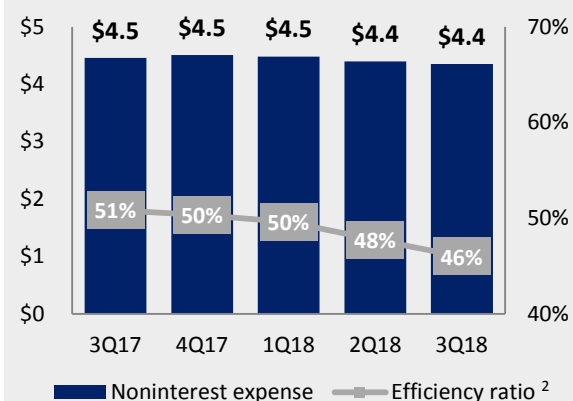
## Business Leadership <sup>1</sup>

- #1 Consumer Deposit Market Share <sup>A</sup>
- 2018 J.D. Power Certified Mobile App
- Named North America's Best Digital Bank <sup>B</sup>
- #1 Online Banking and Mobile Banking Functionality <sup>C</sup>
- #1 U.S. Checking Account Digital Sales Functionality <sup>D</sup>
- 4-Star Rating by Barron's 2018 Best Online Brokers
- #1 Home Equity Originator and #2 bank for Retail Mortgage Originations <sup>E</sup>
- #1 in Prime Auto Credit distribution of new originations among peers <sup>F</sup>
- #2 Small Business Lender <sup>G</sup>
- Global Retail Bank of the Year <sup>H</sup>

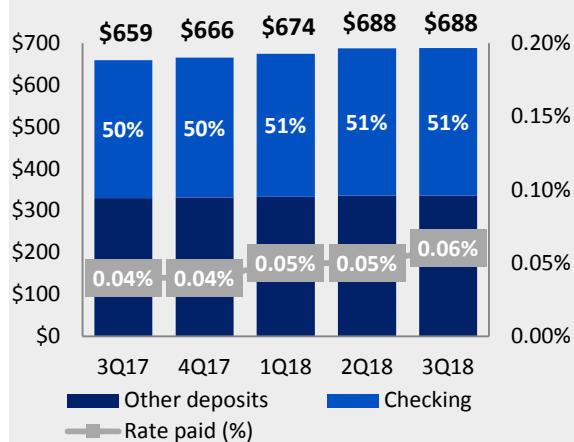
## Total Revenue (\$B) <sup>2</sup>



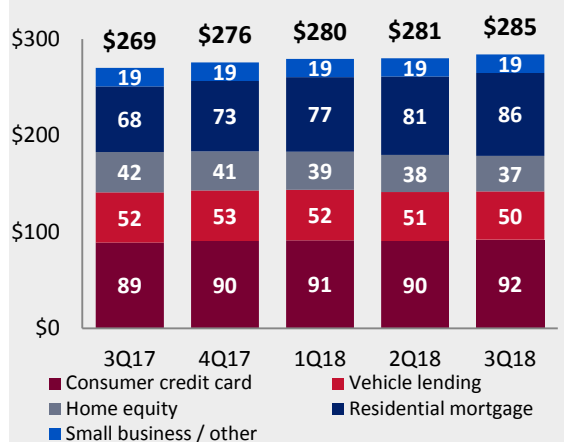
## Total Expense (\$B) and Efficiency <sup>2</sup>



## Average Deposits (\$B)



## Average Loans and Leases (\$B)

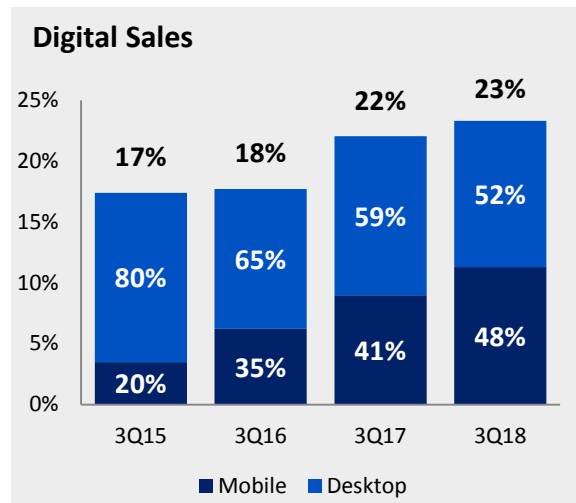
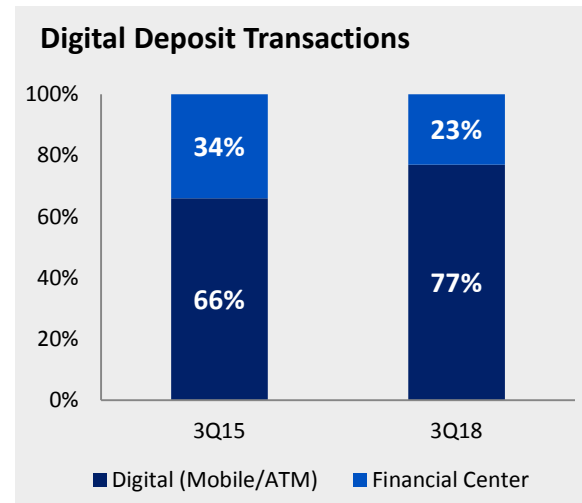
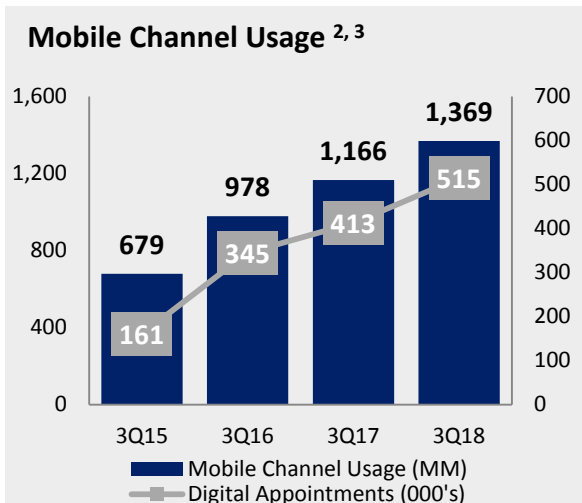
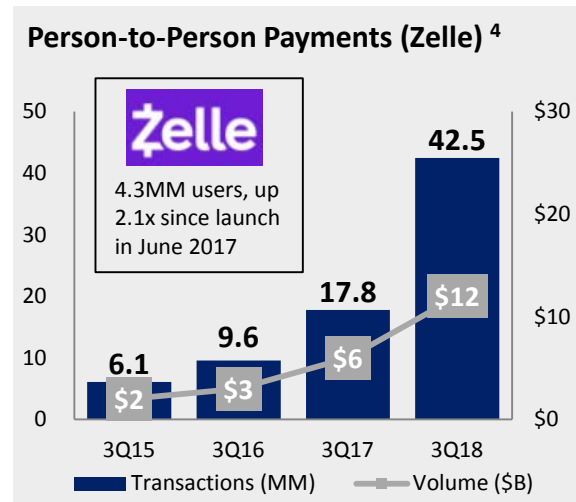
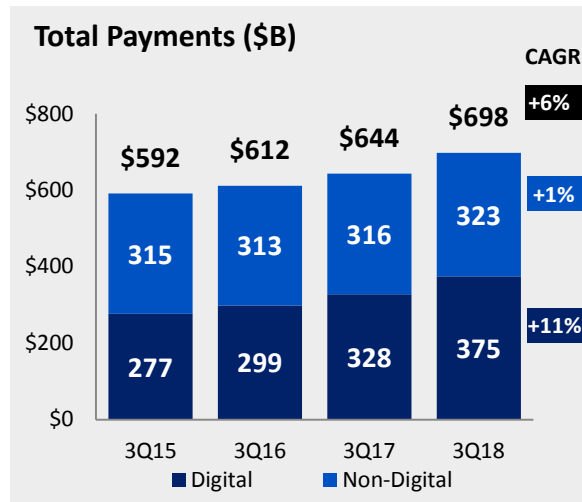
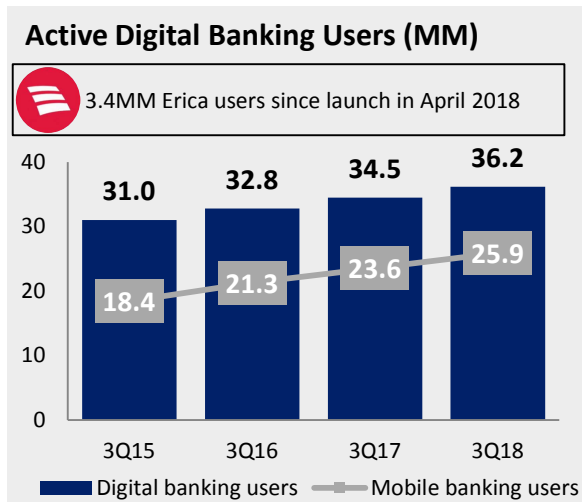


## Client Brokerage Assets (EOP, \$B)



Note: Amounts may not total due to rounding.  
<sup>1</sup> See slide 26 for business leadership sources.  
<sup>2</sup> FTE basis.

# Consumer Banking Digital Usage Trends <sup>1</sup>



<sup>1</sup> Digital users represent mobile and / or online users in consumer businesses.

<sup>2</sup> Mobile channel usage represents the total number of application logins using a smartphone or tablet.

<sup>3</sup> Digital appointments represent the number of appointments made via online, smartphone or tablet.

<sup>4</sup> Includes Bank of America person-to-person payments sent and / or received through e-mail or mobile identification.

# Global Wealth & Investment Management

Summary Income Statement (\$MM) <sup>1</sup>	3Q18	Inc / (Dec)	
		2Q18	3Q17
Total revenue, net of interest expense	\$4,783	\$74	\$163
Provision for credit losses	13	1	(3)
Noninterest expense	3,414	19	45
Pretax income	1,356	54	121
Income tax expense	346	14	(119)
Net income	\$1,010	\$40	\$240

Key Indicators (\$B)	3Q18	2Q18	3Q17
Average deposits	\$238.3	\$236.2	\$239.6
Average loans and leases	161.9	160.8	154.3
Net charge-off ratio	0.03 %	0.04 %	0.03 %
AUM flows	\$7.6	\$10.8	\$20.7
Pretax margin	28 %	28 %	27 %
Return on average allocated capital	28	27	22
Allocated capital	\$14.5	\$14.5	\$14.0

- Net income of \$1.0B increased 31% from 3Q17; ROAAC of 28%
  - Strong pretax margin of 28%, up from 27% in 3Q17
- Revenue of \$4.8B increased 4% from 3Q17 as 9% higher asset management fees and net interest income were partially offset by lower transactional revenue
  - 85% of revenue from asset management fees and net interest income vs. 83% in 3Q17
- Noninterest expense increased 1% from 3Q17, as higher revenue-related incentives and investment in sales professionals were largely offset by continued expense discipline
- Client balances grew to a record \$2.8T, up 6% from 3Q17, driven by higher market valuations and solid assets under management (AUM) flows
  - AUM flows of \$8B in 3Q18 reflected solid client activity and, compared to 3Q17, less of a shift from brokerage to AUM
- Pace of year-to-date organic growth in net new Merrill Lynch households roughly four times 2017 level on annualized basis
- Average deposits of \$238B declined 1% from 3Q17
  - Growth of 1% compared to 2Q18
- Average loans and leases of \$162B increased \$8B, or 5%, from 3Q17, driven by residential mortgage and custom lending
- Wealth advisors grew 1% from 3Q17 to 19,344 <sup>2</sup>



<sup>1</sup> Revenue, pretax income, income tax expense and efficiency ratio shown on an FTE basis. Tax expense compared to prior year impacted by a lower U.S. corporate tax rate.

<sup>2</sup> Includes financial advisors in Consumer Banking of 2,618 and 2,267 in 3Q18 and 3Q17.

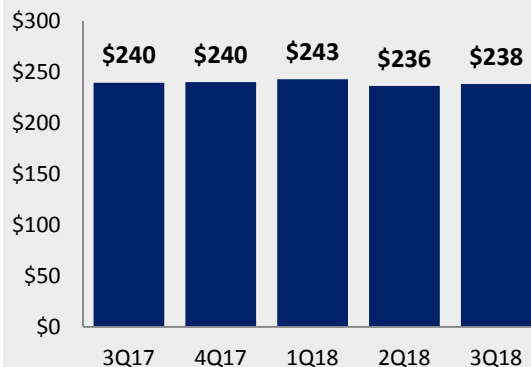


# Global Wealth & Investment Management Trends

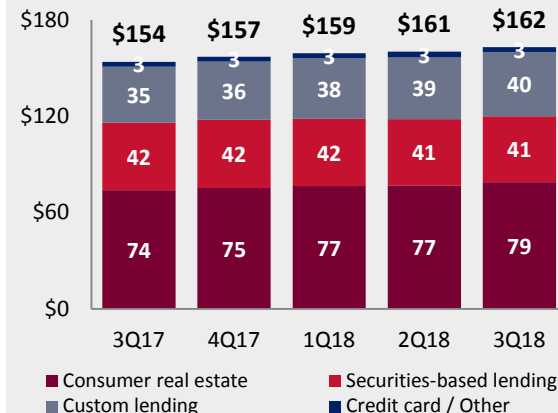
## Business Leadership <sup>1</sup>

- #1 U.S. wealth management market position across client assets, deposits and loans <sup>1</sup>
- #1 in personal trust assets under management <sup>1</sup>
- #1 in Barron's U.S. high net worth client assets (2018)
- #1 in Barron's Top 1,200 ranked Financial Advisors (2018)
- #1 in Forbes' Top 500 America's Top Next Generation Advisors (2018)
- #1 in Financial Times Top 401K Retirement Plan Advisors (2018)
- #1 in Barron's Top 100 Women Advisors (2018)

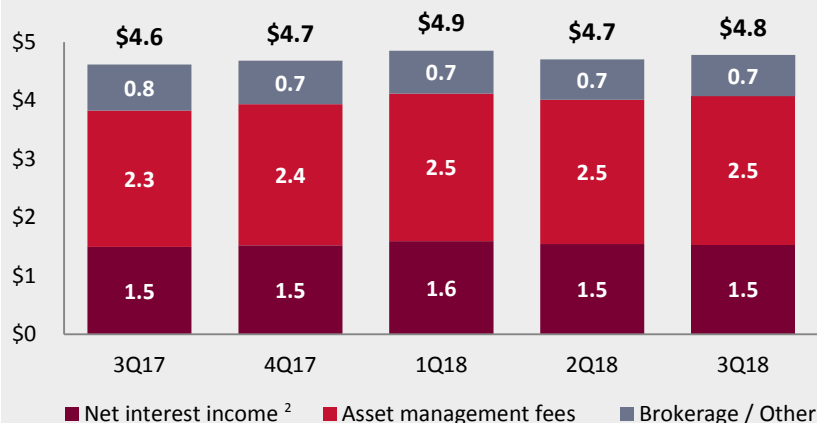
## Average Deposits (\$B)



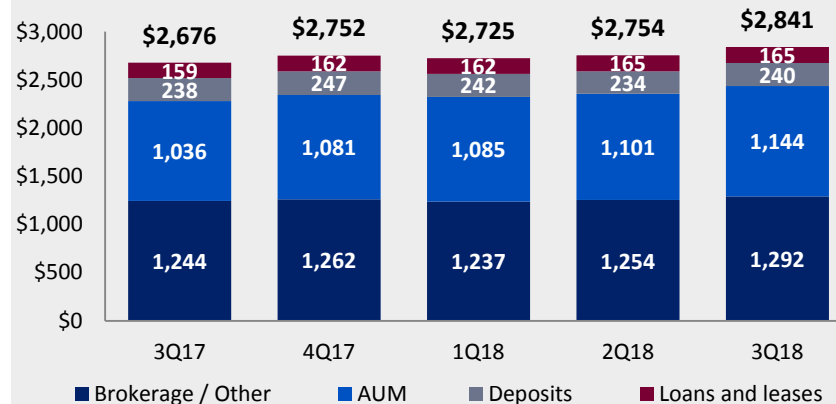
## Average Loans and Leases (\$B)



## Total Revenue (\$B) <sup>2</sup>



## Client Balances (EOP, \$B) <sup>3</sup>



Note: Amounts may not total due to rounding.

<sup>1</sup> See slide 26 for business leadership sources.

<sup>2</sup> FTE basis.

<sup>3</sup> Loans and leases include margin receivables which are classified in customer and other receivables on the consolidated balance sheet.



# Global Banking

<b>Summary Income Statement (\$MM)</b> <sup>1</sup>	<b>3Q18</b>	<b>Inc/(Dec)</b>	
		<b>2Q18</b>	<b>3Q17</b>
Total revenue, net of interest expense <sup>2</sup>	\$4,738	(\$184)	(\$249)
Provision (benefit) for credit losses	(70)	(47)	(118)
Noninterest expense	2,120	(36)	1
Pretax income	2,688	(101)	(132)
Income tax expense	699	(27)	(363)
Net income	<u>\$1,989</u>	<u>(\$74)</u>	<u>\$231</u>

<b>Selected Revenue Items (\$MM)</b>	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Total Corporation IB fees (excl. self-led) <sup>2</sup>	\$1,204	\$1,422	\$1,477
Global Banking IB fees <sup>2</sup>	643	743	806
Business Lending revenue	2,084	2,166	2,318
Global Transaction Services revenue	1,972	1,960	1,815

<b>Key Indicators (\$B)</b>	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Average deposits	\$337.7	\$323.2	\$315.7
Average loans and leases	352.7	355.1	346.1
Net charge-off ratio	0.10 %	0.10 %	0.12 %
Return on average allocated capital	19	20	17
Allocated capital	\$41	\$41	\$40
Efficiency ratio <sup>1</sup>	45 %	44 %	43 %

- Net income of \$2.0B increased 13% from 3Q17; ROAAC of 19%
- Revenue of \$4.7B decreased 5% from 3Q17
  - Reflected lower investment banking fees and the impact of tax reform on certain tax-advantaged investments, partially offset by higher NII from the benefit of higher interest rates and growth in deposits
- Total Corporation investment banking fees of \$1.2B (excl. self-led) declined 18% from 3Q17
  - Decline driven primarily by advisory and leveraged finance, partially offset by an increase in equity underwriting fees
- Provision improved \$0.1B from 3Q17, driven primarily by continued improvements in energy and broader asset quality
- Noninterest expense was flat compared to 3Q17, despite continued investment in the business, including sales professionals
- Average loans and leases of \$353B increased 2% from 3Q17
- Strong average deposit growth of \$22B, or 7%, compared to 3Q17



<sup>1</sup> Revenue, pretax income, income tax expense and efficiency ratio shown on an FTE basis. Tax expense compared to prior year impacted by a lower U.S. corporate tax rate.

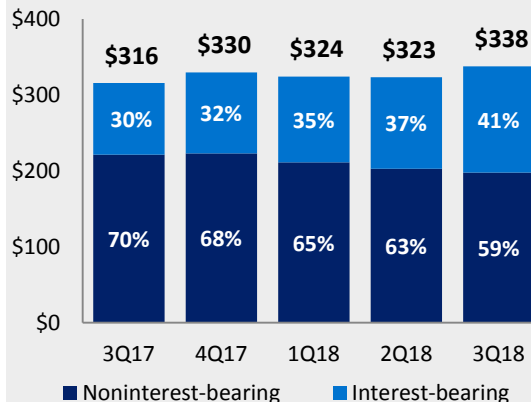
<sup>2</sup> Global Banking and Global Markets share in certain deal economics from investment banking, loan origination activities and sales and trading activities.

# Global Banking Trends

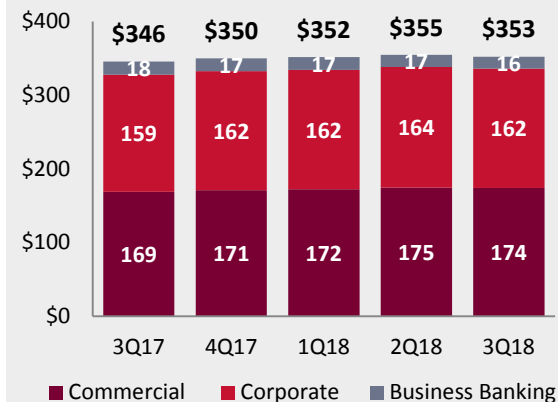
## Business Leadership <sup>1</sup>

- North America's Best Bank for Small to Medium-sized Enterprises <sup>B</sup>
- Most Innovative Investment Bank of the Year and Best Bank for Global Payments <sup>K</sup>
- Best Transaction Bank in North America <sup>L</sup>
- Best Bank for Transaction Services in Western Europe <sup>B</sup>
- 2018 Quality, Share and Excellence Awards for U.S. Large Corporate Cash Management <sup>M</sup>
- Best Global Debt Bank <sup>N</sup>
- Best Brand for Overall Middle Market Banking and Excellence Award for International Middle Market Banking - Payments, FX, Trade Finance <sup>O</sup>
- Relationships with 79% of the Global Fortune 500; 94% of the U.S. Fortune 1,000 (2018)

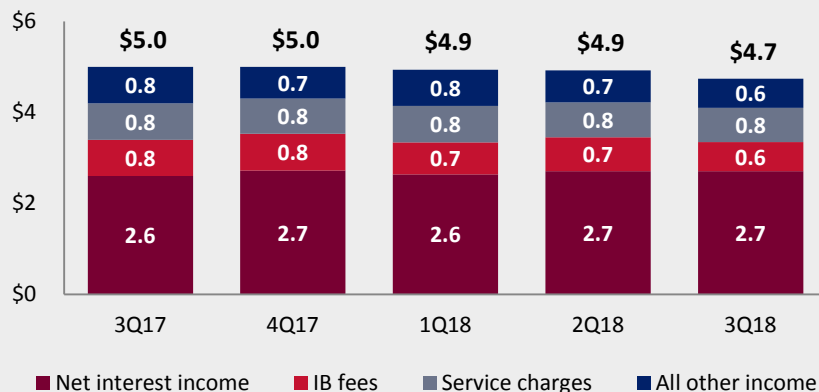
## Average Deposits (\$B)



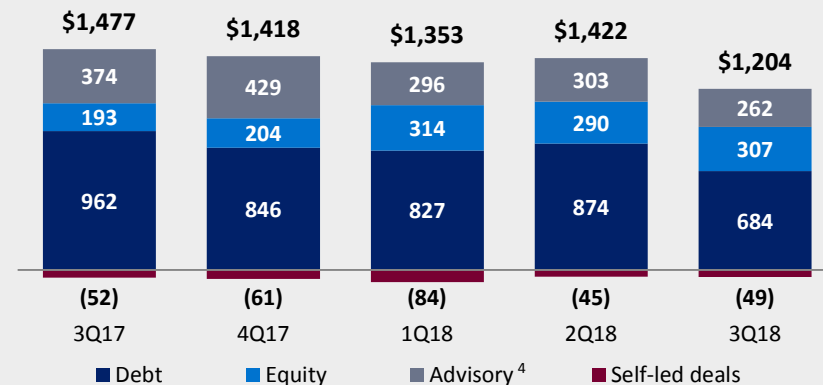
## Average Loans and Leases (\$B)



## Total Revenue (\$B) <sup>2,3</sup>



## Total Corporation IB Fees (\$MM) <sup>2</sup>



Note: Amounts may not total due to rounding.

<sup>1</sup> See slide 26 for business leadership sources.

<sup>2</sup> Global Banking and Global Markets share in certain deal economics from investment banking, loan origination activities and sales and trading activities.

<sup>3</sup> FTE basis.

<sup>4</sup> Advisory includes fees on debt and equity advisory and mergers and acquisitions.



# Global Markets

<b>Summary Income Statement (\$MM)</b> <sup>1</sup>	<b>3Q18</b>	<b>Inc/(Dec)</b>	
		<b>2Q18</b>	<b>3Q17</b>
Total revenue, net of interest expense <sup>2</sup>	\$3,843	(\$378)	(\$58)
<i>Net DVA</i>	(99)	80	(78)
<i>Total revenue (excl. net DVA)</i> <sup>2,3</sup>	3,942	(458)	20
Provision for credit losses	(2)	(1)	4
Noninterest expense	2,612	(103)	(99)
Pretax income	1,233	(274)	37
Income tax expense	321	(70)	(119)
<b>Net income</b>	<b>\$912</b>	<b>(\$204)</b>	<b>\$156</b>
<i>Net income (excl. net DVA)</i> <sup>3</sup>	987	(\$265)	\$218
<b>Selected Revenue Items (\$MM)</b> <sup>2</sup>	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Sales and trading revenue	\$2,972	\$3,417	\$3,129
Sales and trading revenue (excl. net DVA) <sup>3</sup>	3,071	3,596	3,150
FICC (excl. net DVA)	2,062	2,290	2,166
Equities (excl. net DVA)	1,009	1,306	984
Global Markets IB fees	523	651	624
<b>Key Indicators (\$B)</b>	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Average total assets	\$652.5	\$678.5	\$642.4
Average trading-related assets	460.3	473.1	442.3
Average 99% VaR (\$ in MM) <sup>4</sup>	31	30	41
Average loans and leases	71.2	75.1	72.3
Return on average allocated capital	10 %	13 %	9 %
Allocated capital	\$35	\$35	\$35
Efficiency ratio <sup>1</sup>	68 %	64 %	69 %

- Net income of \$0.9B increased 21% from 3Q17; ROAAC of 10%
  - Excluding net DVA, net income of \$1.0B increased 28%
- Revenue declined 1% from 3Q17; excluding net DVA, revenue increased 1%
  - Reflects lower sales and trading revenue and investment banking fees, mostly offset by a gain on sale of an equity investment (excluded from sales and trading revenue)
- Sales and trading revenue of \$3.0B declined 5% from 3Q17
- Excluding net DVA, sales and trading revenue of \$3.1B decreased 3% from 3Q17<sup>3</sup>
  - FICC revenue of \$2.1B decreased 5% from 3Q17, due primarily to lower client activity in rates products as well as a weaker environment for municipal bonds
  - Equities revenue of \$1.0B increased 3% from 3Q17, driven by increased client activity in financing
- Noninterest expense decreased 4% vs. 3Q17, driven by lower operating costs
- Average VaR remained low at \$31MM in 3Q18<sup>4</sup>



<sup>1</sup> Revenue, pretax income, income tax expense and efficiency ratio shown on an FTE basis. Tax expense compared to prior year impacted by a lower U.S. corporate tax rate.

<sup>2</sup> Global Banking and Global Markets share in certain deal economics from investment banking, loan origination activities and sales and trading activities.

<sup>3</sup> Represents a non-GAAP financial measure; see note C on slide 25.

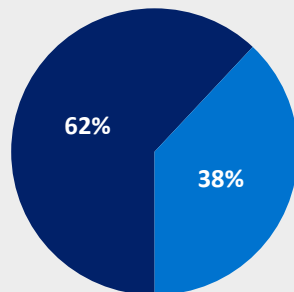
<sup>4</sup> See note D on slide 25 for definition of VaR.

# Global Markets Trends and Revenue Mix

## Business Leadership <sup>1</sup>

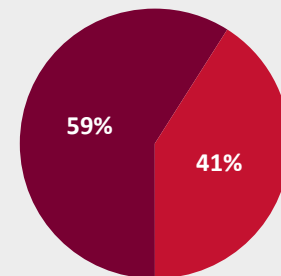
- Best Bank for Markets in Asia <sup>P</sup>
- European Trading House of the Year <sup>Q</sup>
- Equity Derivatives House of the Year <sup>R</sup>
- #1 Equity Portfolio Trading Share – North American Institutions <sup>O</sup>
- #1 for U.S. FICC Overall Trading Quality and #1 for U.S. FICC Overall Sales Quality <sup>M</sup>
- 2018 Quality Leader in Global Top-Tier Foreign Exchange Sales and Corporate FX Sales <sup>M</sup>
- 2017 U.S. Fixed Income Quality Leader in Credit and Securitized Products <sup>O</sup>
- #2 Global Research Firm <sup>S</sup>

## 2018 YTD Global Markets Revenue Mix (excl. net DVA) <sup>2</sup>



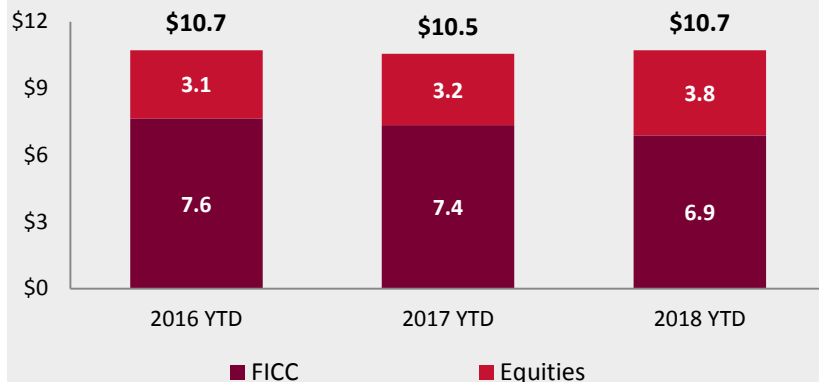
■ U.S. / Canada ■ International

## 2018 YTD Total FICC S&T Revenue Mix (excl. net DVA) <sup>2</sup>



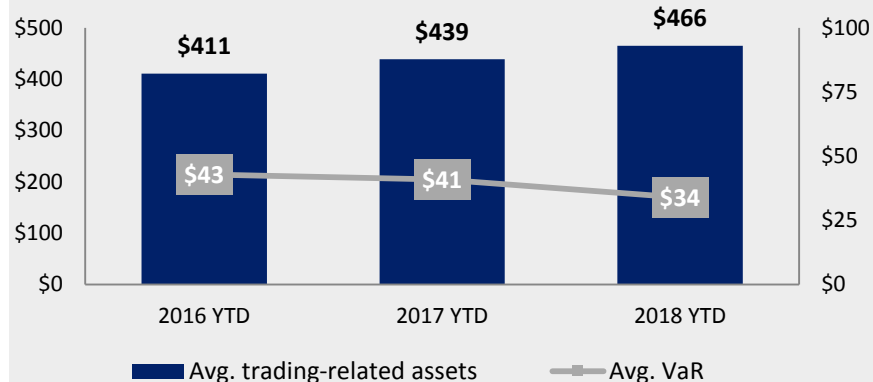
■ Credit / other ■ Macro <sup>3</sup>

## YTD Sales & Trading Revenue (excl. net DVA) (\$B) <sup>2</sup>



■ FICC ■ Equities

## YTD Average Trading-related Assets (\$B) and VaR (\$MM) <sup>4</sup>



■ Avg. trading-related assets — Avg. VaR

Note: Amounts may not total due to rounding.

<sup>1</sup> See slide 26 for business leadership sources.

<sup>2</sup> Represents a non-GAAP financial measure. Reported sales & trading revenue was \$10.5B, \$10.2B and \$10.6B for 2018 YTD, 2017 YTD and 2016 YTD, respectively. Reported FICC sales & trading revenue was \$6.7B, \$7.1B and \$7.5B for 2018 YTD, 2017 YTD and 2016 YTD, respectively. Reported Equities sales & trading revenue was \$3.8B, \$3.2B and \$3.1B for 2018 YTD, 2017 YTD and 2016 YTD, respectively. See note C on slide 25.

<sup>3</sup> Macro includes G10 FX, rates and commodities products.

<sup>4</sup> See note D on slide 25 for definition of VaR.



# All Other <sup>1</sup>

<b>Summary Income Statement (\$MM) <sup>2</sup></b>	<b>Inc/(Dec)</b>		
	<b>3Q18</b>	<b>2Q18</b>	<b>3Q17</b>
Total revenue, net of interest expense	\$161	\$461	\$364
Provision (benefit) for credit losses	(95)	10	96
Noninterest expense	566	(57)	(168)
Pretax income (loss)	(310)	508	436
Income tax expense (benefit)	(453)	116	347
<b>Net income (loss)</b>	<b>\$143</b>	<b>\$392</b>	<b>\$89</b>

- Net income of \$0.1B improved \$0.1B from 3Q17
- Revenue improved \$0.4B from 3Q17, reflecting lower provision for representations and warranties as well as a small gain from the sale of a non-core consumer real estate loan portfolio
- Provision benefit declined \$0.1B from 3Q17, due to a slower pace of portfolio improvement in non-core consumer real estate
- Noninterest expense declined \$0.2B from 3Q17, reflecting lower non-core mortgage costs and litigation expense

<sup>1</sup> All Other consists of asset and liability management (ALM) activities, equity investments, non-core mortgage loans and servicing activities, the net impact of periodic revisions to the MSR valuation model for core and non-core MSRs and the related economic hedge results, liquidating businesses and residual expense allocations. ALM activities encompass certain residential mortgages, debt securities, interest rate and foreign currency risk management activities, the impact of certain allocation methodologies and hedge ineffectiveness. The results of certain ALM activities are allocated to our business segments. Equity investments include our merchant services joint venture, as well as a portfolio of equity, real estate and other alternative investments.

<sup>2</sup> Revenue, pretax income and income tax expense shown on an FTE basis. Tax expense compared to prior year impacted by a lower U.S. corporate tax rate.



# Third Quarter 2018 Key Takeaways

- Record earnings while driving responsible growth; pretax earnings up 18% from 3Q17
- Continued investments in the franchise
- Positive operating leverage for 15 consecutive quarters; grew revenue 4% and reduced expenses 2% from 3Q17
- Solid client activity drove growth in client balances
- Asset quality remained strong
- Increased capital returned to shareholders
- Positioned to benefit from higher interest rates and an improving economic environment



# Appendix





# Notes

- <sup>A</sup> Global Liquidity Sources (GLS) include cash and high-quality, liquid, unencumbered securities, limited to U.S. government securities, U.S. agency securities, U.S. agency MBS, and a select group of non-U.S. government and supranational securities, and are readily available to meet funding requirements as they arise. It does not include Federal Reserve Discount Window or Federal Home Loan Bank borrowing capacity. Transfers of liquidity among legal entities may be subject to certain regulatory and other restrictions.
- <sup>B</sup> The Liquidity Coverage Ratio (LCR) represents the consolidated average amount of high-quality liquid assets as a percent of the prescribed average net cash outflows over a 30 calendar-day period of significant liquidity stress, under the U.S. LCR final rule.
- <sup>C</sup> Revenue for all periods included net debit valuation adjustments (DVA) on derivatives, as well as amortization of own credit portion of purchase discount and realized DVA on structured liabilities. Net DVA gains (losses) were (\$99MM), (\$179MM) and (\$21MM) for 3Q18, 2Q18 and 3Q17, respectively, and (\$214MM), (\$310MM) and (\$137MM) for 2018 YTD, 2017 YTD and 2016 YTD, respectively. Net DVA gains (losses) included in FICC revenue were (\$80MM), (\$184MM) and (\$14MM) for 3Q18, 2Q18 and 3Q17, respectively, and (\$186MM), (\$282MM) and (\$140MM) for 2018 YTD, 2017 YTD and 2016 YTD, respectively. Net DVA gains (losses) included in Equities revenue were (\$19MM), \$5MM and (\$7MM) for 3Q18, 2Q18 and 3Q17, respectively, and (\$28MM), (\$28MM) and \$3MM for 2018 YTD, 2017 YTD and 2016 YTD, respectively.
- <sup>D</sup> VaR model uses historical simulation approach based on three years of historical data and an expected shortfall methodology equivalent to a 99% confidence level. Using a 95% confidence level, average VaR was \$17MM, \$17MM and \$19MM for 3Q18, 2Q18 and 3Q17, respectively.



# Sources

<sup>A</sup> Estimated retail consumer deposits based on June 30, 2018 FDIC deposit data.

<sup>B</sup> Euromoney, 2018.

<sup>C</sup> Dynatrace 2Q18 Online Banker Scorecard, Javelin 2018 Online Banking Scorecard, Dynatrace 3Q18 Mobile Banking Scorecard, and Javelin 2017 Mobile Banking Scorecard.

<sup>D</sup> Forrester 2018 Banking Sales Wave: U.S. Mobile Sites, 3Q18.

<sup>E</sup> Inside Mortgage Finance as of 1H18 and FY17, respectively.

<sup>F</sup> Largest percentage of 740+ Vantage 3.0 customers among key competitors as of July 2018.

<sup>G</sup> FDIC, 2Q18.

<sup>H</sup> 2018 Global Retail Banking Awards.

<sup>I</sup> U.S.-based full-service wirehouse peers based on 2Q18 earnings releases.

<sup>J</sup> Industry 2Q18 call reports.

<sup>K</sup> The Banker, 2017.

<sup>L</sup> The Banker, 2018.

<sup>M</sup> Greenwich, 2018.

<sup>N</sup> Global Finance, 2018.

<sup>O</sup> Greenwich, 2017.

<sup>P</sup> Euromoney, 2017.

<sup>Q</sup> Financial News, 2017.

<sup>R</sup> Risk Magazine, 2017.

<sup>S</sup> Institutional Investor, 2017.



# Forward-Looking Statements

Bank of America Corporation (the “Company”) and its management may make certain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as “anticipates,” “targets,” “expects,” “hopes,” “estimates,” “intends,” “plans,” “goals,” “believes,” “continue” and other similar expressions or future or conditional verbs such as “will,” “may,” “might,” “should,” “would” and “could.” Forward-looking statements represent the Company’s current expectations, plans or forecasts of its future results, revenues, expenses, efficiency ratio, capital measures, strategy, and future business and economic conditions more generally, and other future matters. These statements are not guarantees of future results or performance and involve certain known and unknown risks, uncertainties and assumptions that are difficult to predict and are often beyond the Company’s control. Actual outcomes and results may differ materially from those expressed in, or implied by, any of these forward-looking statements.

You should not place undue reliance on any forward-looking statement and should consider the following uncertainties and risks, as well as the risks and uncertainties more fully discussed under Item 1A. Risk Factors of the Company’s 2017 Annual Report on Form 10-K and in any of the Company’s subsequent Securities and Exchange Commission filings: the Company’s potential claims, damages, penalties, fines and reputational damage resulting from pending or future litigation, regulatory proceedings and enforcement actions, including inquiries into our retail sales practices, and the possibility that amounts may be in excess of the Company’s recorded liability and estimated range of possible loss for litigation exposures; the possibility that the Company could face increased servicing, securities, fraud, indemnity, contribution or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, other parties involved in securitizations, monolines or private-label and other investors; the possibility that future representations and warranties losses may occur in excess of the Company’s recorded liability and estimated range of possible loss for its representations and warranties exposures; the Company’s ability to resolve representations and warranties repurchase and related claims, including claims brought by investors or trustees seeking to avoid the statute of limitations for repurchase claims; uncertainties about the financial stability and growth rates of non-U.S. jurisdictions, the risk that those jurisdictions may face difficulties servicing their sovereign debt, and related stresses on financial markets, currencies and trade, and the Company’s exposures to such risks, including direct, indirect and operational; the impact of U.S. and global interest rates, currency exchange rates, economic conditions, trade policies, including tariffs, and potential geopolitical instability; the impact on the Company’s business, financial condition and results of operations of a potential higher interest rate environment; the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior, adverse developments with respect to U.S. or global economic conditions and other uncertainties; the Company’s ability to achieve its expense targets, net interest income expectations, or other projections; adverse changes to the Company’s credit ratings from the major credit rating agencies; estimates of the fair value of certain of the Company’s assets and liabilities; uncertainty regarding the content, timing and impact of regulatory capital and liquidity requirements; the potential impact of total loss-absorbing capacity requirements; potential adverse changes to our global systemically important bank surcharge; the potential impact of Federal Reserve actions on the Company’s capital plans; the possible impact of the Company’s failure to remediate the shortcoming identified by banking regulators in the Company’s Resolution Plan; the effect of regulations, other guidance or additional information on our estimated impact of the Tax Act; the impact of implementation and compliance with U.S. and international laws, regulations and regulatory interpretations, including, but not limited to, recovery and resolution planning requirements, Federal Deposit Insurance Corporation (FDIC) assessments, the Volcker Rule, fiduciary standards and derivatives regulations; a failure in or breach of the Company’s operational or security systems or infrastructure, or those of third parties, including as a result of cyber attacks; the impact on the Company’s business, financial condition and results of operations from the planned exit of the United Kingdom from the European Union; and other similar matters.



# Important Presentation Information

- The information contained herein is preliminary and based on Company data available at the time of the earnings presentation. It speaks only as of the particular date or dates included in the accompanying slides. Bank of America does not undertake an obligation to, and disclaims any duty to, update any of the information provided.
- The Company may present certain key performance indicators and ratios, including year-over-year comparisons of revenue, noninterest expense and pretax income, excluding certain items (e.g., DVA) which result in non-GAAP financial measures. The Company believes the use of these non-GAAP financial measures provides additional clarity in understanding its results of operations and trends. For more information about the non-GAAP financial measures contained herein, please see the presentation of the most directly comparable financial measures calculated in accordance with GAAP and accompanying reconciliations in the earnings press release for the quarter ended September 30, 2018 and other earnings-related information available through the Bank of America Investor Relations website at: <http://investor.bankofamerica.com>.
- The Company views net interest income and related ratios and analyses on a fully taxable-equivalent (FTE) basis, which when presented on a consolidated basis are non-GAAP financial measures. The Company believes managing the business with net interest income on an FTE basis provides investors with a more accurate picture of the interest margin for comparative purposes. The Company believes that the presentation allows for comparison of amounts from both taxable and tax-exempt sources and is consistent with industry practices. The FTE adjustment was \$151MM, \$154MM, \$150MM, \$251MM and \$240MM for 3Q18, 2Q18, 1Q18, 4Q17 and 3Q17 respectively.
- The Company allocates capital to its business segments using a methodology that considers the effect of regulatory capital requirements in addition to internal risk-based capital models. The Company's internal risk-based capital models use a risk-adjusted methodology incorporating each segment's credit, market, interest rate, business and operational risk components. Allocated capital is reviewed periodically and refinements are made based on multiple considerations that include, but are not limited to, risk-weighted assets measured under Basel 3 Standardized and Advanced approaches, business segment exposures and risk profile, and strategic plans. As a result of this process, in the first quarter of 2018, the Company adjusted the amount of capital being allocated to its business segments.



