

# Bank of America 3Q19 Financial Results

October 16, 2019

# 3Q19 Financial Results

Summary Income Statement (\$B, except per share data)	3Q19		3Q18	3Q19 vs. 3Q18		3Q19 ex-JV vs. 3Q18 <sup>1</sup>
	Reported	Ex-JV impairment <sup>1</sup>		% Inc / (Dec)		% Inc / (Dec)
Total revenue, net of interest expense	\$22.8	\$22.8	\$22.7	0 %		0 %
Noninterest expense	15.2	13.1	13.0	17		1
Provision for credit losses	0.8	0.8	0.7	9		9
Pretax income	6.9	8.9	9.0	(24)		(1)
Income tax expense	1.1	1.5	1.8	(41)		(20)
Net income	\$5.8	\$7.5	\$7.2	(19)		4
Diluted earnings per share	\$0.56	\$0.75	\$0.66	(15)		14
Average diluted common shares (in millions)	9,353	9,353	10,171	(8)		(8)

## Return Metrics and Efficiency Ratio

Return on average assets	0.95 %	1.23 %	1.23 %	(28) bps		0 bps
Return on average common shareholders' equity	8.5	11.2	11.0	(251)		17
Return on average tangible common shareholders' equity <sup>2</sup>	11.8	15.6	15.5	(364)		7
Efficiency ratio	67	57	57	924		(15)

- As previously announced, 3Q19 included a non-cash, pretax impairment charge of \$2.1B related to the notice of termination of the merchant services joint venture at the conclusion of its current term, which reduced results by \$0.19 per diluted common share<sup>1</sup>



Note: Amounts may not total due to rounding.

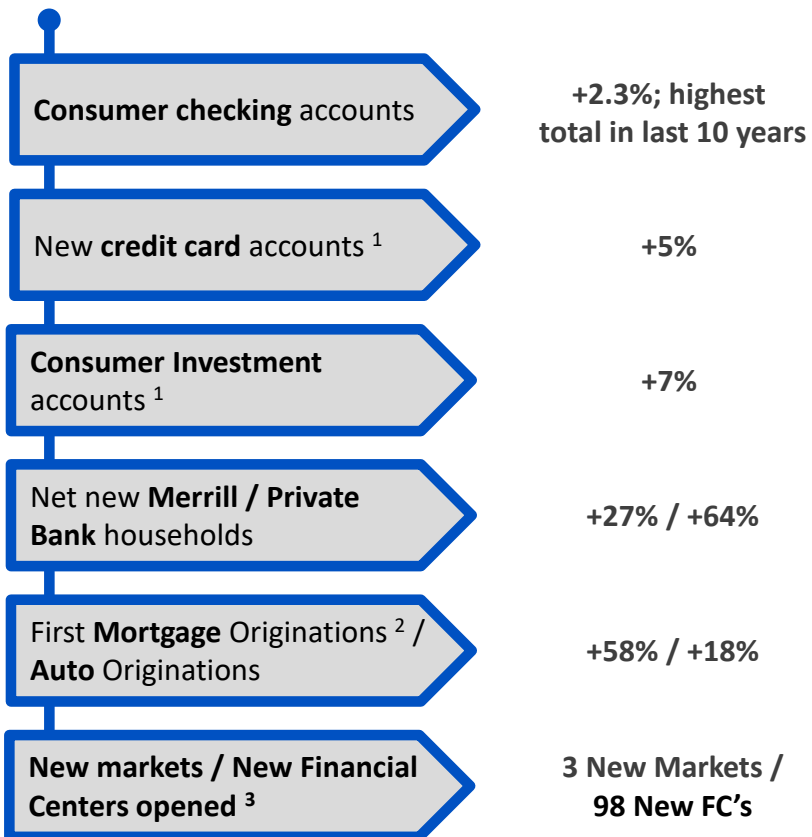
<sup>1</sup> Amounts in this column represent non-GAAP financial measures. For a reconciliation to GAAP of the presented financial metrics, see note A on slide 24. For important presentation information, see slide 27.

<sup>2</sup> Represents a non-GAAP financial measure. For important presentation information, see slide 27.

# Strong Client Activity Across our Franchise

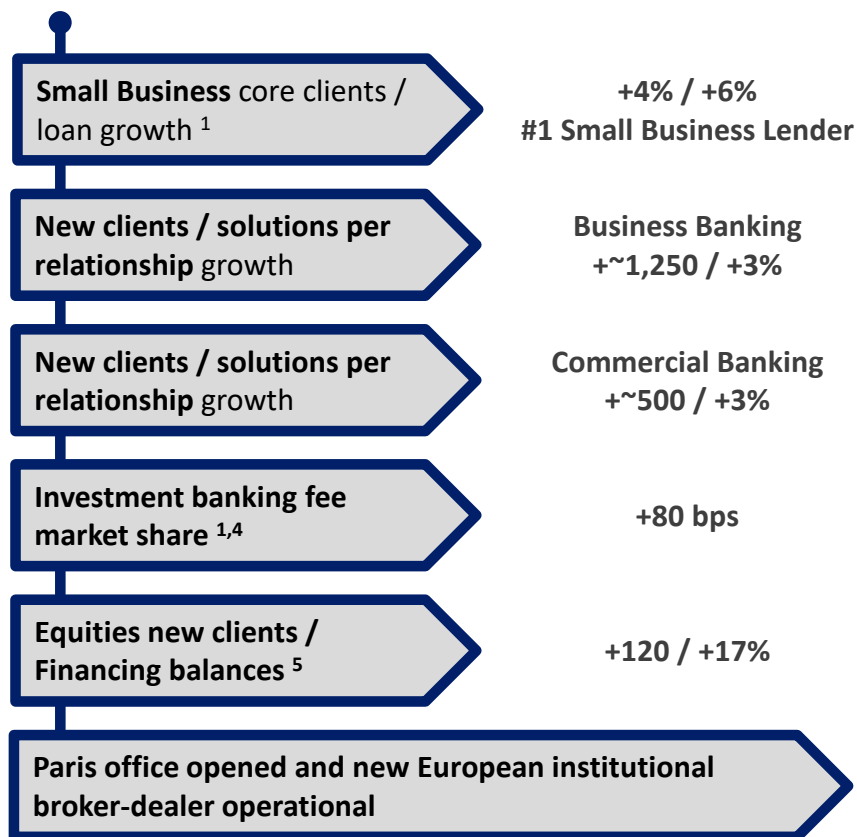
(Comparisons are YTD 2019 to YTD 2018 unless noted)

## Supporting Consumer and Wealth Clients



Driving new capabilities for 38MM digital banking users; Erica, Zelle transactions increasing

## Serving Companies and Institutional Clients



Driving new digital capabilities to make business easier for clients



<sup>1</sup> 3Q19 vs. 3Q18.

<sup>2</sup> Includes Consumer and GWIM originations.

<sup>3</sup> Last 12 months. New markets = Salt Lake City, Cincinnati and Columbus.

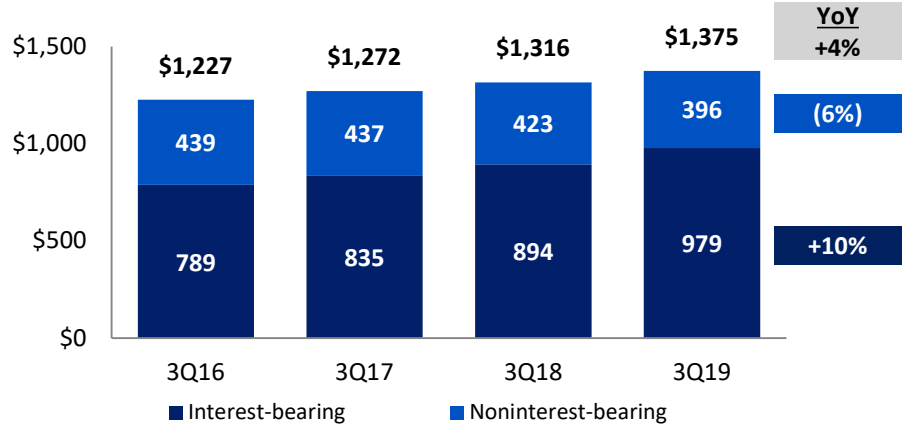
<sup>4</sup> Per Dealogic as of October 1, 2019.

<sup>5</sup> Financing balance growth shown as 3Q19 vs. 4Q18 on ending basis.

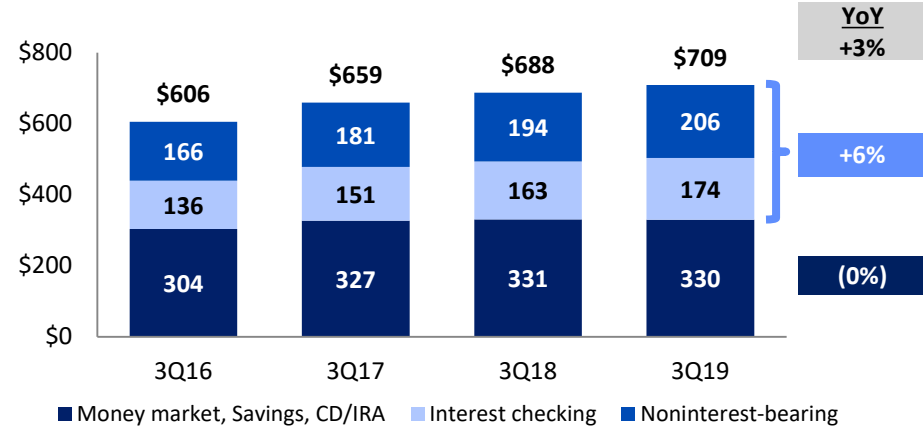
# Average Deposits

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

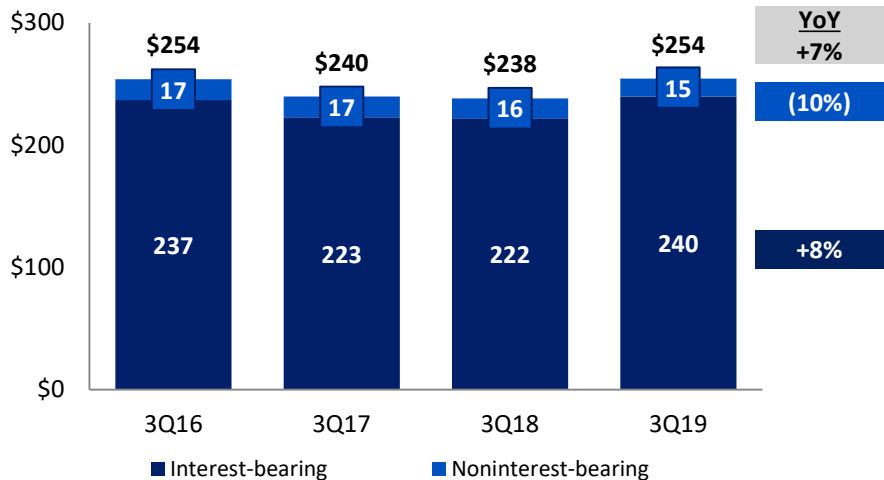
## Total Corporation (\$B)



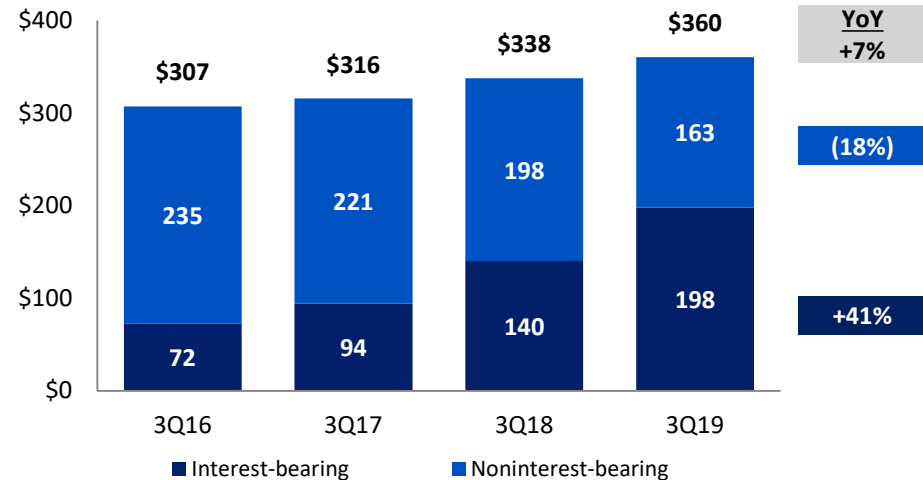
## Consumer Banking (\$B)



## GWIM (\$B)



## Global Banking (\$B)

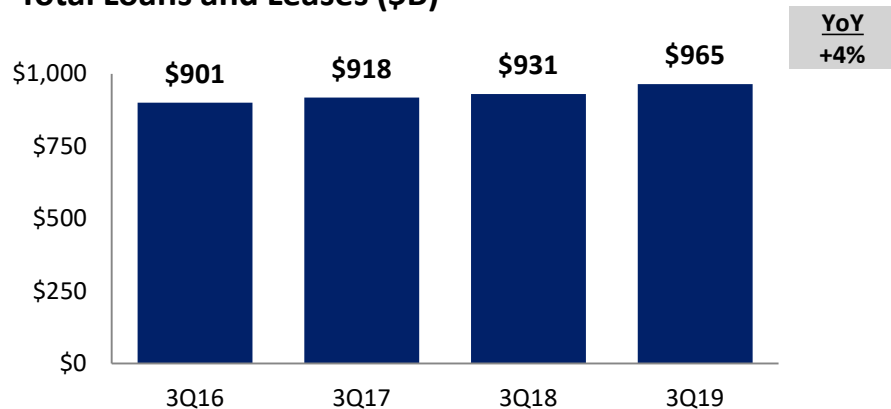


Note: Amounts may not total due to rounding. Total Corporation also includes Global Markets and All Other.

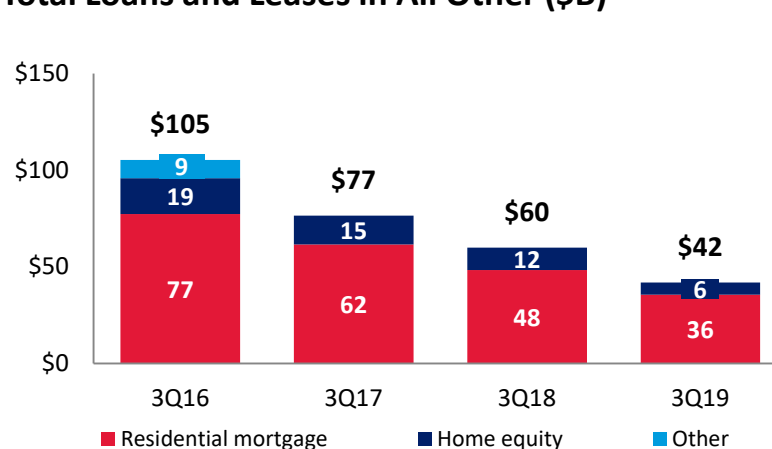
<sup>1</sup> Based on June 30, 2019 FDIC deposit data.

# Average Loans and Leases

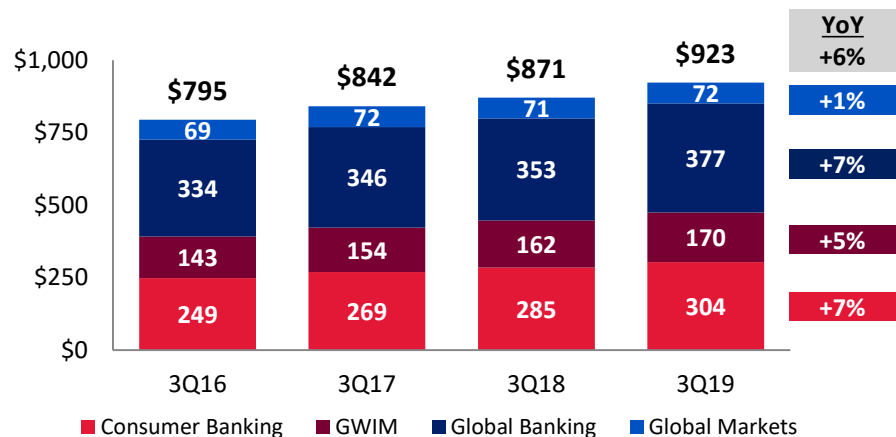
## Total Loans and Leases (\$B)



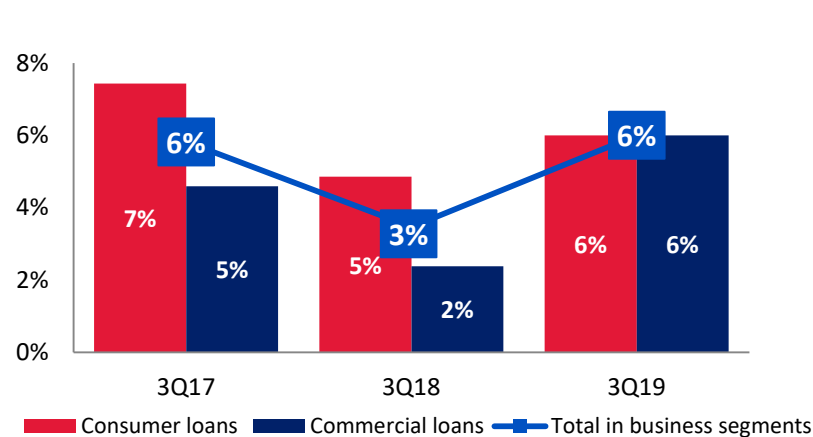
## Total Loans and Leases in All Other (\$B)



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



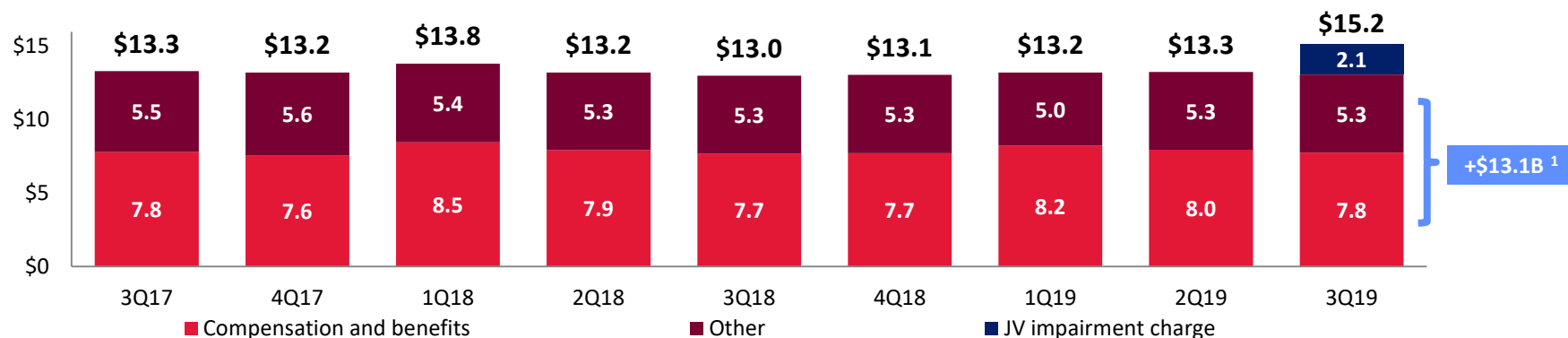
## Year-Over-Year Growth in Business Segments



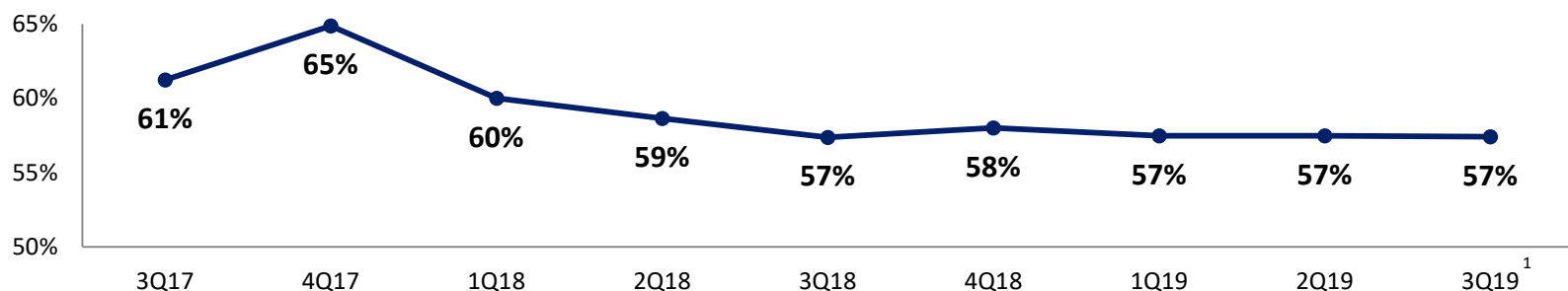
Note: Amounts may not total due to rounding.

# Expense and Efficiency

## Total Noninterest Expense (\$B)



## Efficiency Ratio



*Expense and efficiency comparisons excluding 3Q19 impairment charge of \$2.1B<sup>1</sup>*

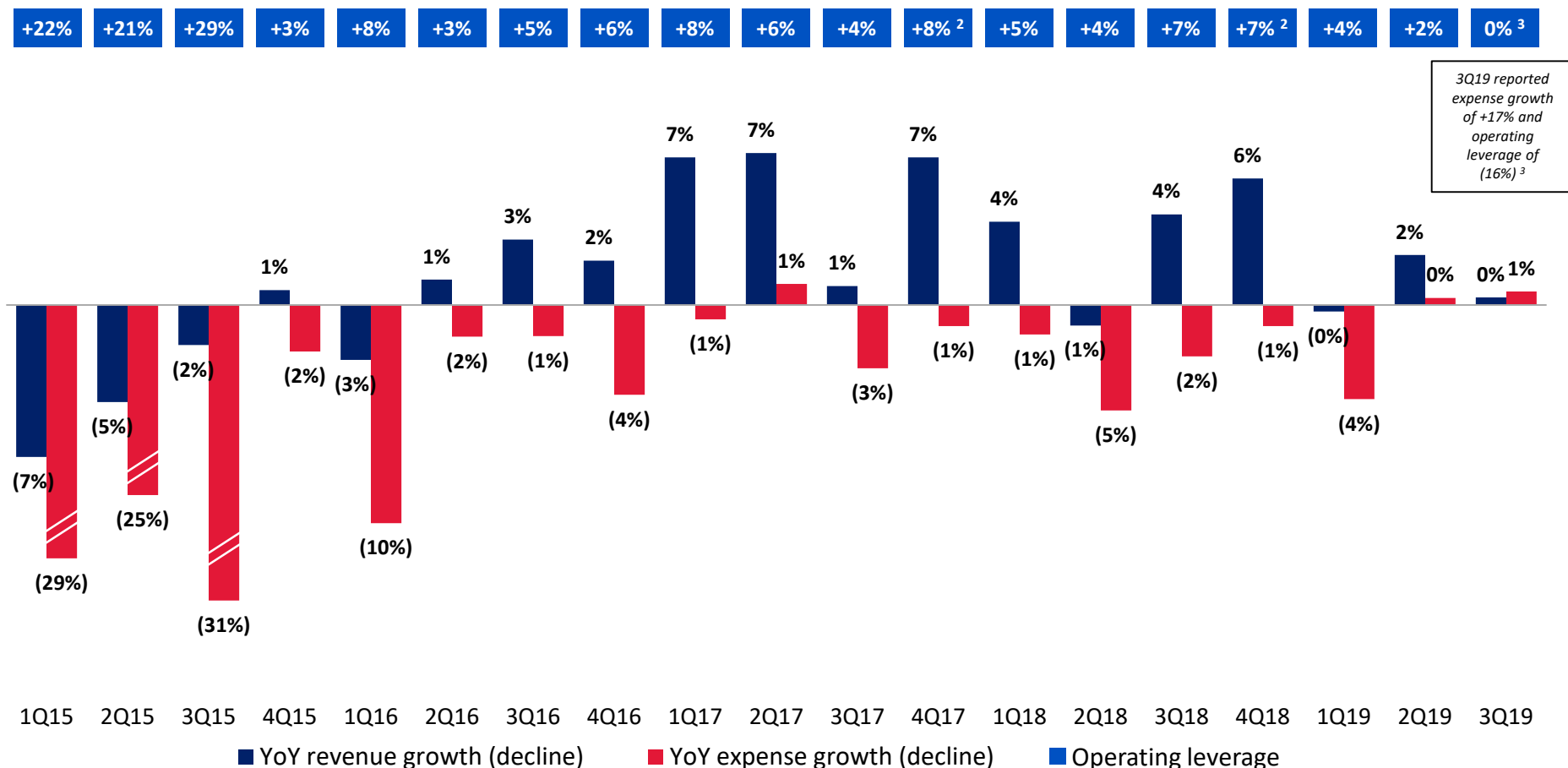
- Noninterest expense of \$13.1B increased \$0.1B from 3Q18 as investments across the franchise as well as higher legacy mortgage-related litigation expense were partially offset by efficiency savings enabled by operational excellence work, lower FDIC costs and lower amortization of intangibles
- Noninterest expense declined \$0.2B from 2Q19 as efficiency savings and lower spend due to timing of investments more than offset higher legacy mortgage-related litigation expense
- Efficiency ratio remained steady compared with 3Q18 and 2Q19 at 57%

Note: Amounts may not total due to rounding.

<sup>1</sup> Noninterest expense and efficiency ratio as adjusted for 3Q19 represent non-GAAP financial measures which exclude 3Q19 impairment charge of \$2.1B for the notice of termination of the merchant services joint venture at the conclusion of its current term. Reported 3Q19 efficiency ratio was 67%. See slide 2 for the percentages calculated using GAAP financial measures and note A on slide 24 for reconciliations.



# Operating Leverage Trend <sup>1</sup>



3Q19 reported expense growth of +17% and operating leverage of (16%)<sup>3</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.

<sup>2</sup> Operating leverage calculated after adjusting 4Q17 revenue for the impact of the Tax Cuts and Jobs Act (Tax Act) is a non-GAAP financial measure. Reported revenue growth and operating leverage were 11% and 12% for 4Q18, and 2% and 3% for 4Q17. Reported revenue was \$22.7B, \$20.4B and \$20.0B for 4Q18, 4Q17 and 4Q16, respectively. Excluding a \$0.9B noninterest income charge from enactment of the Tax Act, 4Q17 revenue was \$21.4B. For important presentation information, see slide 27.

<sup>3</sup> Operating leverage calculated after adjusting 3Q19 expenses for the \$2.1B impairment charge for the notice of termination of the merchant services joint venture at the conclusion of its current term is a non-GAAP financial measure. Reported expenses were \$15.2B for 3Q19, and excluding the \$2.1B noninterest expense charge, 3Q19 expenses were \$13.1B compared to 3Q18 expenses of \$13.0B. See slide 2 for the percentages calculated using GAAP financial measures. For important presentation information, see slide 27.



# Balance Sheet, Liquidity and Capital

(EOP basis unless noted)

<b>Balance Sheet (\$B)</b>	<b>3Q19</b>	<b>2Q19</b>	<b>3Q18</b>
Total assets	\$2,426.3	\$2,395.9	\$2,338.8
Total loans and leases	972.9	963.8	929.8
Total loans and leases in business segments <sup>1</sup>	933.2	920.5	874.8
Total debt securities	444.6	446.1	446.1
<b>Funding &amp; Liquidity (\$B)</b>			
Total deposits	\$1,392.8	\$1,375.1	\$1,345.6
Long-term debt	243.4	238.0	234.2
Global Liquidity Sources (average) <sup>2</sup>	552	552	537
<b>Equity (\$B)</b>			
Common shareholders' equity	\$244.8	\$246.7	\$239.8
Common equity ratio	10.1 %	10.3 %	10.3 %
Tangible common shareholders' equity <sup>3</sup>	\$174.9	\$176.8	\$169.9
Tangible common equity ratio <sup>3</sup>	7.4 %	7.6 %	7.5 %
<b>Per Share Data</b>			
Book value per common share	\$26.96	\$26.41	\$24.33
Tangible book value per common share <sup>3</sup>	19.26	18.92	17.23
Common shares outstanding (in billions)	9.08	9.34	9.86

<b>Basel 3 Capital (\$B)<sup>4</sup></b>	<b>3Q19</b>	<b>2Q19</b>	<b>3Q18</b>
Common equity tier 1 capital (CET1)	\$169.2	\$171.5	\$164.4
<b>Standardized approach</b>			
Risk-weighted assets	\$1,486	\$1,467	\$1,439
CET1 ratio	11.4 %	11.7 %	11.4 %
<b>Advanced approaches</b>			
Risk-weighted assets	\$1,441	\$1,431	\$1,424
CET1 ratio	11.7 %	12.0 %	11.5 %
<b>Supplementary leverage</b>			
Supplementary leverage ratio (SLR)	6.6 %	6.8 %	6.7 %

- CET1 ratio of 11.4% declined 30 bps from 2Q19
  - CET1 capital of \$169.2B, down \$2.3B
  - Standardized RWA of \$1,486B, increased \$19B
- Increased capital returned to shareholders
  - Repurchased \$7.6B of common shares and paid \$1.7B in common dividends in 3Q19
  - Common shares outstanding down 8% from 3Q18 to 9.1B
- Book value per share increased 11% from 3Q18 to \$26.96
- \$552B of average Global Liquidity Sources<sup>2</sup>

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

<sup>2</sup> See note B on slide 24 for definition of Global Liquidity Sources.

<sup>3</sup> Represents a non-GAAP financial measure. For important presentation information, see slide 27.

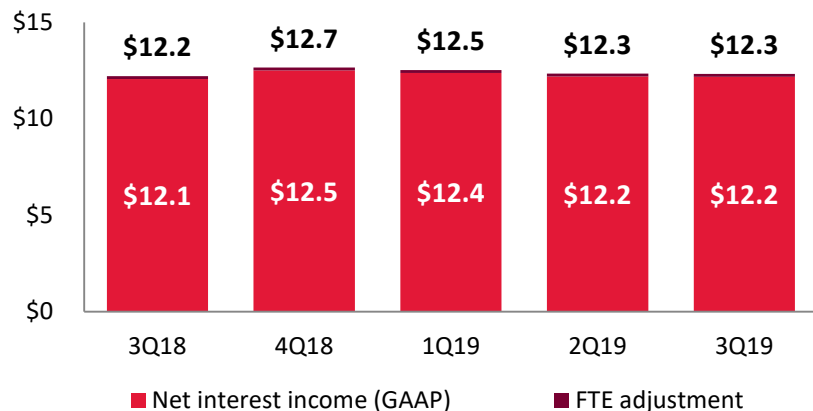
<sup>4</sup> Regulatory capital metrics at September 30, 2019 are preliminary. The Company reports regulatory capital ratios under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy, which for CET1 is the Standardized approach for 3Q19.



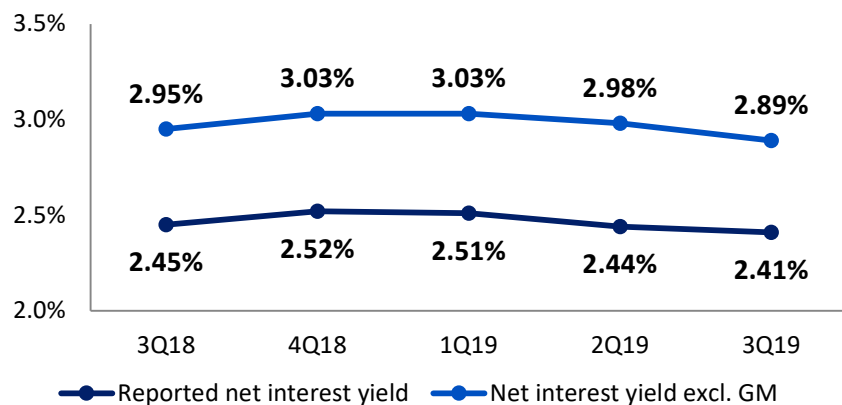


# Net Interest Income

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



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



- Net interest income of \$12.2B (\$12.3B FTE <sup>1</sup>)
  - Increased \$0.1B from 3Q18, or 1%, driven primarily by loan and deposit growth, partially offset by impact of lower long-end interest rates
  - Stable from 2Q19 as the benefits from loan and deposit growth, higher trading-related NII, and one additional accrual day were offset by impact of lower short-end and long-end rates
- Net interest yield of 2.41% decreased 4 bps from 3Q18 and decreased 3 bps from 2Q19 <sup>1</sup>
  - Excluding Global Markets, the net interest yield was 2.89%, down 6 bps from 3Q18 <sup>1</sup>
  - Average rate paid on interest-bearing deposits declined 5 bps from 2Q19 to 0.76%
- Asset sensitivity position increased, primarily driven by lower long-end rates

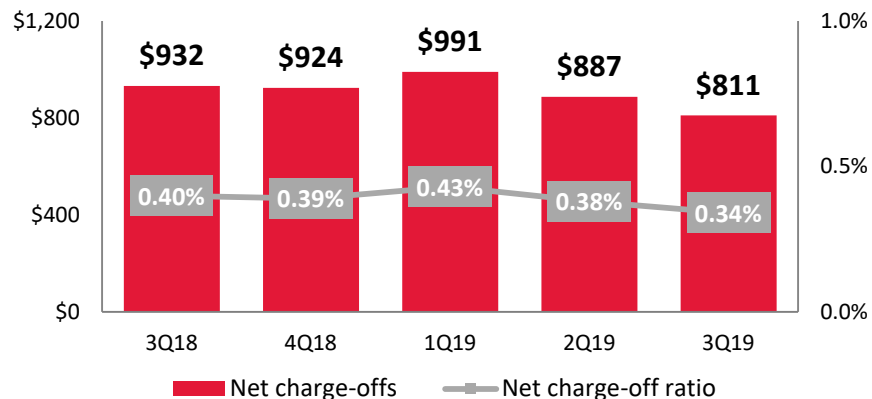


Notes: FTE stands for fully taxable-equivalent basis. GM stands for Global Markets.

<sup>1</sup> Represent non-GAAP financial measures. Net interest yield adjusted to exclude Global Markets NII of \$1,016MM, \$811MM, \$953MM, \$935MM and \$933MM, and average earning assets of \$477B, \$474B, \$472B, \$458B and \$459B for 3Q19, 2Q19, 1Q19, 4Q18 and 3Q18, 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 27.

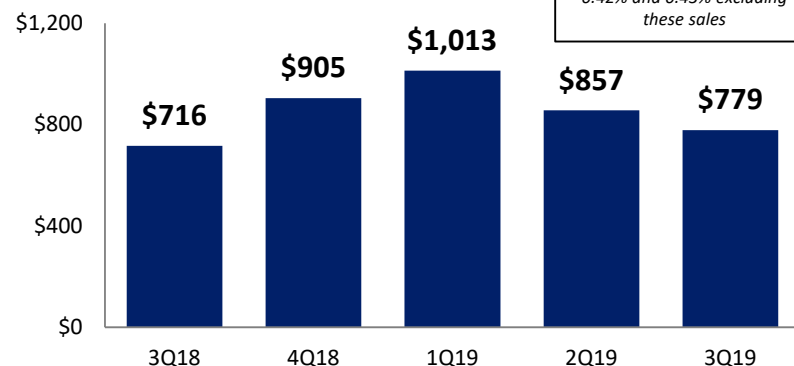
# Asset Quality

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



3Q19 and 2Q19 included recoveries from sales of previously charged-off non-core consumer real estate loans of \$198MM and \$118MM; NCO ratio of 0.42% and 0.43% excluding these sales

## Provision for Credit Losses (\$MM)



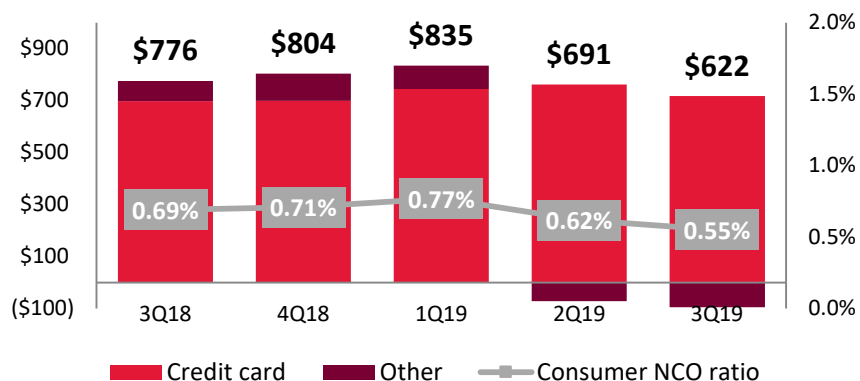
- Total net charge-offs of \$0.8B decreased \$76MM from 2Q19; excluding recoveries from sales of previously charged-off non-core consumer real estate loans of \$198MM and \$118MM in 3Q19 and 2Q19, net charge-offs were stable from 2Q19 at \$1.0B
- Net charge-off ratio of 34 bps decreased 4 bps from 2Q19
  - Loan sales positively impacted 3Q19 net charge-off ratio by 8 bps
  - Excluding the loan sales in both periods, net charge-off ratio would have decreased 1 bp to 42 bps
- Provision expense of \$0.8B decreased \$78MM from 2Q19
  - 3Q19 included a small reserve release of \$32MM, similar to 2Q19
- Allowance for loan and lease losses of \$9.4B represented 0.98% of total loans and leases <sup>1</sup>
- Nonperforming loans (NPLs) of \$3.5B decreased \$0.7B from 2Q19, driven by the loan sales
  - 41% of consumer NPLs are contractually current
- Commercial reservable criticized utilized exposure of \$11.8B was stable from 2Q19 and reservable criticized ratio remains near historic lows



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

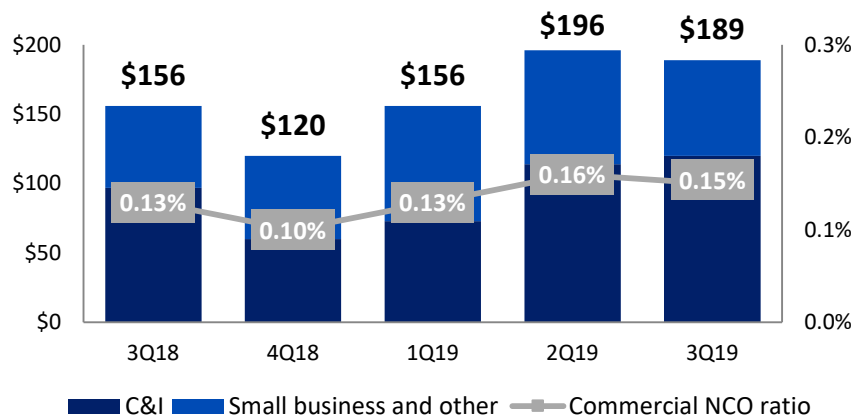
# Asset Quality – Consumer and Commercial Portfolios

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



Consumer Metrics (\$MM)	3Q19	2Q19	3Q18
Provision	\$564	\$640	\$710
Nonperforming loans and leases	2,189	3,027	4,306
% of loans and leases <sup>1</sup>	0.48 %	0.67 %	0.97 %
Consumer 30+ days performing past due	\$5,530	\$5,699	\$7,158
Fully-insured <sup>2</sup>	1,919	2,155	3,183
Non fully-insured	3,611	3,544	3,975
Allowance for loans and leases	4,576	4,689	4,980
% of loans and leases <sup>1</sup>	1.01 %	1.04 %	1.12 %
# times annualized NCOs	1.86 x	1.69 x	1.62 x

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



Commercial Metrics (\$MM)	3Q19	2Q19	3Q18
Provision	\$215	\$217	\$6
Reservable criticized utilized exposure	11,835	11,834	11,597
Nonperforming loans and leases	1,287	1,160	848
% of loans and leases <sup>1</sup>	0.25 %	0.23 %	0.18 %
Allowance for loans and leases	\$4,857	\$4,838	\$4,754
% of loans and leases <sup>1</sup>	0.95 %	0.95 %	0.99 %



<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.

# Consumer Banking

Summary Income Statement (\$MM)	3Q19	Inc / (Dec)	
		2Q19	3Q18
Total revenue, net of interest expense	\$9,724	\$7	\$282
Provision for credit losses	917	(30)	47
Noninterest expense	4,393	(15)	68
Pretax income	4,414	52	167
Income tax expense	1,081	12	(1)
<b>Net income</b>	<b>\$3,333</b>	<b>\$40</b>	<b>\$168</b>

Key Indicators (\$B)	3Q19	2Q19	3Q18
Average deposits	\$709.3	\$707.0	\$687.5
Rate paid on deposits	0.11 %	0.10 %	0.06 %
Cost of deposits <sup>1</sup>	1.50	1.52	1.53
Average loans and leases	\$303.8	\$296.4	\$285.0
Net charge-off ratio	1.18 %	1.24 %	1.19 %
Consumer investment assets <sup>2</sup>	\$223.2	\$219.7	\$203.9
Active mobile banking users (MM)	28.7	27.8	26.0
% Consumer sales through digital channels	26 %	25 %	23 %
Number of financial centers	4,302	4,349	4,385
Combined credit / debit purchase volumes <sup>3</sup>	\$162.0	\$161.5	\$152.0
Total consumer credit card risk-adjusted margin <sup>3</sup>	8.46 %	7.93 %	8.08 %
Return on average allocated capital	36	36	34
Allocated capital	\$37	\$37	\$37
Efficiency ratio	45 %	45 %	46 %

- Net income of \$3.3B increased 5% from 3Q18; ROAAC of 36%
- Revenue of \$9.7B increased \$0.3B, or 3%, from 3Q18, driven primarily by NII due to growth in deposits and loans
- Provision increased modestly from 3Q18
- Noninterest expense increased 2% from 3Q18, driven by investments for business growth, including higher compensation and benefits expense, largely offset by improved productivity and lower FDIC expense
  - Efficiency ratio improved 63 bps to 45%
  - Continued investment in financial center builds/renovations, sales professionals, digital capabilities, minimum wage and Shared Success programs
  - Digital usage increased for sales, service and appointments
- Average deposits of \$709B grew \$22B, or 3%, from 3Q18
  - 53% of deposits in checking accounts; 92% primary accounts <sup>4</sup>
  - Average cost of deposits of 1.50% <sup>1</sup>; rate paid of 11 bps
- Average loans and leases of \$304B increased \$19B, or 7%, from 3Q18, driven by growth in residential mortgages
- Consumer investment assets of \$223B grew \$19B, or 9%, from 3Q18, driven by strong client flows, partially offset by market performance
  - \$23B of client flows since 3Q18
  - Client accounts of 2.7MM, up 7%
- Combined credit / debit card spend increased 7% from 3Q18
- 5.9MM clients enrolled in Preferred Rewards; 99% retention

Note: ROAAC stands for return on average allocated capital.

<sup>1</sup> Cost of deposits calculated as annualized noninterest expense as a percentage of total average deposits within the Deposits subsegment.

<sup>2</sup> Consumer investment assets include client brokerage assets, certain deposit sweep balances and assets under management in Consumer Banking.

<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).

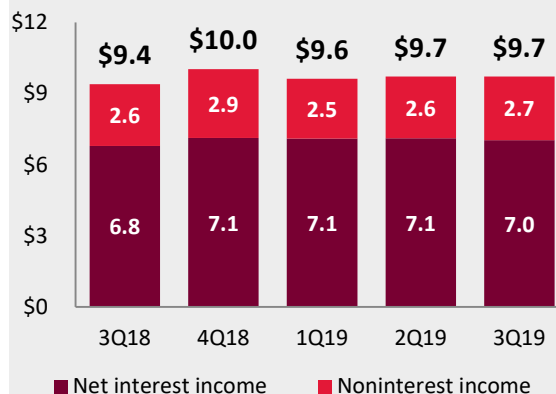


# Consumer Banking Trends

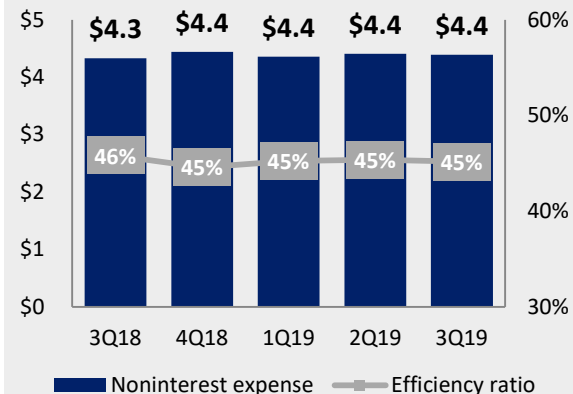
## Business Leadership <sup>1</sup>

- #1 Consumer Deposit Market Share <sup>A</sup>
- #1 Small Business Lender <sup>B</sup>
- #1 Online Banking and Mobile Banking Functionality <sup>C</sup>
- #1 U.S. Checking Account Digital Sales Functionality <sup>D</sup>
- #1 Home Equity Originator <sup>E</sup>
- #1 in Prime Auto Credit distribution of new originations among peers <sup>F</sup>
- #1 Customer Satisfaction for Retail Banking Advice <sup>G</sup>
- 4-Star Rating by Barron's 2019 Best Online Brokers
- Named North America's Best Digital Bank <sup>H</sup>
- 2019 J.D. Power Certified Mobile App
- 2019 J.D. Power Certified Website

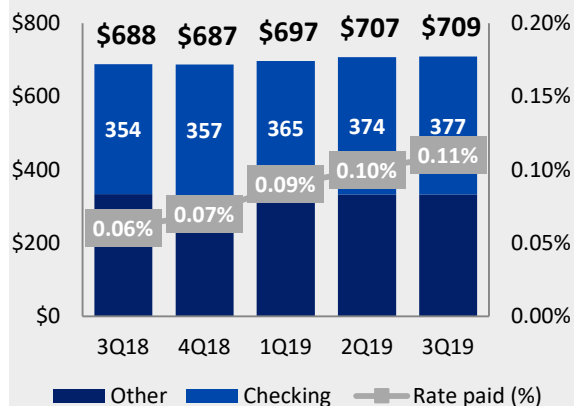
## Total Revenue (\$B)



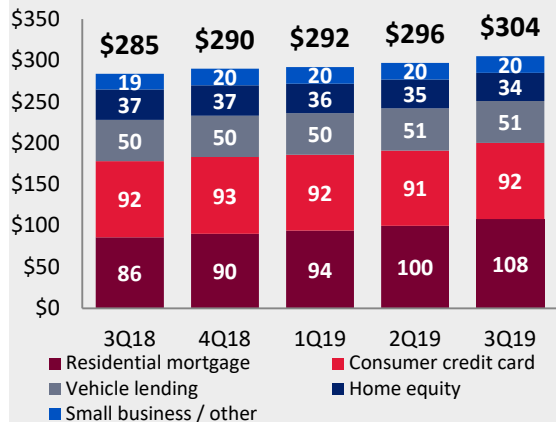
## Total Expense (\$B) and Efficiency



## Average Deposits (\$B)



## Average Loans and Leases (\$B)



## Consumer Investment Assets (EOP, \$B) <sup>2</sup>

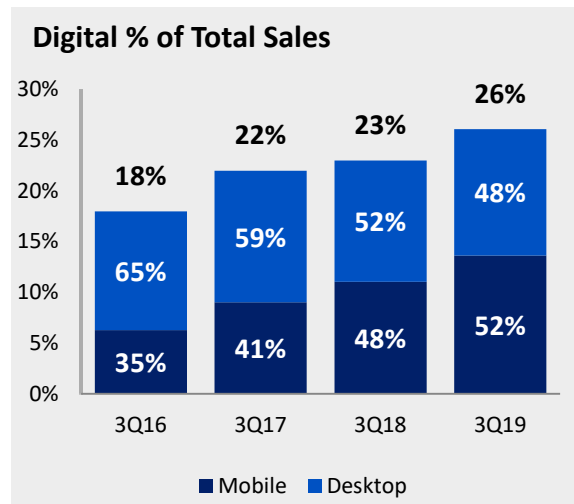
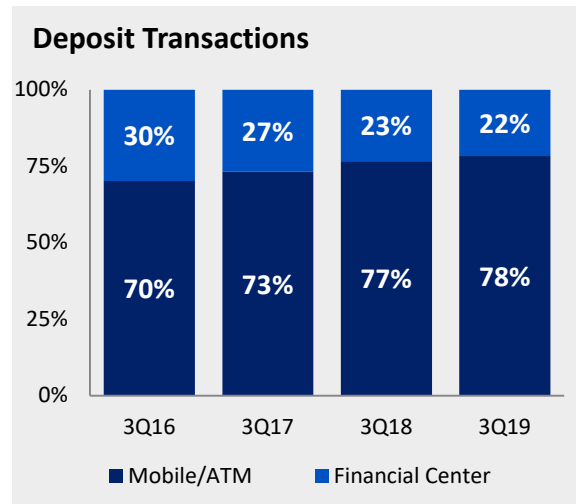
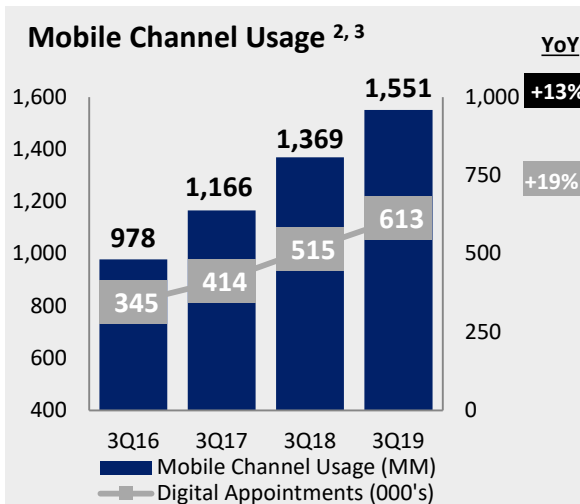
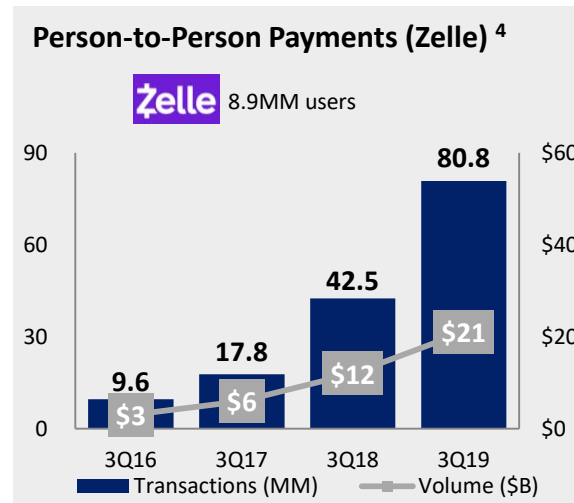
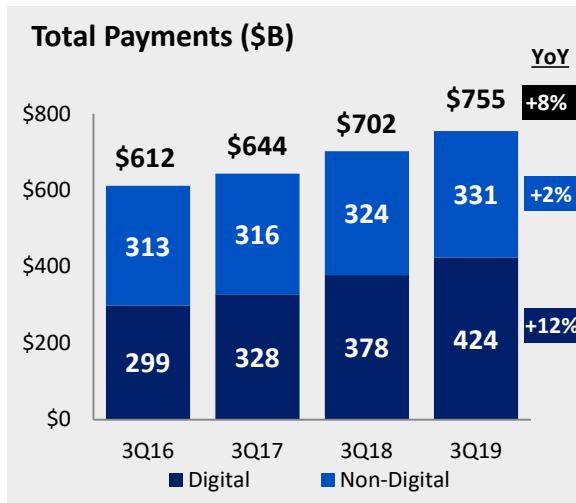
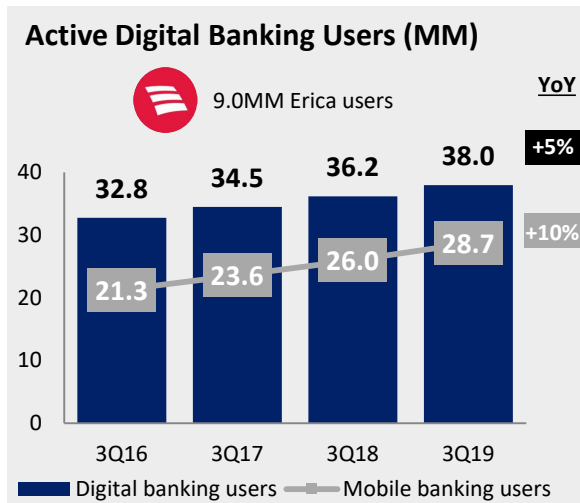


Note: Amounts may not total due to rounding.

<sup>1</sup> See slide 25 for business leadership sources.

<sup>2</sup> Consumer investment assets include client brokerage assets, certain deposit sweep balances and assets under management in Consumer Banking.

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



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

<sup>2</sup> Mobile channel usage represents the total number of mobile banking sessions.

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

<sup>4</sup> Includes Bank of America person-to-person payments sent and received through e-mail or mobile identification. Zelle users represent 90-day active users.

# Global Wealth & Investment Management

Summary Income Statement (\$MM)	3Q19	Inc / (Dec)	
		2Q19	3Q18
Total revenue, net of interest expense	\$4,904	\$4	\$87
Provision for credit losses	37	16	24
Noninterest expense	3,413	(46)	(30)
Pretax income	1,454	34	93
Income tax expense	356	8	9
Net income	\$1,098	\$26	\$84

Key Indicators (\$B)	3Q19	2Q19	3Q18
Average deposits	\$254.4	\$253.9	\$238.3
Average loans and leases	170.4	166.3	161.9
Net charge-off ratio	0.09 %	0.03 %	0.03 %
AUM flows <sup>1</sup>	\$5.5	\$5.3	\$8.2
Pretax margin	30 %	29 %	28 %
Return on average allocated capital	30	30	28
Allocated capital	\$14.5	\$14.5	\$14.5

- Net income of \$1.1B increased 8% from 3Q18; ROAAC of 30%
  - Record pretax margin of 30%
- Revenue of \$4.9B increased 2% from 3Q18, driven primarily by higher NII due to growth in deposits and loans
  - Asset management fees increased driven by the impact of positive AUM flows and higher market valuations, while transactional revenue declined
- Noninterest expense decreased 1% from 3Q18, as investments for business growth were more than offset by lower amortization of intangibles and FDIC expense
- Client balances of \$2.9T, up 2% from 3Q18, driven by positive net flows and higher market valuations
  - AUM flows of \$5.5B in 3Q19 <sup>1</sup>
  - Average deposits of \$254B increased \$16B, or 7%, from 3Q18; included \$8B impact due to money market fund conversion last year
  - Average loans and leases of \$170B increased \$9B, or 5%, from 3Q18, driven by residential mortgage and custom lending
- YTD 2019 net new Private Bank households increased 64% and Merrill Lynch increased 27% vs. YTD 2018
- Mobile channel usage among households increased 49% in Merrill Lynch and 47% in Private Bank from 3Q18



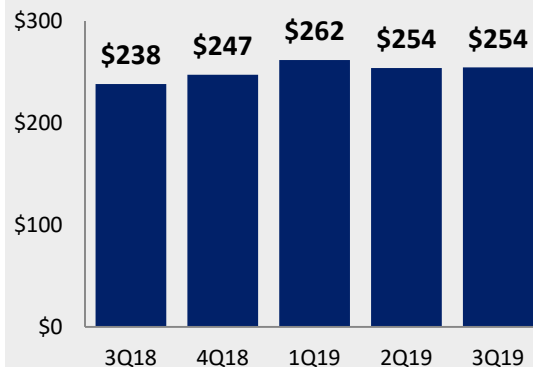
<sup>1</sup> Starting in 2Q19, AUM flows include managed deposits in investment accounts.

# Global Wealth & Investment Management Trends

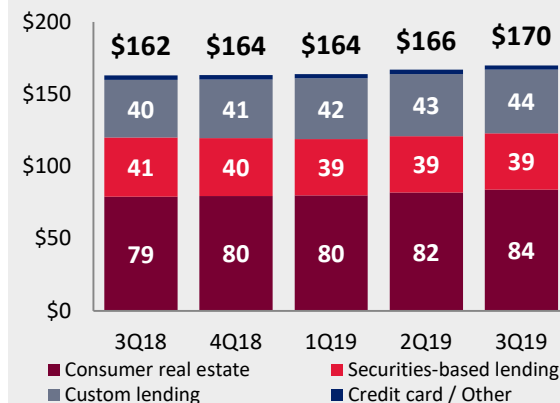
## Business Leadership <sup>1</sup>

- #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 Top 1,200 ranked Financial Advisors (2019)
- #1 in Forbes' Top Next Generation Advisors (2019) and Best-in-State Wealth Advisors (2019)
- #1 in Financial Times Top 401K Retirement Plan Advisors (2018)
- #1 in Barron's Top 100 Women Advisors (2019)
- #1 in Forbes' Top Women Advisors (2019)

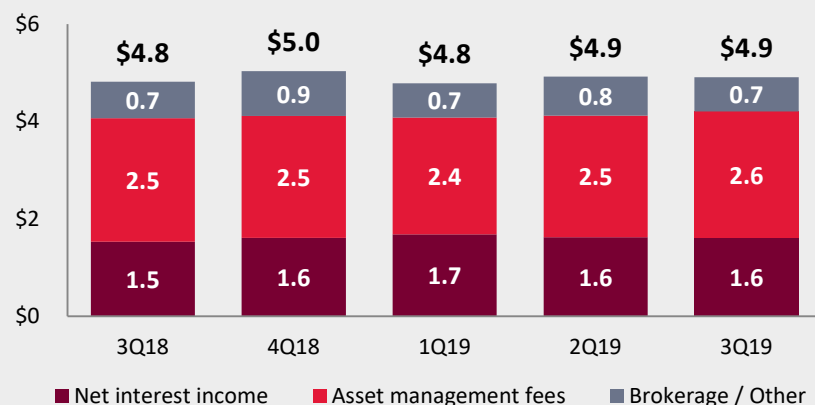
## Average Deposits (\$B)



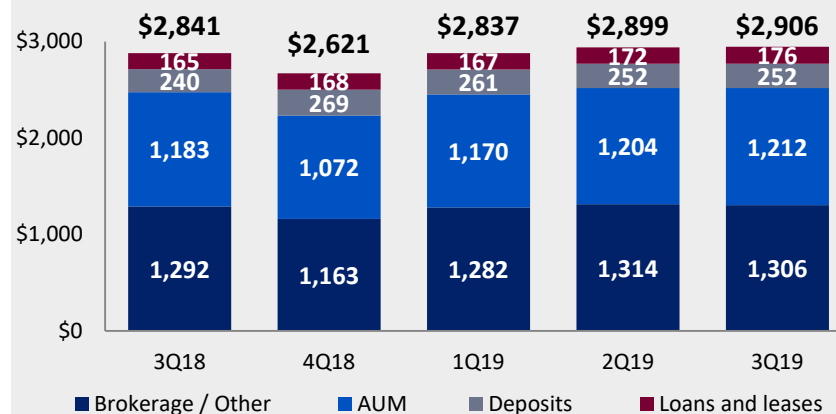
## Average Loans and Leases (\$B)



## Total Revenue (\$B)



## Client Balances (EOP, \$B) <sup>2,3</sup>



Note: Amounts may not total due to rounding.

<sup>1</sup> See slide 25 for business leadership sources.

<sup>2</sup> Loans and leases include margin receivables which are classified in customer and other receivables on the Consolidated Balance Sheet.

<sup>3</sup> Managed deposits in investment accounts of \$40B, \$44B, \$43B, \$51B and \$38B for 3Q19, 2Q19, 1Q19, 4Q18 and 3Q18, respectively, are included in both AUM and Deposits. Total client balances only include these balances once.





# Global Banking

Summary Income Statement (\$MM)	3Q19	Inc/(Dec)	
		2Q19	3Q18
Total revenue, net of interest expense <sup>1</sup>	\$5,212	\$237	\$389
Provision (benefit) for credit losses	120	(5)	190
Noninterest expense	2,220	9	78
Pretax income	2,872	233	121
Income tax expense	775	62	61
Net income	\$2,097	\$171	\$60

Selected Revenue Items (\$MM)	3Q19	2Q19	3Q18
Total Corporation IB fees (excl. self-led) <sup>1</sup>	\$1,533	\$1,371	\$1,204
Global Banking IB fees <sup>1</sup>	902	717	644
Business Lending revenue	2,135	2,059	2,111
Global Transaction Services revenue	2,096	2,161	2,031

Key Indicators (\$B)	3Q19	2Q19	3Q18
Average deposits	\$360.5	\$362.6	\$337.7
Average loans and leases	377.1	372.5	352.7
Net charge-off ratio	0.12 %	0.14 %	0.10 %
Return on average allocated capital	20	19	20
Allocated capital	\$41	\$41	\$41
Efficiency ratio	43 %	44 %	44 %

- Net income of \$2.1B increased 3% from 3Q18; ROAAC of 20%
- Revenue of \$5.2B increased 8% from 3Q18 largely driven by higher investment banking fees as well as leasing-related revenues
- Total Corporation investment banking fees of \$1.5B (excl. self-led) increased 27% from 3Q18 driven by higher M&A and debt underwriting fees
  - 6.5% investment banking fee market share, up 80 bps<sup>2</sup>
- Provision increased \$0.2B from 3Q18, driven by the absence of the prior year's reserve releases, primarily in energy
- Noninterest expense increased 4% from 3Q18, primarily due to continued investments in the business, including technology spend and client-facing associates
  - Efficiency ratio improved to 43%
- Average loans and leases of \$377B increased 7% from 3Q18, driven by broad-based growth across corporate and commercial clients
- Average deposits of \$360B increased 7% from 3Q18, driven by domestic and international growth



<sup>1</sup> Global Banking and Global Markets share in certain deal economics from investment banking, loan origination activities and sales and trading activities.

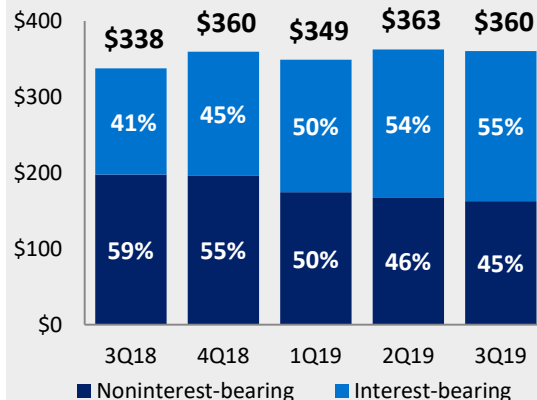
<sup>2</sup> Per Dealogic as of October 1, 2019.

# Global Banking Trends

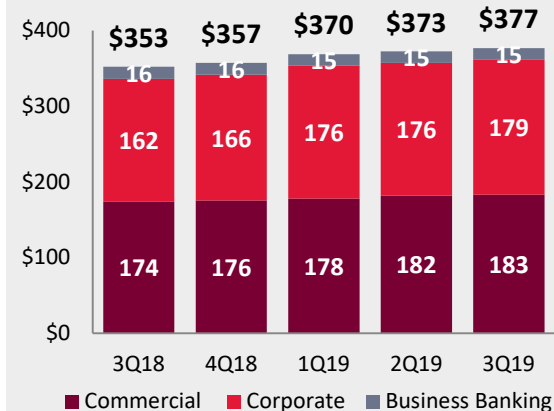
## Business Leadership <sup>1</sup>

- North America's Best Bank for Small to Medium-sized Enterprises <sup>H</sup>
- Most Innovative Investment Bank of the Year from North America <sup>K</sup>
- Best Transaction Bank in North America <sup>K</sup>
- North America's Best Bank for Financing <sup>H</sup>
- 2018 Quality, Share and Excellence Awards for U.S. Large Corporate Banking and Cash Management <sup>M</sup>
- Best Global Debt Bank <sup>N</sup>
- Relationships with 77% of the Global Fortune 500; 95% of the U.S. Fortune 1,000 (2019)

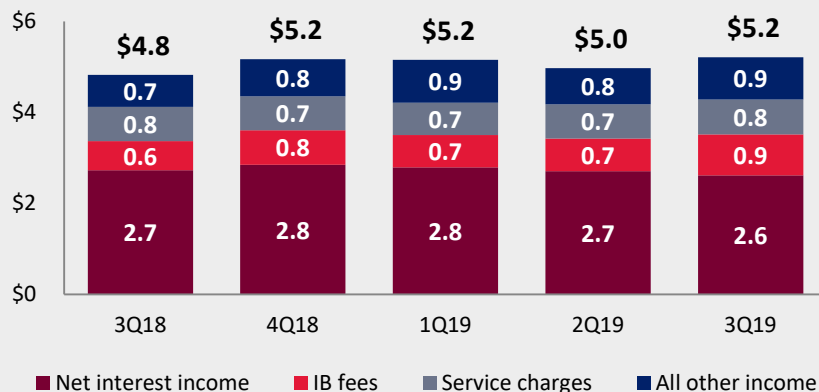
## Average Deposits (\$B)



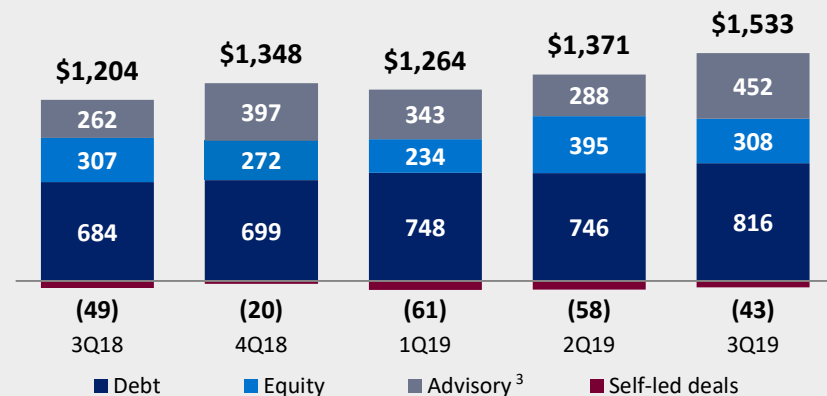
## Average Loans and Leases (\$B)



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



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



Note: Amounts may not total due to rounding.


<sup>1</sup> See slide 25 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> Advisory includes fees on debt and equity advisory and mergers and acquisitions.

# Global Banking Digital Update <sup>1</sup>

**CashPro® Online Users**  
across commercial, corporate, and business banking clients

**500K** 


**CashPro® Mobile App Logins**

**+126%** 


Rolling 12 mos. YoY

**CashPro® Mobile Payment Approvals**

**\$144B**


up 95% Rolling 12 mos. YoY 

**CashPro® Mobile Checks Deposited**

**+150%** 

Rolling 12 mos. YoY

**CashPro® Assistant**

Utilizing AI, Predictive Analytics and APIs to make it easier for clients to analyze info 

**eSignature**

Documents e-Signed via CashPro Assistant

**33K** 

YTD

## Investing in Digital Technology to Develop Integrated Solutions for Our Clients that are:

### FAST

**CashPro Mobile**

Expanding access and capabilities

**Mobile Wallet**

For Commercial Card

**Real Time Payments**

For U.S. payments

**CashPro API**

Supporting real-time access

**Digitizing KYC refreshes**

Faster and easier through CashPro Assistant

*Improving Connectivity and Access*

### SMART

**Notifications**

For added visibility

**Intelligent Receivables**

Bringing AI to Receivables with award-winning solution

**Email Assist**

Intelligently casing service requests

**CashPro Assistant**

Utilizing intelligence to make business easier

**eSignature**

Also on CashPro Mobile

*Leveraging Data and Intelligence*

### SECURE

**Automatic Fraud Monitoring**

Smart and secure

**Mobile Token**

Expanding access

**Document Exchange**

Online and Mobile

**Paperless Statements**

For commercial card

**Biometrics**

For CashPro Mobile

*Confidently doing business anytime, anywhere*



<sup>1</sup> Metrics as of September 30, 2019 unless otherwise indicated.

# Global Markets

Summary Income Statement (\$MM)	3Q19	Inc/(Dec)	
		2Q19	3Q18
Total revenue, net of interest expense <sup>1</sup>	\$3,864	(\$280)	(\$9)
<i>Net DVA</i>	(15)	16	84
<i>Total revenue (excl. net DVA) <sup>1,2</sup></i>	3,879	(296)	(93)
Provision for credit losses	0	(5)	2
Noninterest expense	2,679	4	46
Pretax income	1,185	(279)	(57)
Income tax expense	338	(79)	15
<b>Net income</b>	<b>\$847</b>	<b>(\$200)</b>	<b>(\$72)</b>
<i>Net income (excl. net DVA) <sup>2</sup></i>	\$858	(\$213)	(\$136)
<b>Selected Revenue Items (\$MM) <sup>1</sup></b>	<b>3Q19</b>	<b>2Q19</b>	<b>3Q18</b>
Sales and trading revenue	\$3,204	\$3,242	\$2,987
Sales and trading revenue (excl. net DVA) <sup>2</sup>	3,219	3,273	3,086
FICC (excl. net DVA) <sup>2</sup>	2,074	2,128	2,069
Equities (excl. net DVA) <sup>2</sup>	1,145	1,145	1,017
Global Markets IB fees	585	585	522
<b>Key Indicators (\$B)</b>	<b>3Q19</b>	<b>2Q19</b>	<b>3Q18</b>
Average total assets	\$687.4	\$685.4	\$652.5
Average trading-related assets	498.8	496.2	460.3
Average 99% VaR (\$MM) <sup>3</sup>	34	34	31
Average loans and leases	71.6	70.6	71.2
Return on average allocated capital	10 %	12 %	10 %
Allocated capital	\$35	\$35	\$35
Efficiency ratio	69 %	65 %	68 %

- Net income of \$0.8B decreased 8% from 3Q18; ROAAC of 10%
  - Excluding net DVA, net income of \$0.9B decreased 14% <sup>2</sup>
- Revenue stable from 3Q18; excluding net DVA, revenue decreased 2% <sup>2</sup>
  - Reflects higher sales and trading revenue and investment banking fees, more than offset by a gain on sale of an equity investment in 3Q18 (excluded from sales and trading revenue)
- Excluding net DVA, sales and trading revenue of \$3.2B increased 4% from 3Q18 <sup>2</sup>
  - FICC revenue of \$2.1B stable driven by an improvement in mortgages and municipal products, partially offset by weaker trading in FX and credit products
  - Equities revenue of \$1.1B increased 13% driven by growth in client financing activities
- Noninterest expense increased 2% vs. 3Q18, driven primarily by higher revenue-related expenses and continued investment in technology
- Average VaR remained low at \$34MM in 3Q19 <sup>3</sup>



<sup>1</sup> Global Banking and Global Markets share in certain deal economics from investment banking, loan origination activities and sales and trading activities.

<sup>2</sup> Represents a non-GAAP financial measure; see note C on slide 24 and slide 27 for important presentation information.

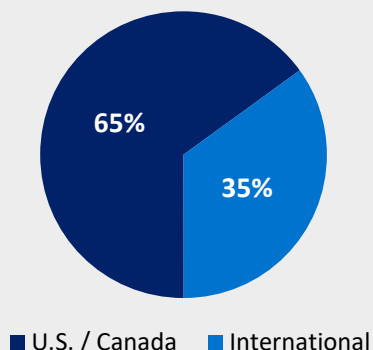
<sup>3</sup> See note D on slide 24 for the definition of VaR.

# Global Markets Trends and Revenue Mix

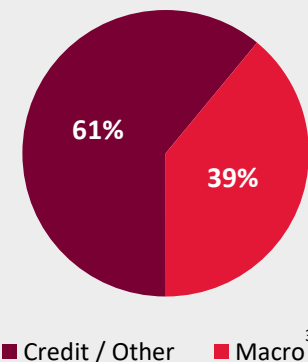
## Business Leadership <sup>1</sup>

- Derivatives House of the Year <sup>L</sup>
- #1 Equity Portfolio Trading Share – North American Institutions <sup>M</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>
- 2018 Share Leader in U.S. Fixed Income Market Share - #1 Securitized, #2 Emerging Markets <sup>M</sup>
- #1 Municipal Bonds Underwriter <sup>O</sup>
- #2 Global Research Firm <sup>P</sup>
- #1 Global Fixed Income Research Team <sup>Q</sup>

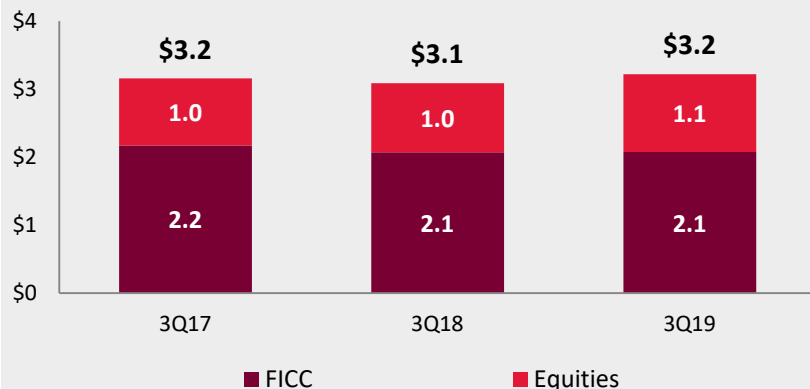
## YTD Global Markets Revenue Mix (excl. net DVA) <sup>2</sup>



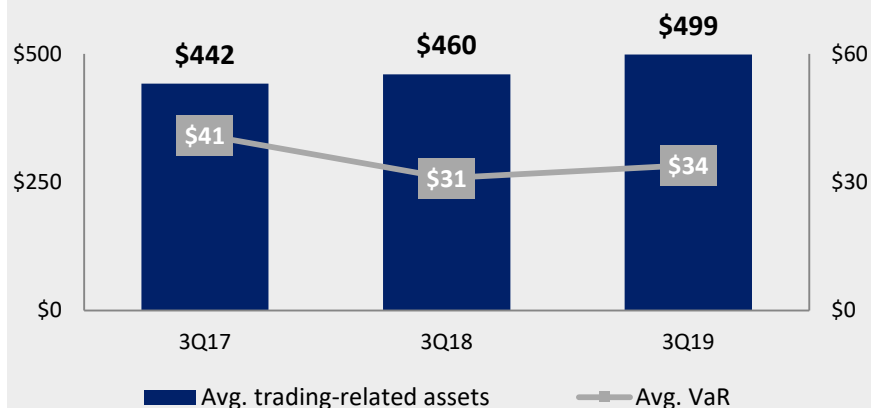
## YTD Total FICC S&T Revenue Mix (excl. net DVA) <sup>2</sup>



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



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



Note: Amounts may not total due to rounding.

<sup>1</sup> See slide 25 for business leadership sources.

<sup>2</sup> Represents a non-GAAP financial measure. Reported sales & trading revenue was \$3.2B, \$3.0B and \$3.1B for 3Q19, 3Q18 and 3Q17, respectively. Reported FICC sales & trading revenue was \$2.1B, \$2.0B and \$2.2B for 3Q19, 3Q18 and 3Q17, respectively. Reported Equities sales & trading revenue was \$1.1B, \$1.0B and \$1.0B for 3Q19, 3Q18 and 3Q17, respectively. See note C on slide 24 and slide 27 for important presentation information.

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

<sup>4</sup> See note D on slide 24 for definition of VaR.



# All Other <sup>1</sup>

Summary Income Statement (\$MM)	3Q19	Inc/(Dec)	
		2Q19	3Q18
Total revenue, net of interest expense	(\$749)	(\$246)	(\$669)
Provision (benefit) for credit losses	(295)	(54)	(200)
Noninterest expense	2,464	1,949	1,993
Pretax income (loss)	(2,918)	(2,141)	(2,462)
Income tax expense (benefit)	(1,320)	(533)	(832)
Net income (loss)	(\$1,598)	(\$1,608)	(\$1,630)

- Net loss of \$1.6B compared to net income of \$32MM in 3Q18; excluding the impact of the joint venture impairment charge (described below), net income of \$0.1B <sup>2</sup>
- 3Q19 included the following items:
  - Noninterest expense impacted by an impairment charge of \$2.1B related to the notice of termination of the merchant services joint venture at the conclusion of its current term
  - Total Corporation litigation expense of \$352MM in 3Q19 compared to \$90MM in 3Q18
  - Provision benefit included \$0.2B of recoveries from 3Q19 sales of previously charged-off non-core consumer real estate loans
  - Total Corporation effective tax rate of 16%; included benefit from the resolution of several discrete tax matters



<sup>1</sup> All Other consists of asset and liability management (ALM) activities, equity investments, non-core mortgage loans and servicing activities, liquidating businesses and certain expenses not otherwise allocated to a business segment. ALM activities encompass certain residential mortgages, debt securities, and interest rate and foreign currency risk management activities. Substantially all of the results of 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> Represents a non-GAAP financial measure. For a reconciliation to GAAP of the presented financial metrics, see note A on slide 24. For important presentation information, see slide 27.

# Appendix



# Notes

- <sup>A</sup> The non-cash impairment charge related to the notice of termination of the merchant services joint venture at the conclusion of its current term reduced 3Q19 net income by \$1.7B, or \$0.19 per diluted share, which included an increase in noninterest expense and a reduction in pretax income of \$2.1B and a reduction in income tax expense of \$373MM. The impairment charge negatively impacted 3Q19 return on average assets by 28 bps, return on average common shareholders' equity by 268 bps, return on average tangible common shareholders' equity by 371 bps, and efficiency ratio by 909 bps. Reported metrics are shown on slide 2.
- <sup>B</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>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 (losses) were (\$15MM), (\$31MM), (\$99MM) and (\$22MM) for 3Q19, 2Q19, 3Q18 and 3Q17, respectively. Net DVA (losses) included in FICC revenue were (\$18MM), (\$30MM), (\$80MM) and (\$14MM) for 3Q19, 2Q19, 3Q18 and 3Q17, respectively. Net DVA gains (losses) included in Equities revenue were \$3MM, (\$1MM), (\$19MM) and (\$8MM) for 3Q19, 2Q19, 3Q18 and 3Q17, 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 \$19MM, \$19MM, \$17MM and \$19MM for 3Q19, 2Q19, 3Q18 and 3Q17, respectively.





# Sources

- <sup>A</sup> Estimated retail consumer deposits based on June 30, 2019 FDIC deposit data.
- <sup>B</sup> FDIC, 2Q19.
- <sup>C</sup> Dynatrace 2Q19 Online Banker Scorecard and 3Q19 Mobile Banker Scorecard; Javelin 2019 Online and Mobile Banking Scorecards.
- <sup>D</sup> Forrester 2018 Banking Sales Wave: U.S. Mobile Sites.
- <sup>E</sup> Inside Mortgage Finance, 2Q19.
- <sup>F</sup> Experian Autocount; Franchised Dealers; Largest percentage of 680+ Vantage 3.0 originations among key competitors as of July 2019.
- <sup>G</sup> J.D. Power, February 2019.
- <sup>H</sup> Euromoney, July 2019.
- <sup>I</sup> U.S.-based full-service wirehouse peers based on 2Q19 earnings releases.
- <sup>J</sup> Industry 2Q19 FDIC call reports.
- <sup>K</sup> The Banker, 2018.
- <sup>L</sup> Global Capital, 2019.
- <sup>M</sup> Greenwich, 2018.
- <sup>N</sup> Global Finance, 2018.
- <sup>O</sup> Refinitiv, 2018.
- <sup>P</sup> Institutional Investor, 2018.
- <sup>Q</sup> Institutional Investor, 2019.



# 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 2018 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; the possibility that the Company’s future liabilities may be in excess of its recorded liability and estimated range of possible loss for litigation, regulatory, and representations and warranties exposures; the possibility that the Company could face increased servicing, fraud, indemnity, contribution, or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, monolines, private-label and other investors, or other parties involved in securitizations; 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; the risks related to the discontinuation of the London InterBank Offered Rate and other reference rates, including increased expenses and litigation and the effectiveness of hedging strategies; 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, inflation, currency exchange rates, economic conditions, trade policies, including tariffs, and potential geopolitical instability; the impact of the interest rate environment on the Company’s business, financial condition and results of operations; 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 and expectations regarding net interest income, net charge-offs, effective tax rate, loan growth or other projections; adverse changes to the Company’s credit ratings from the major credit rating agencies; an inability to access capital markets or maintain deposits or borrowing costs; estimates of the fair value and other accounting values, subject to impairment assessments, of certain of the Company’s assets and liabilities; the estimated or actual impact of changes in accounting standards or assumptions in applying those standards, including the new credit loss accounting standard; uncertainty regarding the content, timing and impact of regulatory capital and liquidity requirements; the impact of adverse changes to total loss-absorbing capacity requirements and/or global systemically important bank surcharges; the potential impact of actions of the Board of Governors of the Federal Reserve System on the Company’s capital plans; the effect of regulations, other guidance or additional information on the impact from the Tax Cuts and Jobs 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 assessments, the Volcker Rule, fiduciary standards and derivatives regulations; a failure or disruption 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; the impact of a federal government shutdown and uncertainty regarding the federal government’s debt limit; and other matters.

Forward-looking statements speak only as of the date they are made, and the Company undertakes no obligation to update any forward-looking statement to reflect the impact of circumstances or events that arise after the date the forward-looking statement was made.



# 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, 2019 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 \$148MM, \$149MM, \$153MM, \$155MM and \$151MM for 3Q19, 2Q19, 1Q19, 4Q18 and 3Q18, 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.



**BANK OF AMERICA**

