Different by Design.

UMB Financial

Third Quarter 2019

October 29, 2019

Cautionary Notice about Forward-Looking Statements

This presentation of UMB Financial Corporation (the “Company,” “our,” “us,” or “we”) contains, and our other communications may contain, 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 “believe,” “expect,” “anticipate,” “intend,” “estimate,” “project,” “outlook,” “forecast,” “target,” “trend,” “plan,” “goal,” or other words of comparable meaning or future-tense or conditional verbs such as “may,” “will,” “should,” “would,” or “could.”

Forward-looking statements convey our expectations, intentions, or forecasts about future events, circumstances, results, or aspirations. All forward-looking statements are subject to assumptions, risks, and uncertainties, which may change over time and many of which are beyond our control. You should not rely on any forward-looking statement as a prediction or guarantee about the future. Our actual future objectives, strategies, plans, prospects, performance, condition, or results may differ materially from those set forth in any forward-looking statement. Some of the factors that may cause actual results or other future events, circumstances, or aspirations to differ from those in forward-looking statements are described in our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, or other applicable documents that are filed or furnished with the U.S. Securities and Exchange Commission (SEC).

Any forward-looking statement made by us or on our behalf speaks only as of the date that it was made. We do not undertake to update any forward-looking statement to reflect the impact of events, circumstances, or results that arise after the date that the statement was made, except to the extent required by applicable securities laws. You, however, should consult disclosures (including disclosures of a forward-looking nature) that we may make in any subsequent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K, or other applicable document that is filed or furnished with the SEC.

Earnings Summary – 3Q 2019

$ in thousands, except share and per share data; unaudited

	3Q'19	2Q'19	3Q'18	% variance vs. 2Q'19	% variance vs. 3Q'18
Net interest income	$ 168,260	$ 166,414	$ 150,490	1.1	11.8
Noninterest income	103,635	105,398	100,885	(1.7)	2.7
Total revenue	271,895	271,812	251,375	0.0	8.2
Noninterest expense	191,397	193,387	180,385	(1.0)	6.1
Pre-Provision net revenue	80,498	78,425	70,990	2.6	13.4
Provision for loan losses	7,500	11,000	5,750	(31.8)	30.4
Income before taxes	72,998	67,425	65,240	8.3	11.9
Income tax expense	10,616	10,466	7,391	1.4	43.6
Income from continuing operations	**$ 62,382**	**$ 56,959**	**$ 57,849**	**9.5**	**7.8**
Earnings per share from continuing operations as reported - diluted	$ 1.27	$ 1.16	$ 1.16		
Adjustments[1]	-	0.01	-		
Tax impact of adjustments[1]	-	-	-		
Operating earnings per share - diluted[1]	$ 1.27	$ 1.17	$ 1.16		
Dividends per share	0.30	0.30	0.29		
WASO (diluted)	49,096,196	49,039,692	49,912,084		

(1) Non-GAAP adjustments include acquisition and divestiture income and expense, severance expense and the cumulative tax impact of these adjustments. See the non-GAAP reconciliations and additional information on these items on slides 37 and 38.

Select Balance Sheet Items

$ in thousands, average balances; unaudited

	Three Months Ended							
	September 30, 2019		**June 30, 2019**		**September 30, 2018**		**% variance**	
Assets	*Avg. Balance*	*Avg Yield / Rate %*	*Avg. Balance*	*Avg Yield / Rate %*	*Avg. Balance*	*Avg Yield / Rate %*	***vs. 2Q'19***	***vs. 3Q'18***
Loans, net of unearned interest	$ 12,890,878	4.99	$ 12,620,981	5.14	$ 11,718,552	4.87	2.1	10.0
Total securities	8,522,297	2.64	8,289,430	2.68	7,237,014	2.40	2.8	17.8
Total earning assets	22,389,878	3.99	21,689,507	4.11	19,379,671	3.89	3.2	15.5
Allowance for loan losses	(104,795)		(109,463)		(99,289)		(4.3)	5.5
Total assets	**$ 23,937,116**		**$ 23,270,467**		**$ 20,749,665**		**2.9**	**15.4**
Liabilities and Shareholders' Equity								
Interest-bearing deposits	$ 13,226,432	1.23	$ 12,707,353	1.25	$ 10,984,419	0.93	4.1	20.4
Total interest-bearing liabilities	14,997,604	1.34	14,517,843	1.39	12,797,067	1.07	3.3	17.2
Noninterest-bearing demand deposits	6,082,498		6,078,520		5,547,880		0.1	9.6
Shareholders' equity	2,553,278		2,414,294		2,224,943		5.8	14.8
Total liabilities and shareholders' equity	**$ 23,937,116**		**$ 23,270,467**		**$ 20,749,665**		**2.9**	**15.4**
Net interest spread		2.65		2.72		2.82		
Net interest margin		3.09		3.19		3.18		

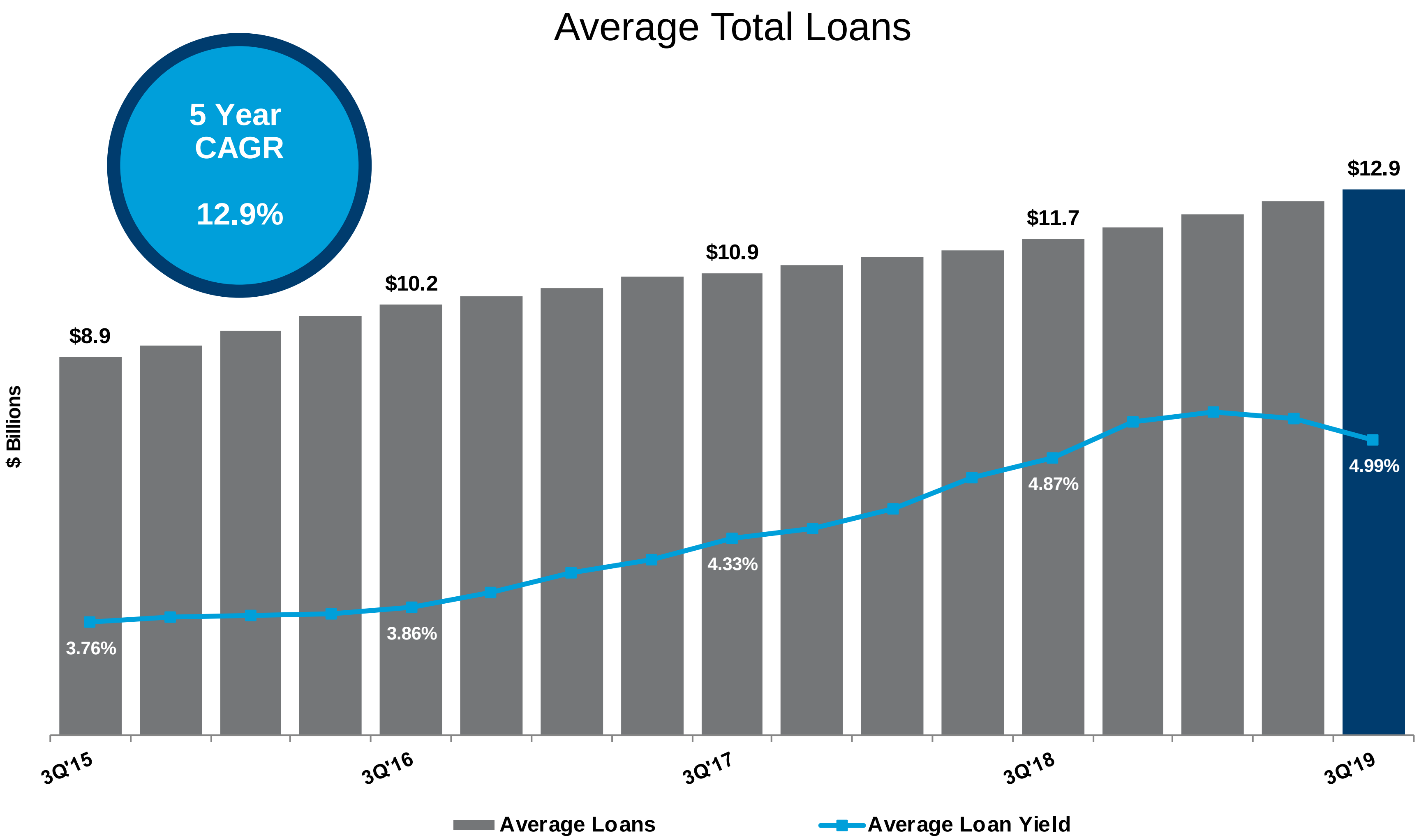
Key Performance Metrics

	3Q'19	2Q'19	1Q'19	4Q'18	3Q'18
ROE	9.69%	9.46%	10.48%	4.57%	10.32%
Operating ROE [(1)]	9.72%	9.51%	10.56%	4.95%	10.35%
ROA	1.03%	0.98%	1.02%	0.46%	1.11%
Operating ROA [(1)]	1.04%	0.99%	1.03%	0.50%	1.11%
Efficiency Ratio	70.70%	70.32%	70.00%	71.26%	71.27%
Operating Efficiency Ratio [(1)]	70.63%	70.19%	69.78%	70.19%	71.18%
Net Interest Margin	3.09%	3.19%	3.20%	3.24%	3.18%
Noninterest Income % of Revenue	38.1%	38.8%	39.6%	37.0%	40.1%
Avg. Loan/Deposit Ratio	66.8%	67.2%	65.7%	65.9%	70.9%
Assets Under Mgmt. (billions)	$ 14.8	$ 14.8	$ 13.6	$ 12.9	$ 13.5
Common Equity Tier 1 Capital Ratio	12.53%	12.64%	12.70%	12.89%	13.47%
Diluted EPS	$ 1.27	$ 1.16	$ 1.18	$ 0.52	$ 1.16
Operating EPS-Diluted [(1)]	$ 1.27	$ 1.17	$ 1.19	$ 0.56	$ 1.16

(1) This represents a non-GAAP measure. See slides 37 and 38 for additional disclosures and reconciliations related to these non-GAAP financial measures.

Balance Sheet

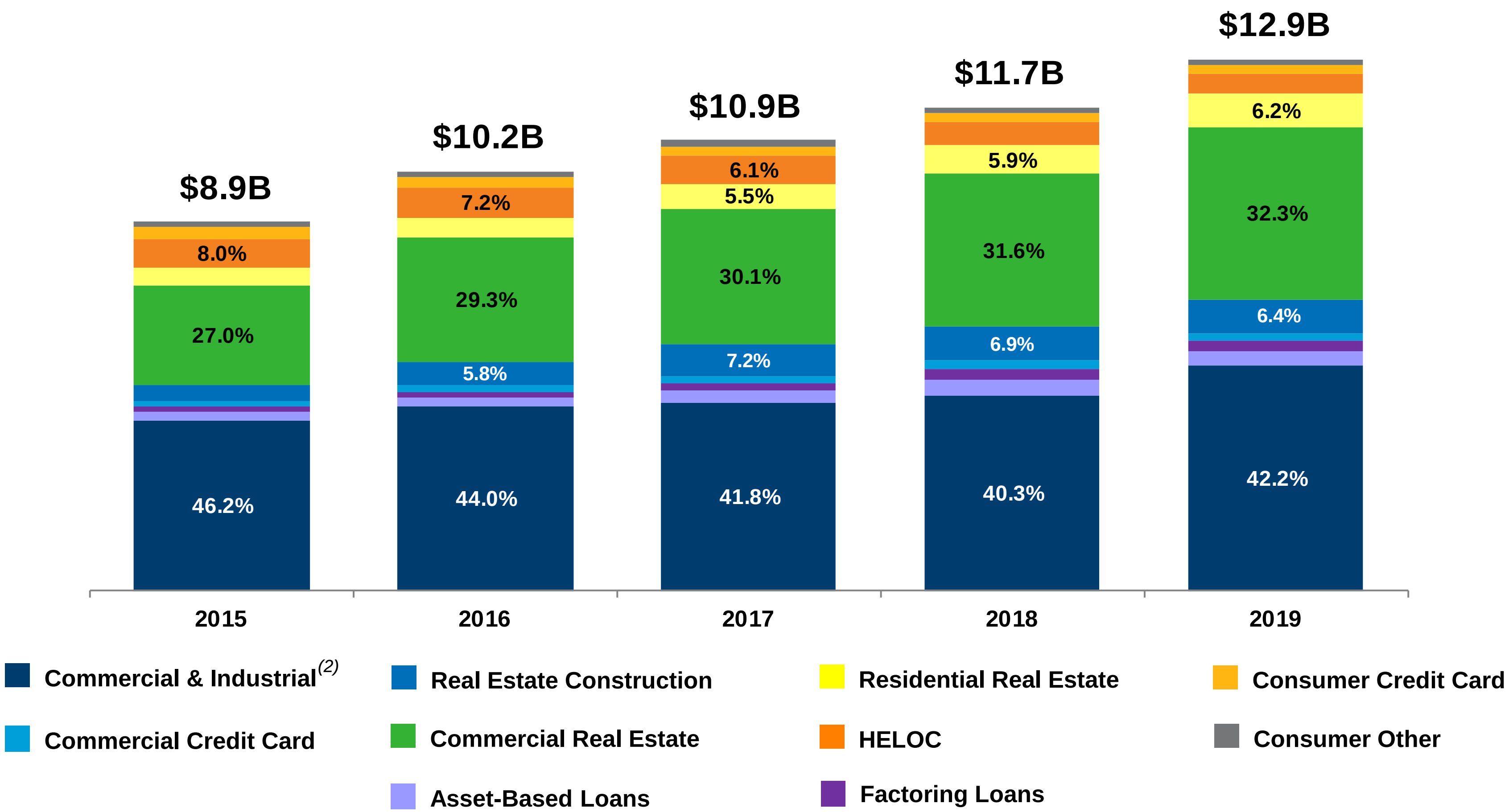
Consistent Loan Growth



Loan Composition

Diverse Loan Book[1]

(Average loan balances for the three months ended September 30 of the indicated year)

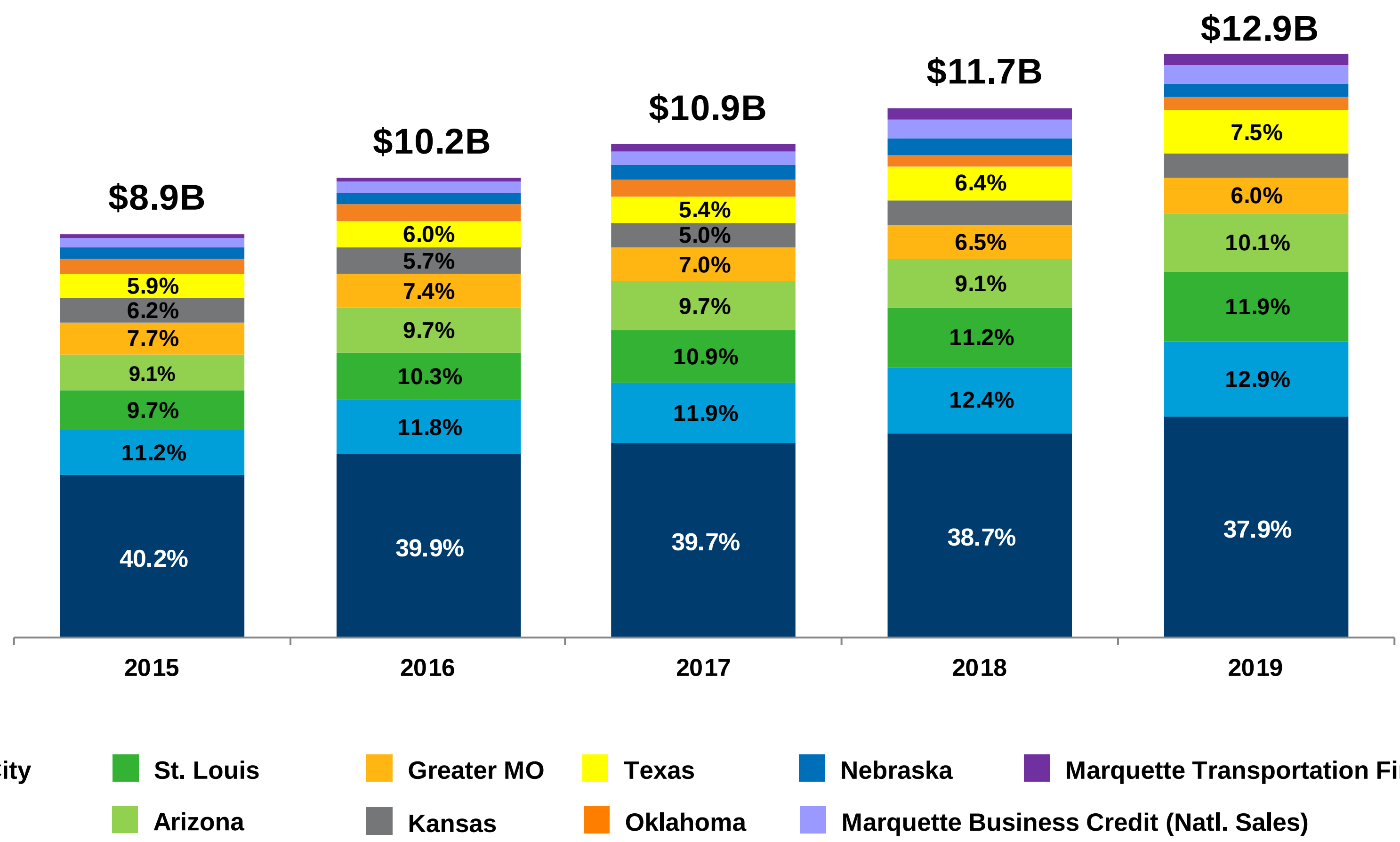


(1) Percentages less than 5% have been omitted.
(2) Includes leases.

Geographic Diversity

Loans by Region[1]

(Average loan balances for the three months ended September 30 of the indicated year)



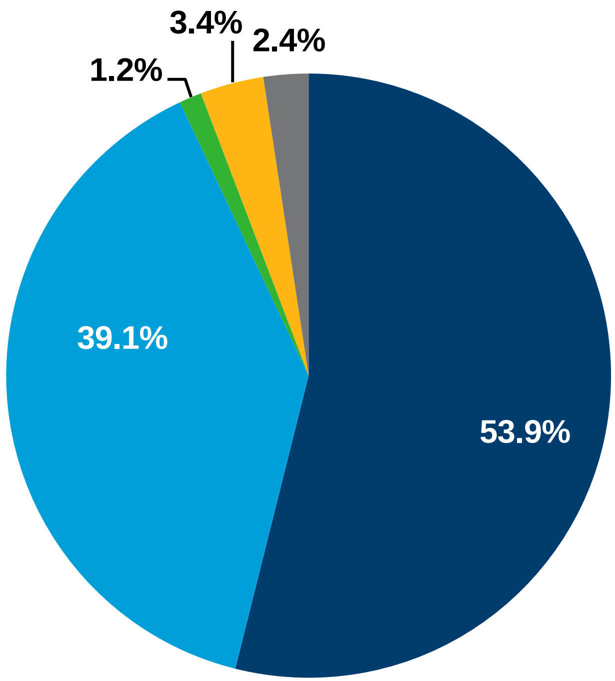
(1) *Percentages less than 5% have been omitted.*

Loan Activity

$ in millions	3Q'19	2Q'19	1Q'19	4Q'18	3Q'18
Gross Loan Production	850.3	844.2	930.4	709.4	732.9
Revolving Balance Changes	(143.6)	8.3	(139.9)	106.2	(18.8)
Net Charge-offs	(2.2)	(12.6)	(12.3)	(45.7)	(2.7)
Payoffs	(274.4)	(287.3)	(194.2)	(149.4)	(156.0)
Paydowns	(286.6)	(202.0)	(212.5)	(407.0)	(222.3)
Net Loan Growth	143.5	350.6	371.5	213.5	333.1
End-of-Period Total Loans	$ 13,043.8	$ 12,900.3	$ 12,549.7	$ 12,178.2	$ 11,964.7
Paydowns/Payoffs as a % of Loans	4.3%	3.8%	3.2%	4.6%	3.2%

High Quality Investment Portfolio

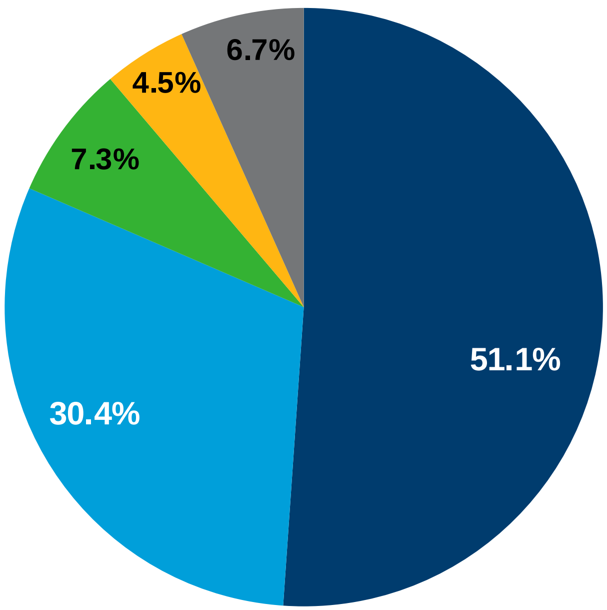
Securities Available for Sale
$7.4 billion at September 30, 2019



- Mortgage-Backed Securities
- Municipals
- Treasuries
- Agencies
- Corporates

Average Balance: $7.3 billion
Average Yield: 2.55%
Duration: 47 months

Securities Held to Maturity
$1.1 billion at September 30, 2019



- Healthcare
- Higher Education
- Governmental
- Utility
- Other
  - *Social Service*
  - *Industrial*
  - *Cultural*
  - *Civic*
  - *K-12 Education*
  - *NFP - Other*

Average Balance: $1.1 billion
Average Yield: 3.28%
Duration: 70 months

Total Portfolio
Average Yield: 2.64%
Duration: 50 months

Securities and Loan Statistics

AFS Portfolio Activity

$ in millions	3Q'19	2Q'19	1Q'19	4Q'18	3Q'18
Roll off / Cash Flow (1)	$ 254	$ 267	$ 267	$ 191	$ 229
Roll off yield	2.19%	2.03%	2.11%	2.04%	1.96%
Purchased (2)	$ 261	$ 268	$ 262	$ 194	$ 198
Purchase yield	2.99%	3.35%	3.66%	3.59%	3.66%

Forward-looking expectations	4Q'19	Next 12 months
Roll off / Cash Flow	$ 499	$ 1,413
Roll off yield	2.46%	2.32%

Loan Portfolio Statistics

at September 30, 2019

Variable Rate Loans: $8.1 billion or 62% of the loan book

- ~35% of variable loans are tied to Prime for the next quarter
- ~64% of variable loans are tied to LIBOR for the next quarter

Loan Repricing/Maturity Schedule

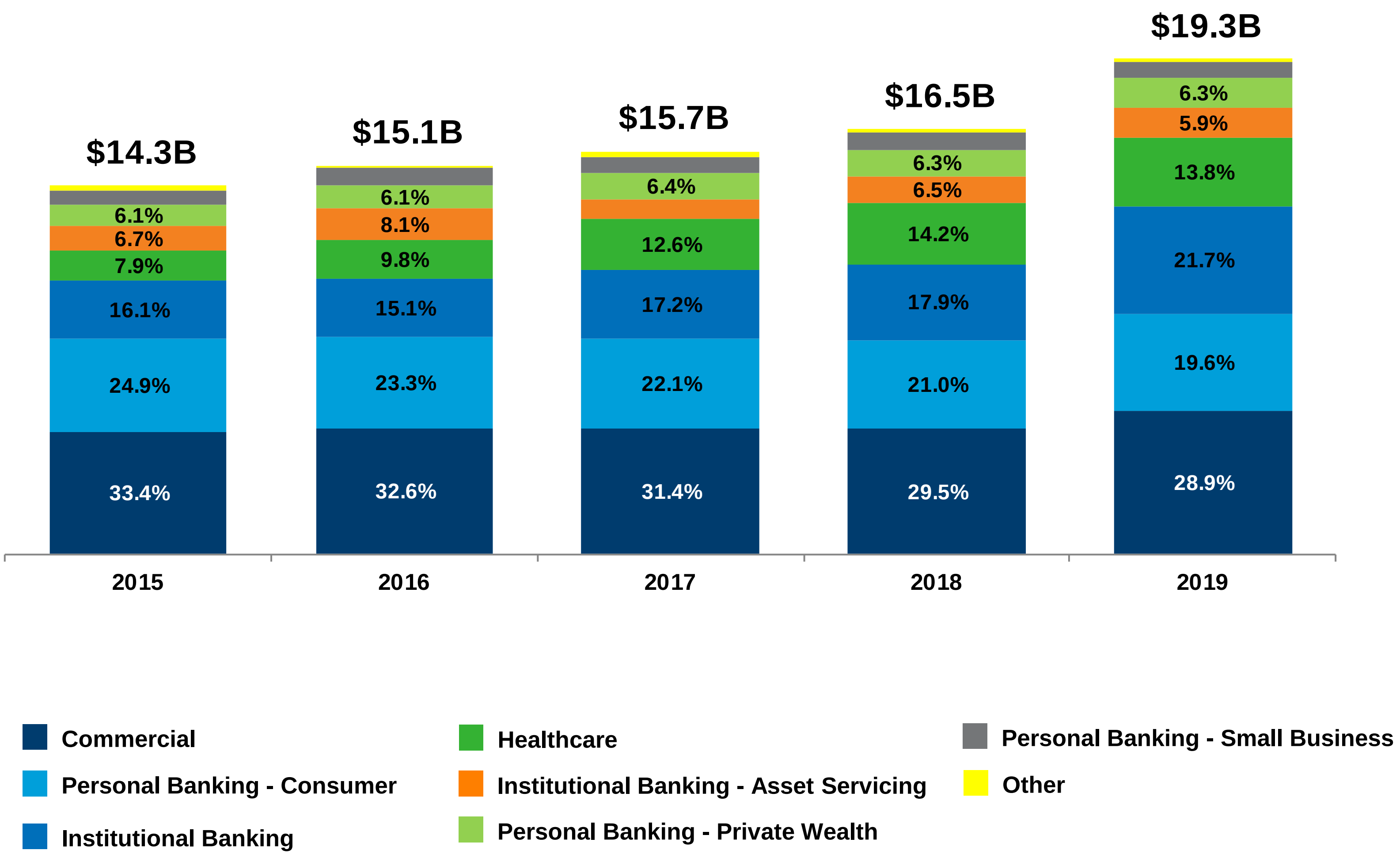
- 56% in 4th quarter 2019
- 66% in the next 12 months

(1) Roll off includes cash flow from maturities, calls or amortizations of securities and is presented net of sales.
(2) Purchased amount is presented net of purchases made related to sales.

Deposit Composition

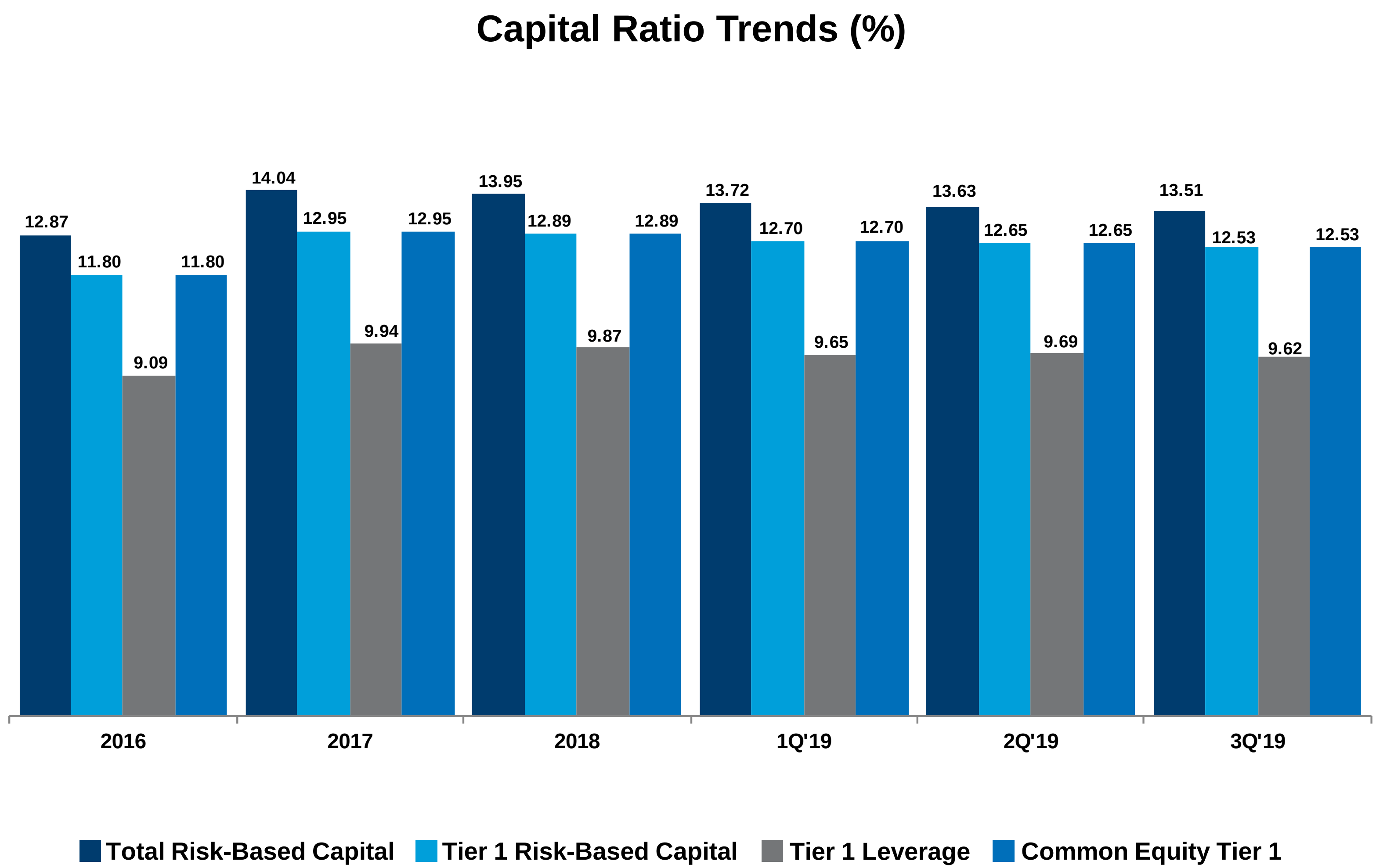
Diverse Sources of Deposits(1)

(Average deposits for the three months ended September 30 of the indicated year)



(1) Percentages less than 5% have been omitted.

Strong Capital Position



Asset Quality

Net Charge-Off History

UMB

Annual

($ in thousands)	2009	2010	2011	2012	2013
Commercial Loans [(1)]	$ 4,113	$ 6,007	$ 11,880	$ 7,310	$ 3,881
Consumer Credit Card	12,291	14,279	11,127	9,382	8,811
Other [(2)]	3,854	1,411	1,128	1,399	1,483
Total Net Charge-Offs	**$ 20,258**	**$ 21,697**	**$ 24,135**	**$ 18,091**	**$ 14,175**
Average Total Loans *($ in millions)*	$ 4,356.2	$ 4,583.7	$ 4,748.9	$ 5,243.3	$ 6,217.2
NCOs as % of Avg Loans	0.47%	0.48%	0.51%	0.35%	0.23%

($ in thousands)	2014	2015	2016	2017	2018
Commercial Loans [(1)]	$ 6,459	$ 3,415	$ 9,192	$ 24,463	$ 57,618
Consumer Credit Card	8,301	6,753	6,706	7,141	6,873
Other [(2)]	851	329	6,096	441	3,228
Total Net Charge-Offs	**$ 15,611**	**$ 10,497**	**$ 21,994**	**$ 32,045**	**$ 67,719**
Average Total Loans *($ in millions)*	$ 6,974.2	$ 8,424.0	$ 9,986.2	$10,841.5	$11,604.6
NCOs as % of Avg Loans	0.22%	0.12%	0.22%	0.30%	0.58%

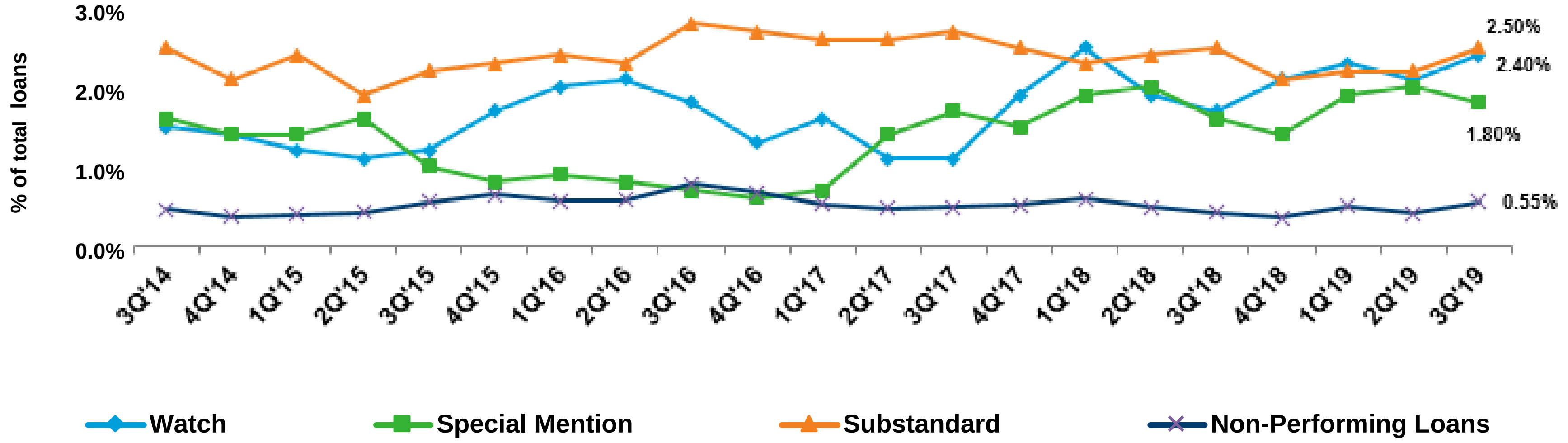
Quarterly

($ in thousands, unaudited)	3Q'18	4Q'18	1Q'19	2Q'19	3Q'19
Commercial Loans [(1)]	$ 624	$ 44,010	$ 10,537	$ 11,790	$ 568
Consumer Credit Card	1,632	1,606	1,676	1,336	1,377
Other [(2)]	490	51	111	(557)	241
Total Net Charge-Offs	**$ 2,746**	**$ 45,667**	**$ 12,324**	**$ 12,569**	**$ 2,186**
Average Total Loans *($ in millions)*	$11,716.0	$11,965.8	$12,301.7	$12,617.3	$12,884.5
NCOs as % of Avg Loans	0.09%	1.51%	0.41%	0.40%	0.07%

(1) Commercial Loans includes commercial and industrial, commercial credit card, asset-based and factoring loans.

(2) Other includes all real-estate related loans (commercial, residential and HELOC), plus consumer loans and DDA charge-offs.

Loan Classification Trends



<u>Definitions:</u>

"Watch" – This rating represents credit exposure that presents higher than average risk and warrants greater than routine attention due to conditions affecting the borrower, the borrower's industry or the economic environment.

"Special Mention" – This rating reflects a potential weakness that deserves management's close attention and that, if left uncorrected, may result in deterioration of the repayment prospects.

"Substandard" – Loans in this category are inadequately protected by the current paying capacity of the borrower or by the collateral pledged, if any, and are characterized by the distinct possibility that the Company will sustain some loss if the deficiencies are not corrected.

"Non-Performing" – Includes restructured loans on non-accrual and all other non-accrual loans.

Income Statement

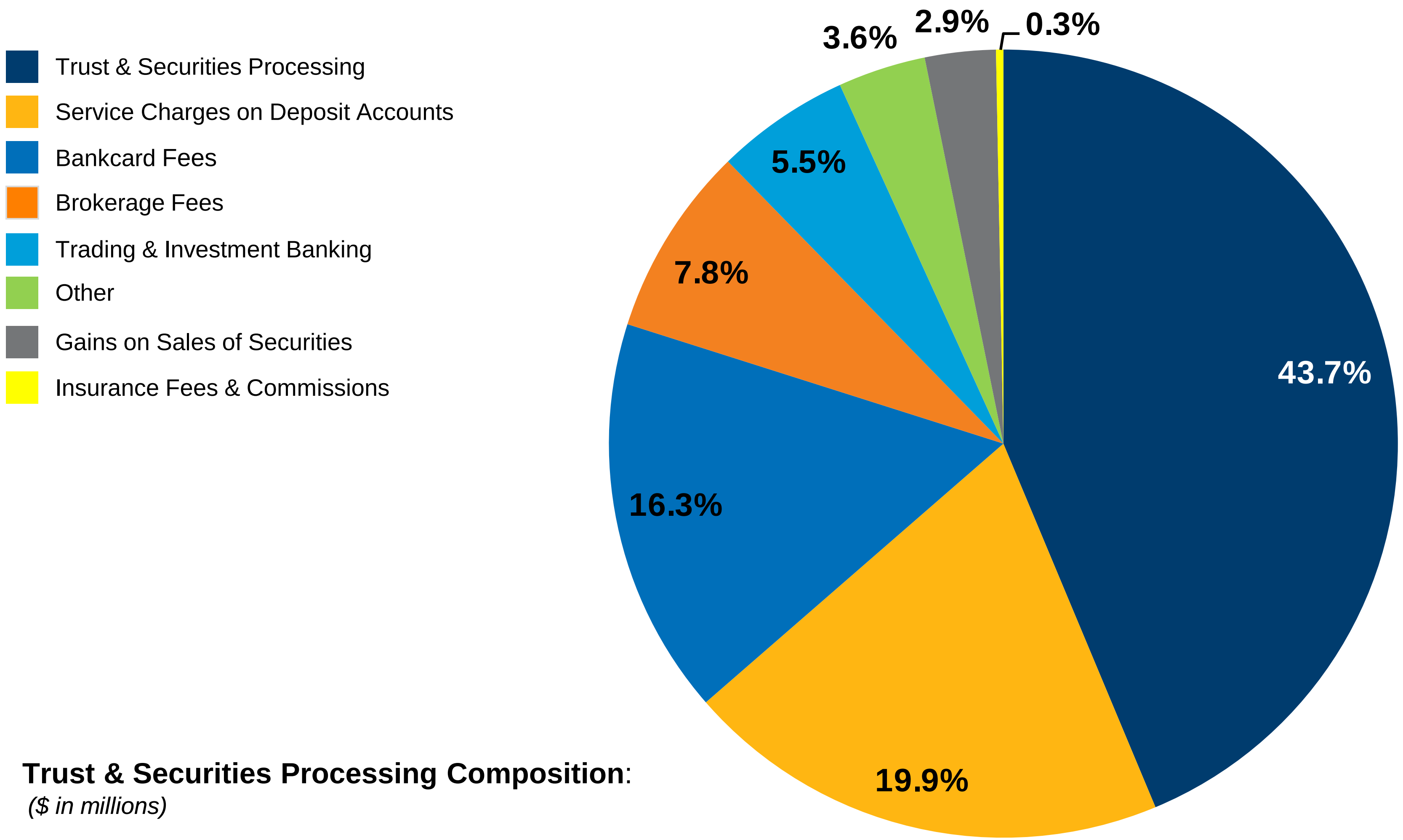
Noninterest Income – 3Q 2019

$ in thousands (unaudited)	3Q'19	2Q'19	1Q'19	4Q'18	3Q'18
Trust and securities processing	$ 45,218	$ 42,903	$ 41,957	$ 41,891	$ 43,425
Trading and investment banking	5,712	5,453	5,581	3,119	3,711
Service charges on deposit accounts	20,620	20,747	21,281	20,733	20,927
Insurance fees and commissions	320	465	338	312	339
Brokerage fees	8,102	7,077	7,243	6,761	6,402
Bankcard fees	16,895	16,439	17,067	16,375	16,838
Gains (losses) on sales of securities	3,057	(1,403)	809	-	211
Other	3,711	13,717	13,106	5,808	9,032
Total noninterest income	**$103,635**	**$105,398**	**$107,382**	**$ 94,999**	**$100,885**

3rd Quarter '19 Drivers

- Noninterest income decreased $1.8MM, or 1.7%, compared to 2Q'19, primarily driven by:
  - Decreases of the following market-related metrics, recorded in "other" income
    - $3.7MM in equity earnings on alternative investments;
    - $2.3MM in company-owned life insurance income (offset by a proportionate decrease in deferred compensation expense noted below); and
    - $1.5MM in derivative income.
  - Partially offset by increases of
    - $4.5MM in gains on the sale of securities;
    - $2.3MM in trust and securities processing income, driven by fund services, corporate trust and private wealth revenue; and
    - $1.0MM in brokerage fees related to 12b-1 income.

Noninterest Income Composition – 3Q 2019



Trust & Securities Processing Composition:
($ in millions)

Source of Income:	**3Q'19**	**2Q'19**	**3Q'18**
Personal Banking – Private Wealth & Prairie Capital	$ 16.4	$ 15.7	$ 16.4
Institutional Banking – Fund Services	20.9	19.8	21.2
Institutional Banking – Corp. Trust & other	7.9	7.4	5.8
	$ 45.2	**$ 42.9**	**$ 43.4**

Noninterest Expense – 3Q 2019

$ in thousands (unaudited)	3Q'19	2Q'19	1Q'19	4Q'18	3Q'18
Salaries and employee benefits	$ 110,153	$114,454	$116,032	$103,992	$102,956
Occupancy, net	12,240	11,539	11,743	11,845	11,628
Equipment	19,775	18,824	19,684	18,983	18,533
Supplies and services	4,261	4,285	3,873	3,669	4,528
Marketing and business dev	5,655	7,304	4,913	6,483	6,671
Processing fees	13,619	13,096	12,132	11,948	12,331
Legal and consulting	8,374	7,496	5,633	11,085	8,470
Bankcard	4,643	4,701	4,345	4,316	4,407
Amortization of other intangibles	1,335	1,251	1,327	1,332	1,385
Regulatory fees	2,749	2,910	2,890	2,681	3,337
Other	8,593	7,527	8,054	7,987	6,139
Total noninterest expense	**$ 191,397**	**$193,387**	**$190,626**	**$184,321**	**$180,385**
Operating noninterest expense(1)	**$ 191,213**	**$193,020**	**$190,029**	**$181,591**	**$180,161**

(1) Operating noninterest expense, which excludes the impact of acquisition and divestiture expense and severance expense, was $191.2 million for the third quarter of 2019, a decrease of $1.8 million, or 0.9 percent, compared to the linked quarter, and an increase of $11.1 million, or 6.1 percent, compared to the third quarter of 2018. See slides 37 and 38 for a reconciliation of this non-GAAP financial measure.

3rd Quarter '19 Drivers

- Noninterest expense decreased $2.0MM, or 1.0%, compared to 2Q'19, primarily driven by:
  - A decrease of $4.3MM in salary and employee benefit expense due to
    - $3.0MM lower bonus and commission expense;
    - $1.7MM lower deferred compensation expense (offset by the decrease in company-owned life insurance income noted above); and
  - A $1.6MM decrease in the timing of marketing and business development expense related to multiple product initiatives.
  - Partially offset by a $1.3MM fee recorded in other expense, which was paid to terminate a portion of a building lease.

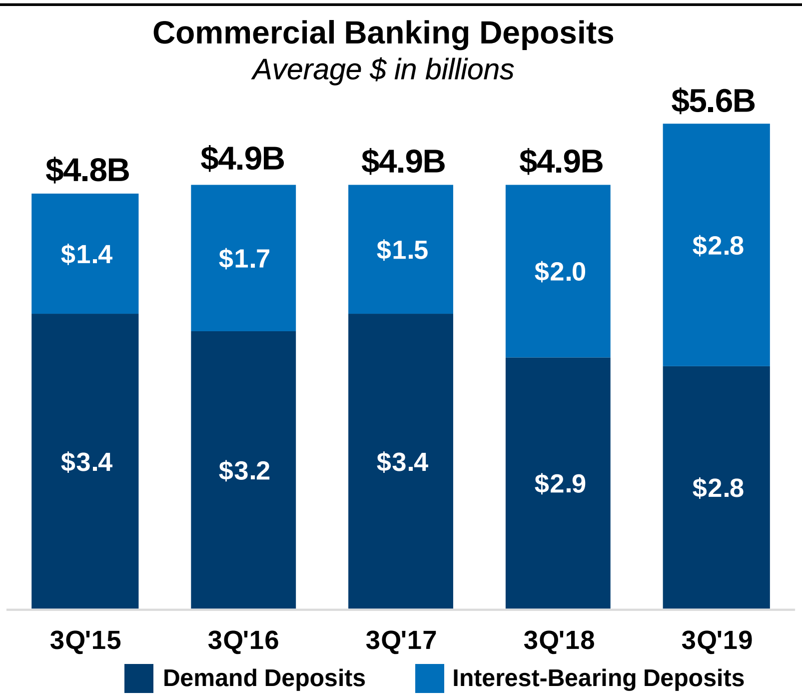
Segment Updates

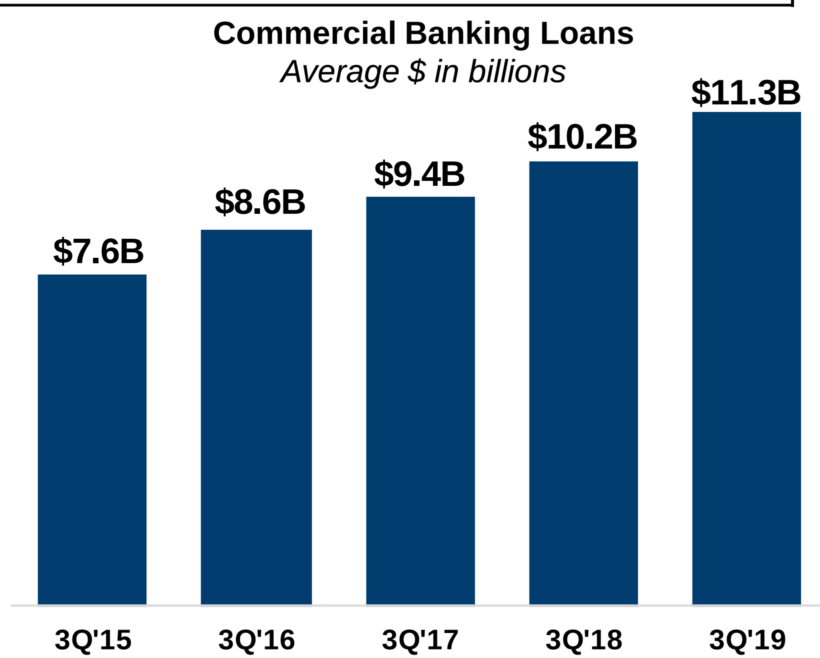
Commercial Banking

Commercial Banking Segment Results

($ in thousands, unaudited)

	3Q'19	2Q'19	3Q'18	% Variance vs. 2Q'19	% Variance vs. 3Q'18
Net interest income	$ 104,360	$ 102,579	$ 94,782	1.7	10.1
Provision for loan losses	5,966	9,306	4,063	(35.9)	46.8
Noninterest income	18,874	20,387	20,825	(7.4)	(9.4)
Noninterest expense	66,447	68,511	64,076	(3.0)	3.7
Income before taxes	**50,821**	**45,149**	**47,468**	**12.6**	**7.1**
Income tax expense	7,390	7,008	5,378	5.5	37.4
Income from continuing operations	**$ 43,431**	**$ 38,141**	**$ 42,090**	**13.9**	**3.2**

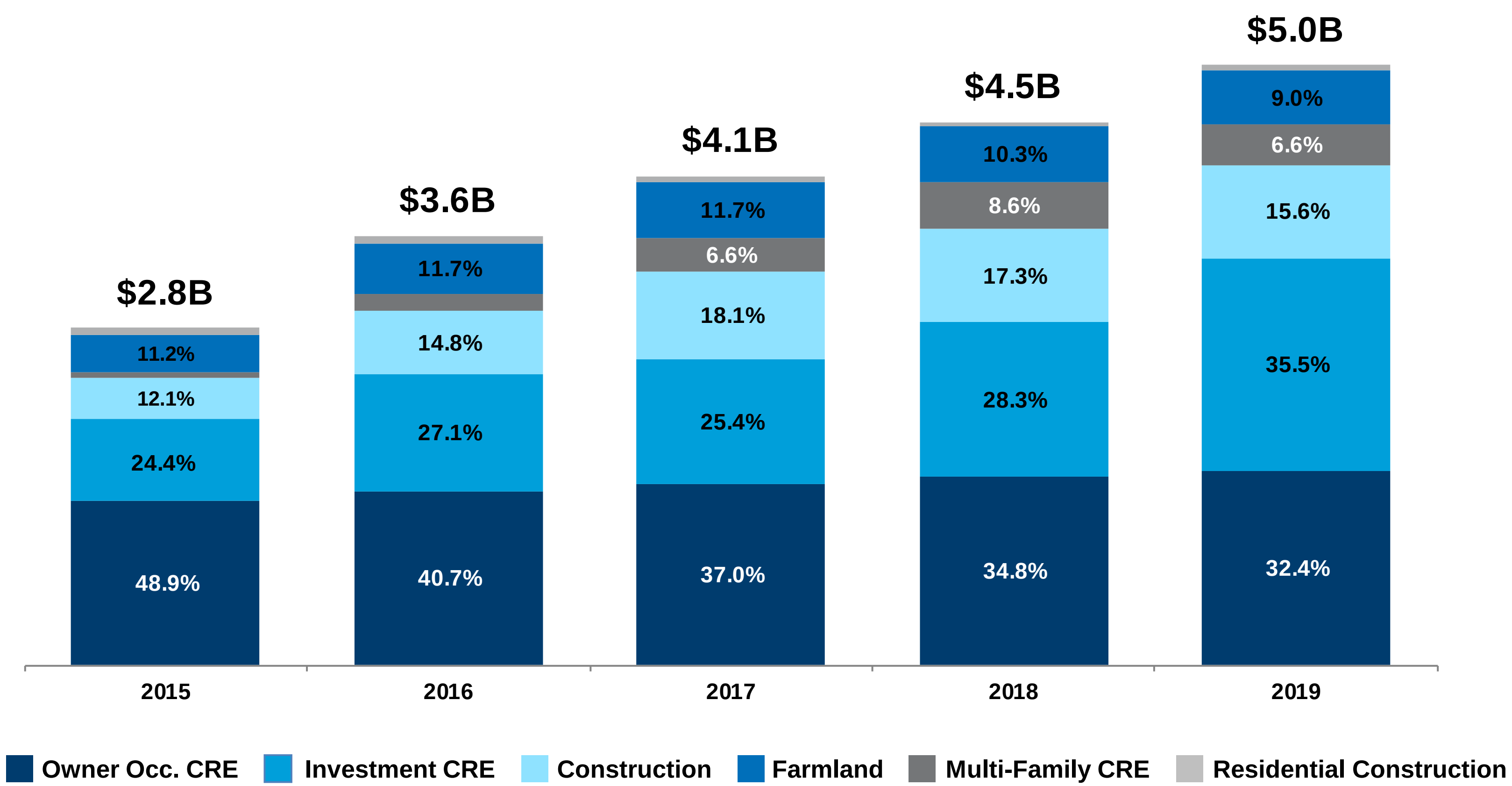




Commercial Real Estate Portfolio

CRE & Construction Lending (1)

(Average loan balances for the three months ended September 30 of the indicated year)



(1) Percentages less than 5% have been omitted.

Institutional Banking

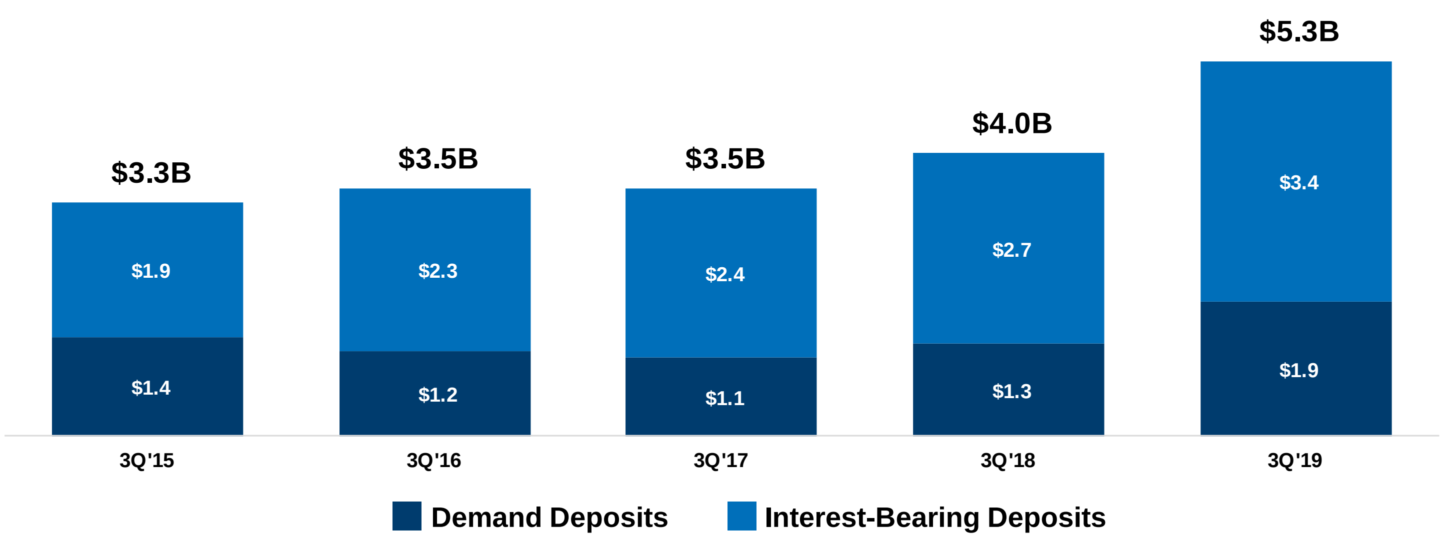
Institutional Banking Segment Results

($ in thousands, unaudited)

	3Q'19	2Q'19	3Q'18	% Variance vs. 2Q'19	% Variance vs. 3Q'18
Net interest income	$ 18,726	$ 19,164	$ 15,235	(2.3)	22.9
Provision for loan losses	256	181	354	41.4	(27.7)
Noninterest income	49,806	46,777	43,171	6.5	15.4
Noninterest expense	55,280	52,415	47,083	5.5	17.4
Income before taxes	**12,996**	**13,345**	**10,969**	**(2.6)**	**18.5**
Income tax expense	1,891	2,071	1,243	(8.7)	52.1
Income from continuing operations	**$ 11,105**	**$ 11,274**	**$ 9,726**	**(1.5)**	**14.2**

Institutional Banking Deposits

Average $ in billions



Institutional Banking – Business Description

Investor Solutions

- Banking services for 4 of the top 10 broker-dealers
- FDIC sweep solutions; liquidity alternative to overnight funds
- Expanded to include Fintech clients as a channel for services in 2019

Corporate Trust

- Bond trustee and agency services to municipal and corporate issuers
- Approximately $20.1 billion in assets under administration
- #3 trustee, #3 paying agent in U.S. based on number of deals

Investment Banking

- Fixed income services for banks, institutional, municipal & corporate clients
- $26.6 billion par value bonds traded YTD 2019

Distressed Debt/ Specialty Finance

- Workout defaulted bond deals on behalf of holders
- Specialty corporate trust
- Aviation lease transactions

Institutional Custody

- Provides custodial services to municipalities, corporations, fund companies and more
- Among top 10 U.S. fund custodians as measured by AUC (MFSG)

Asset Servicing

- Fund accounting and administration
- Alternative Investments
- $224 billion in assets under administration

Personal Banking

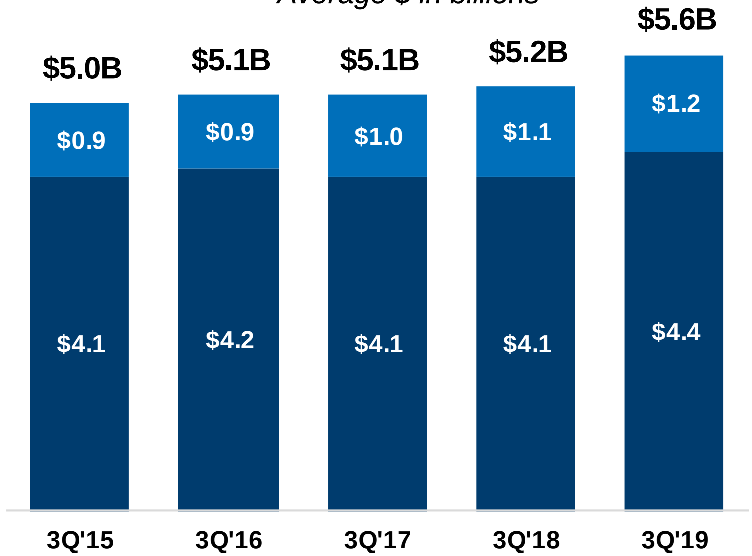
Personal Banking Segment Results

($ in thousands, unaudited)

	3Q'19	2Q'19	3Q'18	% Variance vs. 2Q'19	% Variance vs. 3Q'18
Net interest income	$ 33,296	$ 33,334	$ 31,069	(0.1)	7.2
Provision for loan losses	1,278	1,513	1,333	(15.5)	(4.1)
Noninterest income	26,118	29,385	28,269	(11.1)	(7.6)
Noninterest expense	58,328	60,024	56,651	(2.8)	3.0
(Loss) income before taxes	**(192)**	**1,182**	**1,354**	**(116.2)**	**(114.2)**
Income tax (benefit) expense	(28)	184	153	(115.2)	(118.3)
(Loss) income from continuing operations	**$ (164)**	**$ 998**	**$ 1,201**	**(116.4)**	**(113.7)**

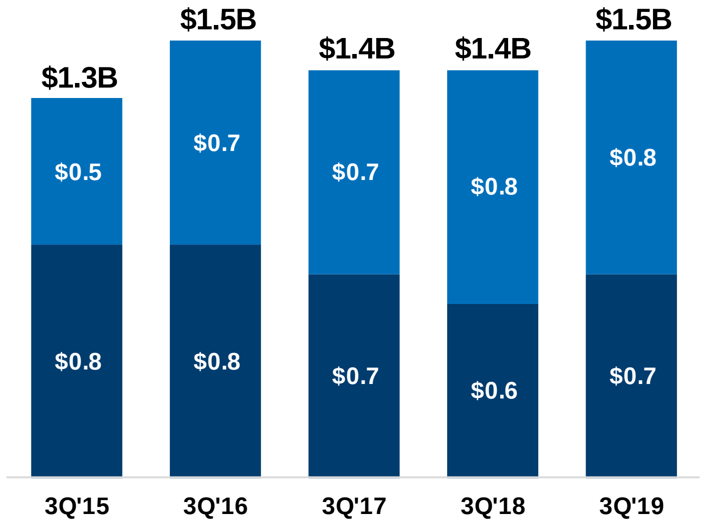
Personal Banking Deposits

Average $ in billions



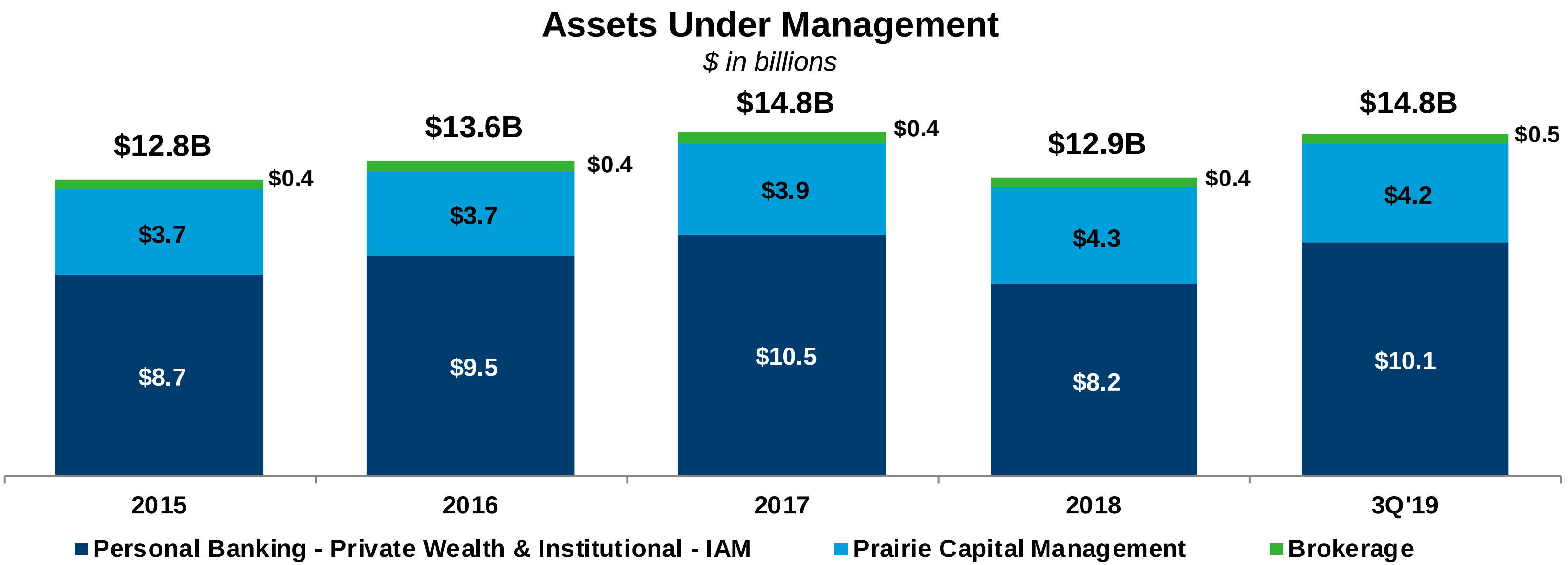
Personal Banking Loans

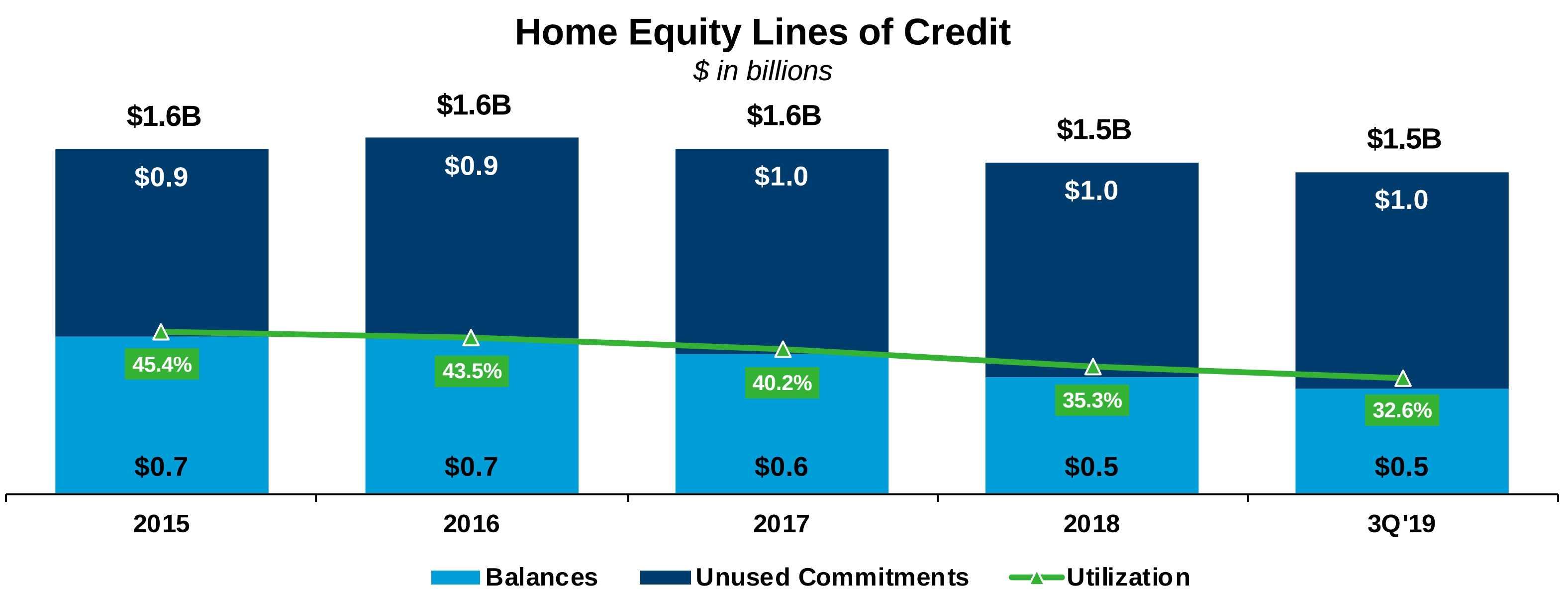
Average $ in billions



Consumer & Small Business   Private Banking

Personal Banking





Healthcare Services

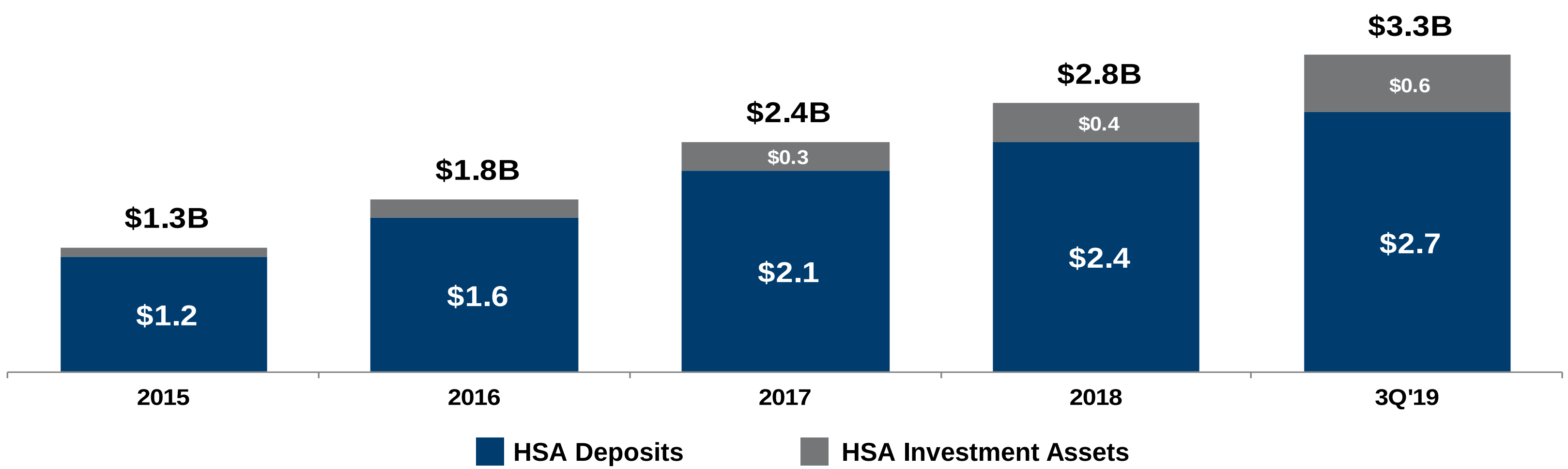
Healthcare Services Segment Results

($ in thousands, unaudited)

	3Q'19	2Q'19	3Q'18	% Variance vs. 2Q'19	% Variance vs. 3Q'18
Net interest income	$ 11,878	$ 11,337	$ 9,404	4.8	26.3
Noninterest income	8,837	8,849	8,620	(0.1)	2.5
Noninterest expense	11,342	12,437	12,575	(8.8)	(9.8)
Income before taxes	**9,373**	**7,749**	**5,449**	**21.0**	**72.0**
Income tax expense	1,363	1,203	617	13.3	120.9
Income from continuing operations	**$ 8,010**	**$ 6,546**	**$ 4,832**	**22.4**	**65.8**

Healthcare Deposits & Assets

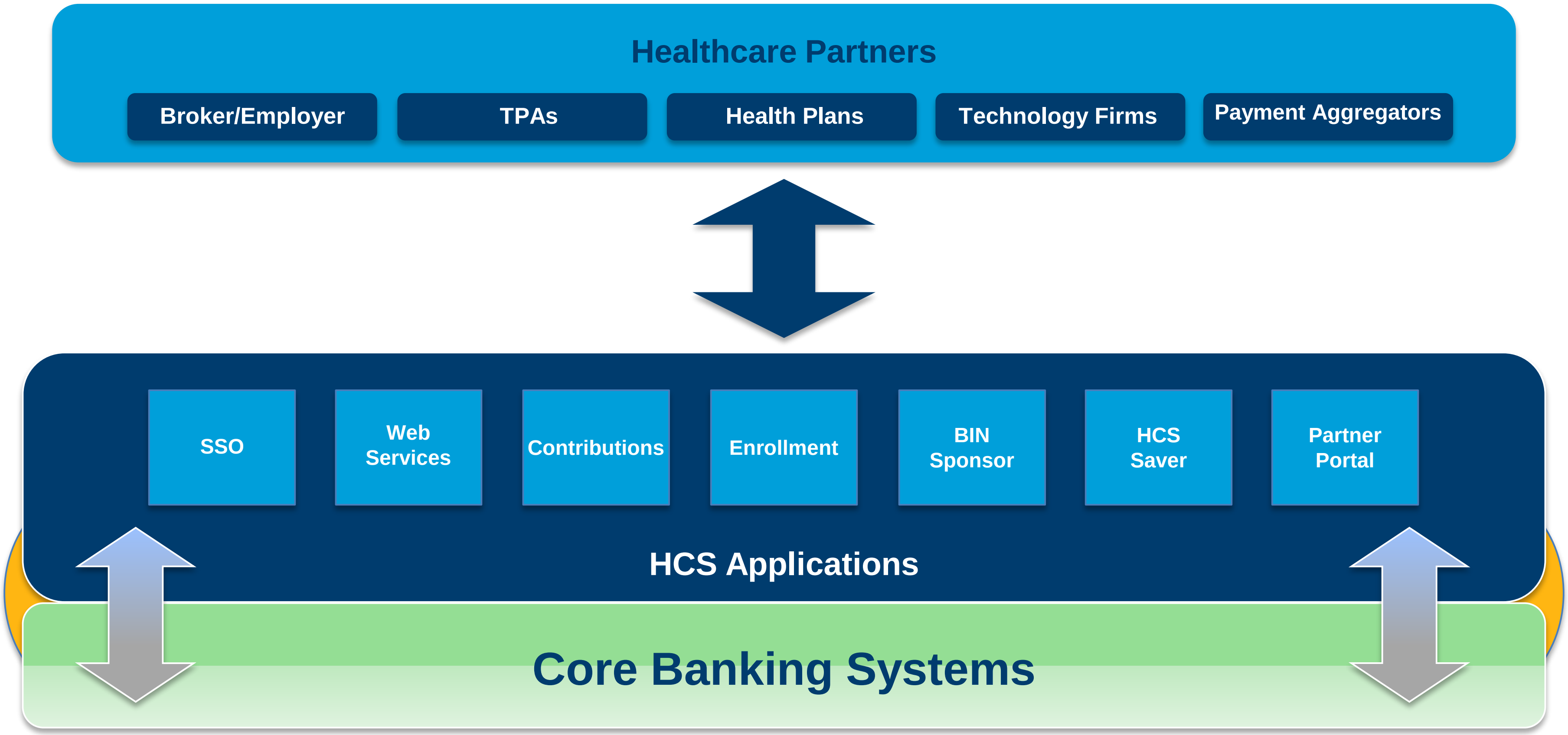
End-of-period balances; $ in billions



	2015	2016	2017	2018	3Q'19
HSA deposits as % of total UMB deposits	7.8%	9.7%	11.4%	12.5%	14.0%

Multi-Channel Healthcare Strategy

UMB offers a *modular and configurable* platform of applications and services that deliver the underlying *core banking* functionality to our healthcare partners



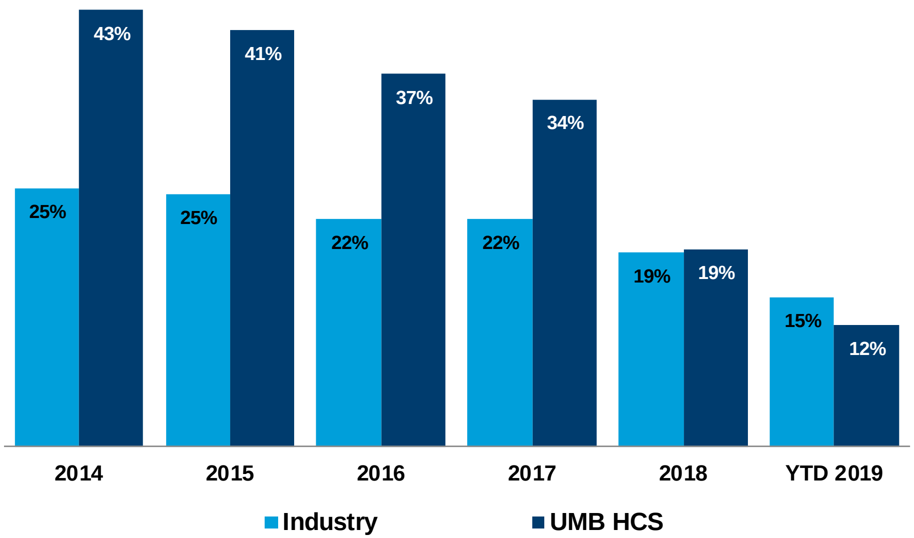
Healthcare Services – Industry Statistics

✓ HCS represents a unique asset as one of the top 5 leaders in a growing niche market.

	Total Accounts	Total Assets	Account Market Share (%)
Optum Bank	4,023	$11,052	15%
Health Equity	4,074	$8,392	16%
HSA Bank	2,964	$8,029	11%
UMB Bank	1,465	$3,163	6%
Fidelity	1,345	$4,830	5%
BenefitWallet	1,070	$2,700	4%
Payflex	1,015	$2,465	4%
Bank of America	926	$2,752	4%
WageWorks	746	$1,607	3%
Discovery Benefits	701	$1,075	3%

Total Accounts in thousands and Total Assets in millions

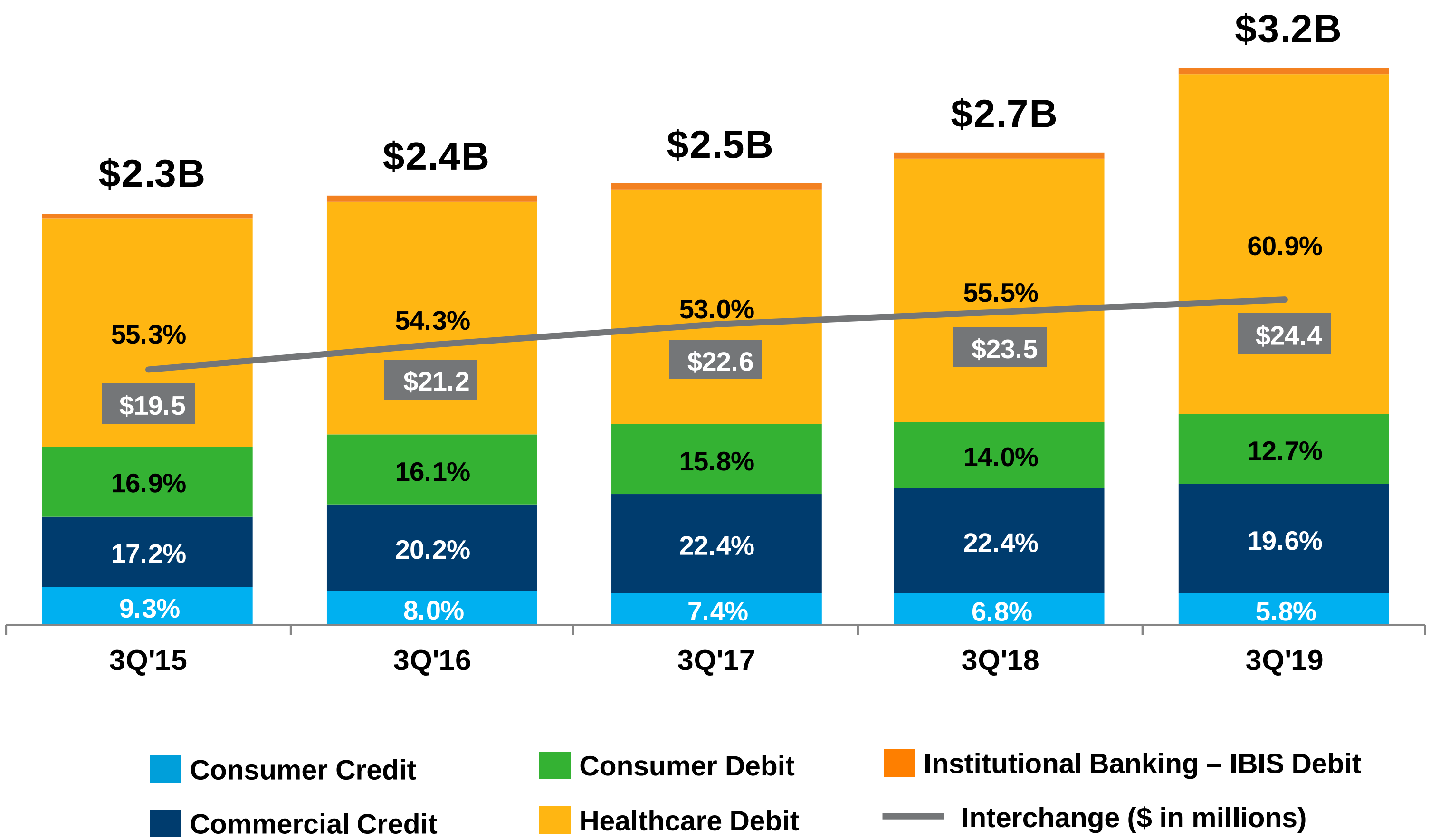
Growth Rates – Deposits and Assets



Industry information source: Devenir Research 2019 Mid-Year HSA Market Statistics & Trends report dated August 27, 2019. Rankings as of 06/30/19.

Card Purchase Volumes

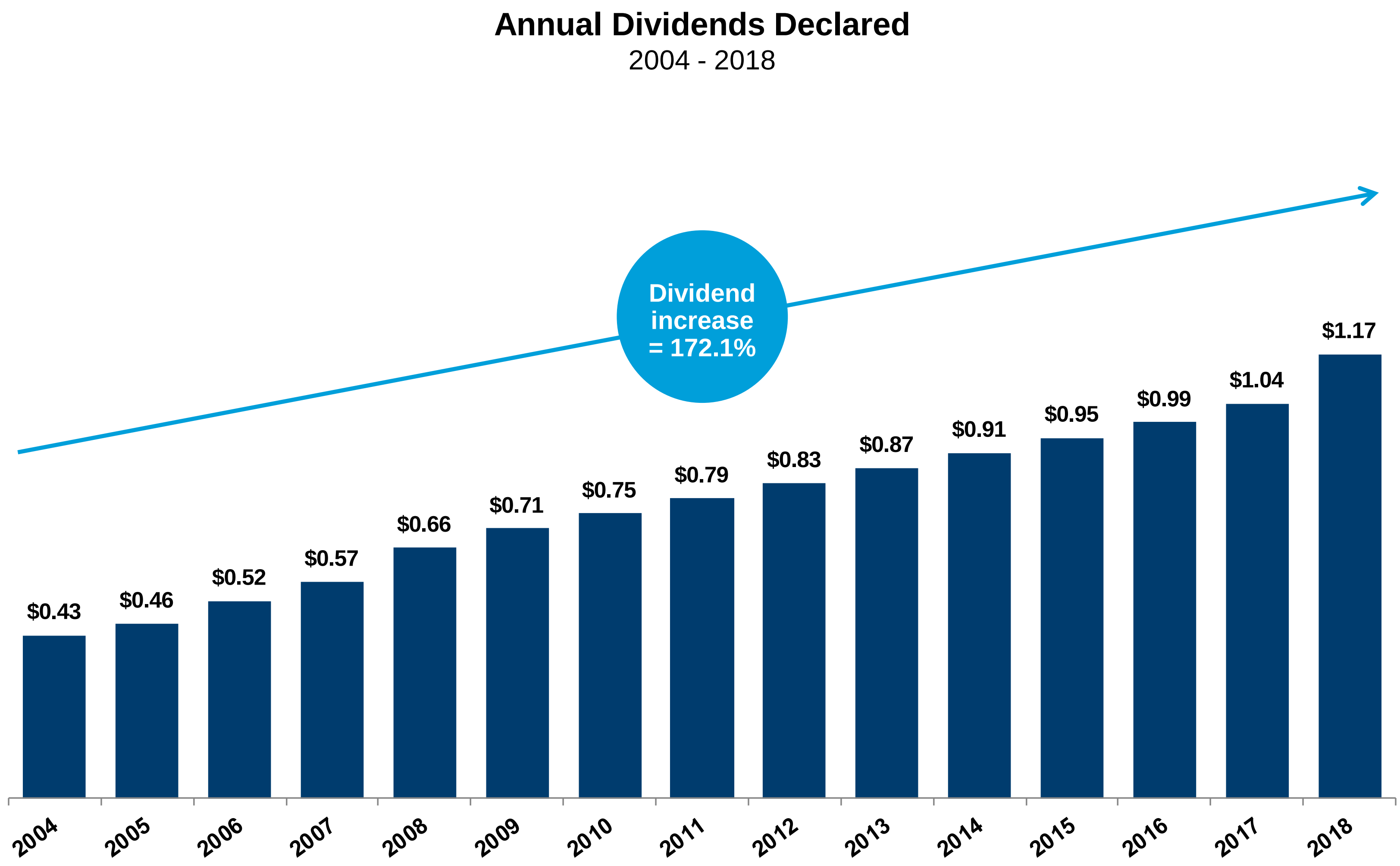
Purchase Volume & Interchange Revenue[1]



(1) Percentages less than 5% have been omitted.

Appendix

Returning Capital to Our Shareholders

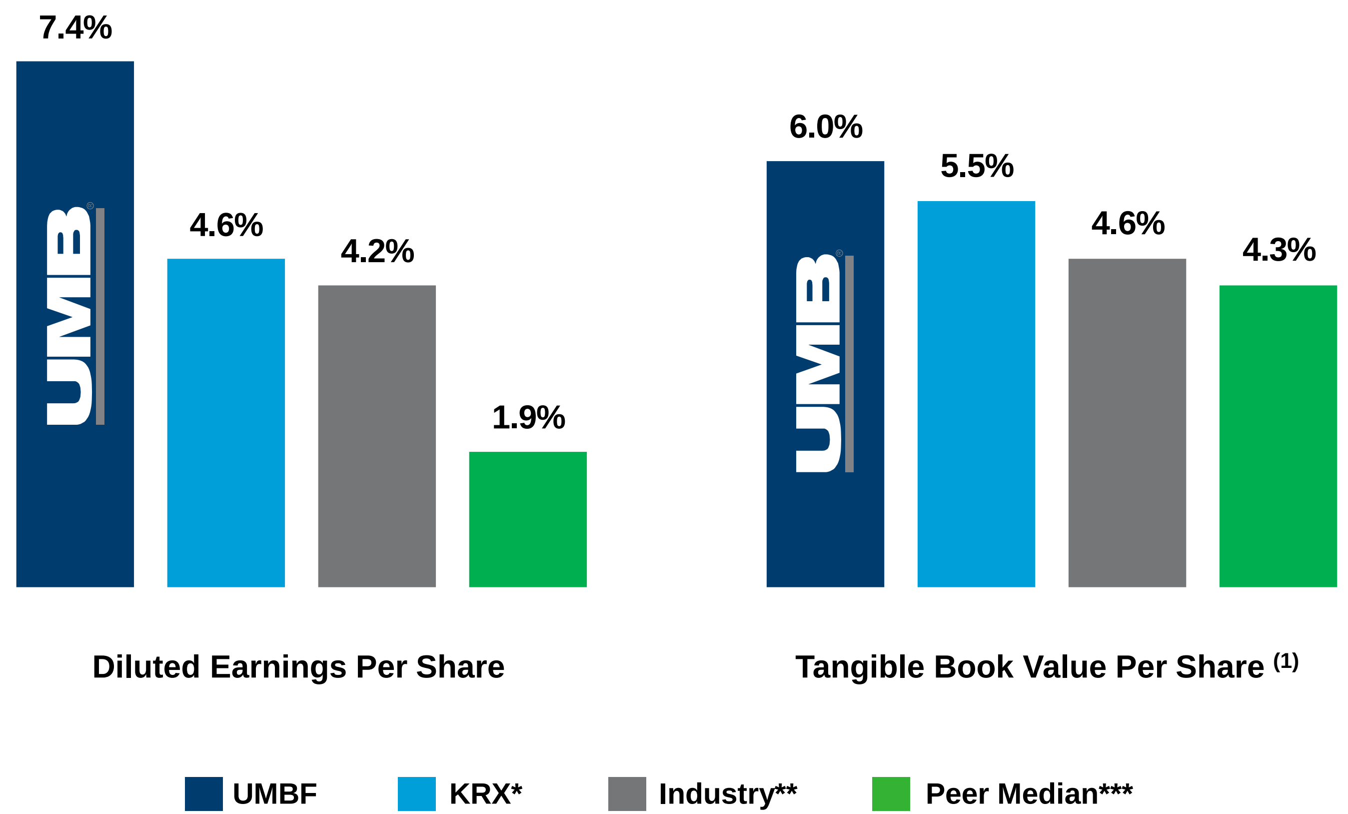


Industry Median +51.4% increase

Industry is defined as all publicly traded banks with dividend data reported for 2004 and 2018. Source: S&P Global

Long-Term Value Creation

15-Year Compound Annual Growth Rates
2003 - 2018



Data as available at time of printing, 07/19/18. [1] See reconciliation of tangible book value per share on slide 39.

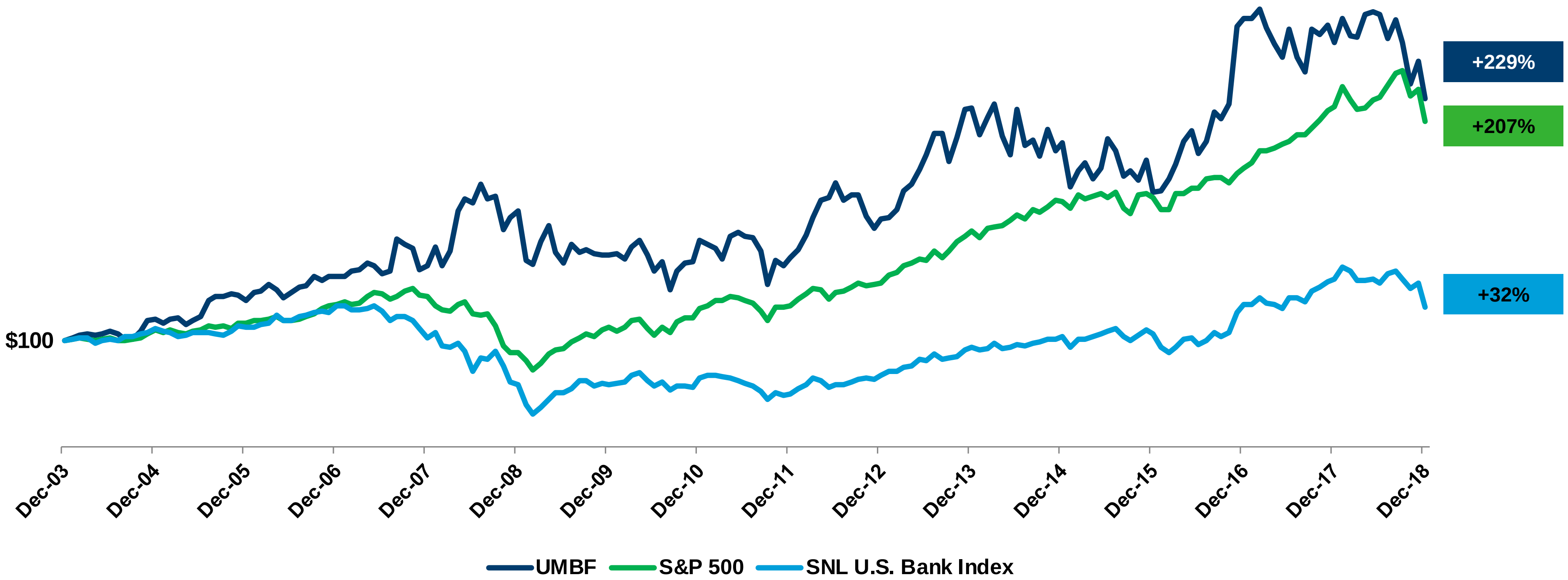
**KBW Nasdaq Regional Bank Index (50 banks); **All publicly-traded banks with data reported for 2003 and 2018; ***UMB traditional peer group (15 banks).*

Source: S&P Global.

Long-Term Shareholder Return

UMB

December 31, 2003 – December 31, 2018
Reinvesting all dividends



Source: S&P Global

Net Operating Income Non-GAAP Reconciliation

(unaudited, $ in thousands except per share data)

	Three Months Ended			Nine Months Ended	
	September 30, 2019	**June 30, 2019**	**September 30, 2018**	**September 30, 2019**	**September 30, 2018**
Income from continuing operations (GAAP)	$ 62,382	$ 56,959	$ 57,849	$ 177,085	$ 170,806
Adjustments:					
Acquisition and divestiture expense (income)	71	70	3	168	(3)
Severance expense	113	297	221	980	3,035
Tax impact of adjustments (i)	(41)	(81)	(49)	(255)	(673)
Total Non-GAAP adjustments	143	286	175	893	2,359
Net operating income from continuing operations (Non-GAAP)	$ 62,525	$ 57,245	$ 58,024	$ 177,978	$ 173,165
Earnings per share from continuing operations as reported - diluted	$ 1.27	1.16	$ 1.16	$ 3.61	$ 3.41
Acquisition and divestitures expense (income)	-	-	-	-	-
Severance expense	-	0.01	-	0.02	0.07
Tax impact of adjustments (i)	-	-	-	-	(0.01)
Operating earnings per share from continuing operations - diluted (Non-GAAP)	$ 1.27	$ 1.17	$ 1.16	$ 3.63	$ 3.47
GAAP					
Return on average assets	1.03%	0.98%	1.11%	1.01%	1.10%
Return on average equity	9.69%	9.46%	10.32%	9.86%	10.43%
Non-GAAP					
Operating return on average assets	1.04%	0.99%	1.11%	1.02%	1.12%
Operating return on average equity	9.72%	9.51%	10.35%	9.91%	10.57%

In this presentation, we provide information about net operating income from continuing operations, operating earnings per share from continuing operations-diluted (operating EPS-diluted), operating return on average equity (operating ROE), operating return on average assets (operating ROA), operating noninterest expense and operating efficiency ratio, all of which are non-GAAP financial measures. This information supplements the results that are reported according to generally accepted accounting principles in the United States (GAAP) and should not be viewed in isolation from, or as a substitute for, GAAP results. The differences between the non-GAAP financial measures and the nearest comparable GAAP financial measures are reconciled in the table above and on the next slide. The Company believes that these non-GAAP financial measures and the reconciliations may be useful to investors because they adjust for acquisition-, divestiture-, and severance-related items that management does not believe reflect the Company's fundamental operating performance. Net operating income for the relevant period is defined as GAAP net income, adjusted to reflect the impact of excluding expenses related to acquisitions and divestitures, severance expense, and the cumulative tax impact of these adjustments.

(continued on next page)

Operating Noninterest Expense & Efficiency Ratio Non-GAAP Reconciliation

UMB

(unaudited, $ in thousands)

	Three Months Ended			Nine Months Ended	
	September 30, 2019	June 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Noninterest expense (GAAP)	$ 191,397	$ 193,387	$ 180,385	$ 575,410	$ 533,479
Adjustments (pre-tax):					
Acquisition and divestiture expense (income)	71	70	3	168	(3)
Severance expense	113	297	221	980	3,035
Total Non-GAAP adjustments (pre-tax)	184	367	224	1,148	3,032
Operating noninterest expense (Non-GAAP)	191,213	193,020	180,161	574,262	530,447
Noninterest expense	191,397	193,387	180,385	575,410	533,479
Less: Amortization of other intangibles	1,335	1,251	1,385	3,914	4,432
Noninterest expense, net of amortization of other intangibles (numerator A)	190,062	192,136	179,000	571,496	529,047
Operating noninterest expense (Non-GAAP)	191,213	193,020	180,161	574,262	530,447
Less: Amortization of other intangibles	1,335	1,251	1,385	3,914	4,432
Operating expense, net of amortization of other intangibles (numerator B)	189,878	191,769	178,776	570,348	526,015
Net interest income	168,260	166,414	150,490	498,542	448,638
Noninterest income	103,635	105,398	100,885	316,415	306,699
Less: Gains (losses) on sales of securities available for sale, net	3,057	(1,403)	211	2,463	578
Total revenue (denominator A)	$ 268,838	$ 273,215	$ 251,164	$ 812,494	$ 754,759
Efficiency ratio (numerator A/denominator A)	70.70%	70.32%	71.27%	70.34%	70.09%
Operating efficiency ratio (numerator B/denominator A) (Non-GAAP)	70.63%	70.19%	71.18%	70.20%	69.69%

Operating EPS-diluted is calculated as diluted earnings per share as reported, adjusted to reflect, on a per share basis, the impact of excluding the non-GAAP adjustments described above for the relevant period. Operating ROE is calculated as net operating income from continuing operations, divided by the Company's average total shareholders' equity for the relevant period. Operating ROA is calculated as net operating income from continuing operations, divided by the Company's average assets for the relevant period. Operating noninterest expense for the relevant period is defined as GAAP noninterest expense, adjusted to reflect the pre-tax impact of non-GAAP adjustments described above. Operating efficiency ratio is calculated as the Company's operating noninterest expense, net of amortization of other intangibles, divided by the Company's total non-GAAP revenue (which is calculated as net interest income plus noninterest income, less gains (losses) on sales of securities available for sale, net).

(i) Calculated using the Company's marginal tax rate of 22.2%.

Tangible Book Value Non-GAAP Reconciliation

	For the Year Ended			
	December 31, 2018		December 31, 2003	
Total shareholders' equity	$	2,228,470	$	811,923
Less: Intangible assets				
Goodwill		180,867		57,428
Other intangibles, net		15,003		5,601
Total intangibles		195,870		63,029
Total tangible shareholders' equity (Non-GAAP)	$	2,032,600	$	748,894
Total shares outstanding (1)		49,117,222		43,388,156
Ratio of total shareholders' equity (book value) per share	$	45.37	$	18.71
Ratio of total tangible shareholders' equity (tangible book value) per share (Non-GAAP)	$	41.38	$	17.26

(1) Share count for December 31, 2003 adjusted for Company's 2-for-1 stock split on May 31, 2006.

In this presentation, we provide information about tangible book value per share, which is a non-GAAP financial measure. This information supplements the results that are reported according to generally accepted accounting principles in the United States (GAAP) and should not be viewed in isolation from, or as a substitute for, GAAP results. The difference between the non-GAAP financial measure and the nearest comparable GAAP financial measure is reconciled in the table above. The Company believes that this non-GAAP financial measure and the reconciliation may be useful to investors because it is an important measure of the strength of the Company's capital and its ability to generate earnings on tangible equity invested by our shareholders. Tangible book value ratio is calculated as the Company's total shareholders' equity, net of intangible assets, divided by the Company's total shares outstanding.