FIRST QUARTER 2020 EARNINGS PRESENTATION

April 23, 2020

ASB
LISTED
NYSE

Associated Bank

DISCLAIMER

Important note regarding forward-looking statements:

Statements made in this presentation which are not purely historical are forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995. This includes any statements regarding management's plans, objectives, or goals for future operations, products or services, and forecasts of its revenues, earnings, or other measures of performance. Such forward-looking statements may be identified by the use of words such as "believe," "expect," "anticipate," "plan," "estimate," "should," "will," "intend," "target," "outlook" or similar expressions. Forward-looking statements are based on current management expectations and, by their nature, are subject to risks and uncertainties. Actual results may differ materially from those contained in the forward-looking statements. Factors which may cause actual results to differ materially from those contained in such forward-looking statements include those identified in the Company's most recent Form 10-K and subsequent SEC filings, and such factors are incorporated herein by reference.

Non-GAAP Measures

This presentation includes certain non-GAAP financial measures. These non-GAAP measures are provided in addition to, and not as substitutes for, measures of our financial performance determined in accordance with GAAP. Our calculation of these non-GAAP measures may not be comparable to similarly titled measures of other companies due to potential differences between companies in the method of calculation. As a result, the use of these non-GAAP measures has limitations and should not be considered superior to, in isolation from, or as a substitute for, related GAAP measures. Reconciliations of these non-GAAP financial measures to the most directly comparable GAAP financial measures can be found at the end of this presentation.

COVID-19 RESPONSE

Associated supports its Customers, Colleagues and Communities during these challenging times

Customers

- Funded over 3,600 loans totaling nearly $900 million as part of the Paycheck Protection Program
- Consumers: suspended certain transaction and late fees; initiated consumer and mortgage loan payment deferral and credit card payment relief programs; suspended foreclosures and repossessions
- Small Businesses: initiated loan payment deferral and credit card payment relief programs; suspended certain loan late fees

Colleagues

- Associated was one of the first banks to transition to primarily online, mobile and drive-through service with its lobbies available by appointment only; suspended operations at 29 branches without drive-throughs
- About 3,200 colleagues (~68% of workforce) working from home
- Associated is continuing to pay colleagues whose work is affected by changes to its services and is offering bonus payments to employees whose work requires them to be in company facilities
- The company has also expanded its leave policies to accommodate personal or family health circumstances caused by COVID-19

Communities

- Donated $150,000 to local United Way chapters in Wisconsin, Illinois and Minnesota to fund community-based programs
- A commitment of $50,000 each to the Give to MKE Responds Fund, the Chicago Community COVID-19 Response Fund and the Minnesota Disaster Recovery Fund (MDRF) to assist with housing and small business relief efforts

FIRST QUARTER 2020 UPDATE

Associated funded a record volume of loans to assist its customers while remaining strong, with substantial liquidity and capital to continue this support

Net income available to common equity of $42 million, or $0.27 per common share, *or $0.28 per common share excluding acquisition related costs*[1]

Supported Customers With Our Balance Sheet[2]

- Significant volume of loans and deposit inflows as we assisted customers build cash reserves
- Total loans increased by $1.5 billion
- Total deposits increased by $1.9 billion

Maintained Solid Capital Levels

- Common equity Tier 1 ratio of 9.36%
- Repurchased $71 million of common stock in 1Q20; share repurchase program suspended March 13, 2020

Defended Our Net Interest Margin

- Net interest margin increased modestly from 4Q 2019
- With the First Staunton acquisition, our funding base improved as EOP core deposits increased to 58% of total deposits
- Interest-bearing deposit costs decreased 19 basis points from 4Q 2019

Implemented CECL

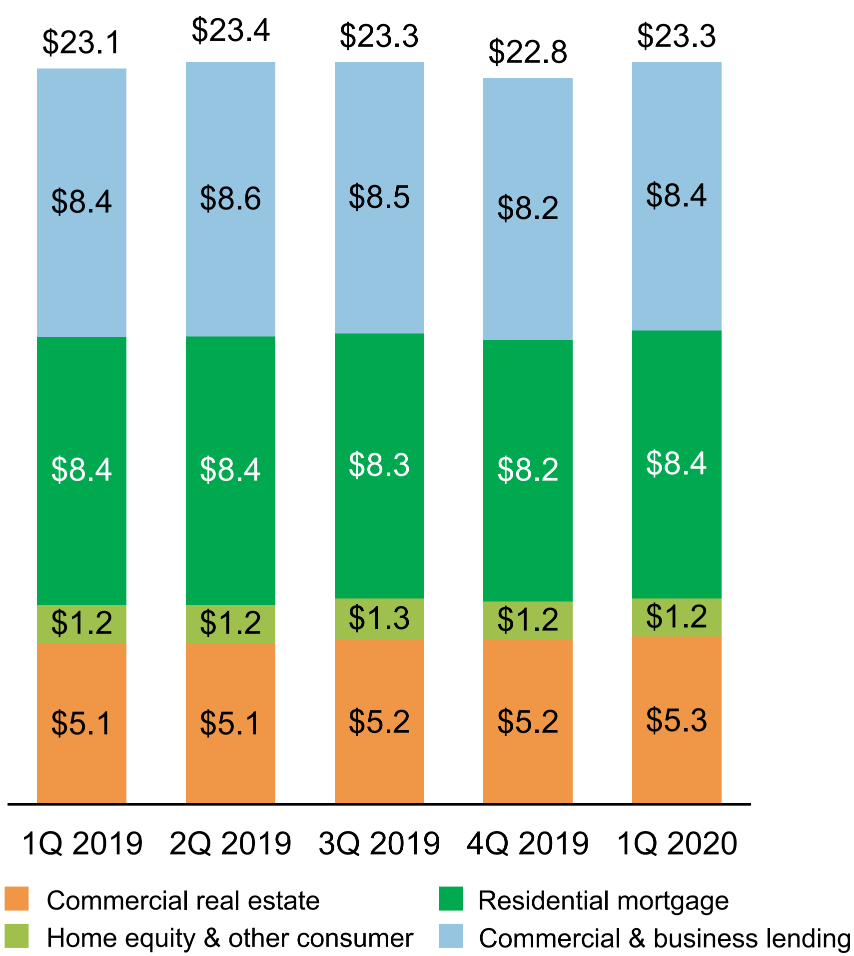
- CECL implemented on 1/1/20 with Day 1 increase to allowance for credit losses of $131 million
- 1Q20 provision (Day 2 CECL) of $53 million driven by elevated loss expectations related to pandemic
- 1Q20 net charge offs of $17 million; NCOs were 29 bps of avg total loans

[1]This is a non-GAAP financial measure. See Appendix for a reconciliation of non-GAAP financial measures to GAAP financial measures.
[2]1Q 2020 end of period (EOP) balances compared to 4Q 2019 EOP balances.

LOAN PORTFOLIO - QUARTERLY TRENDS

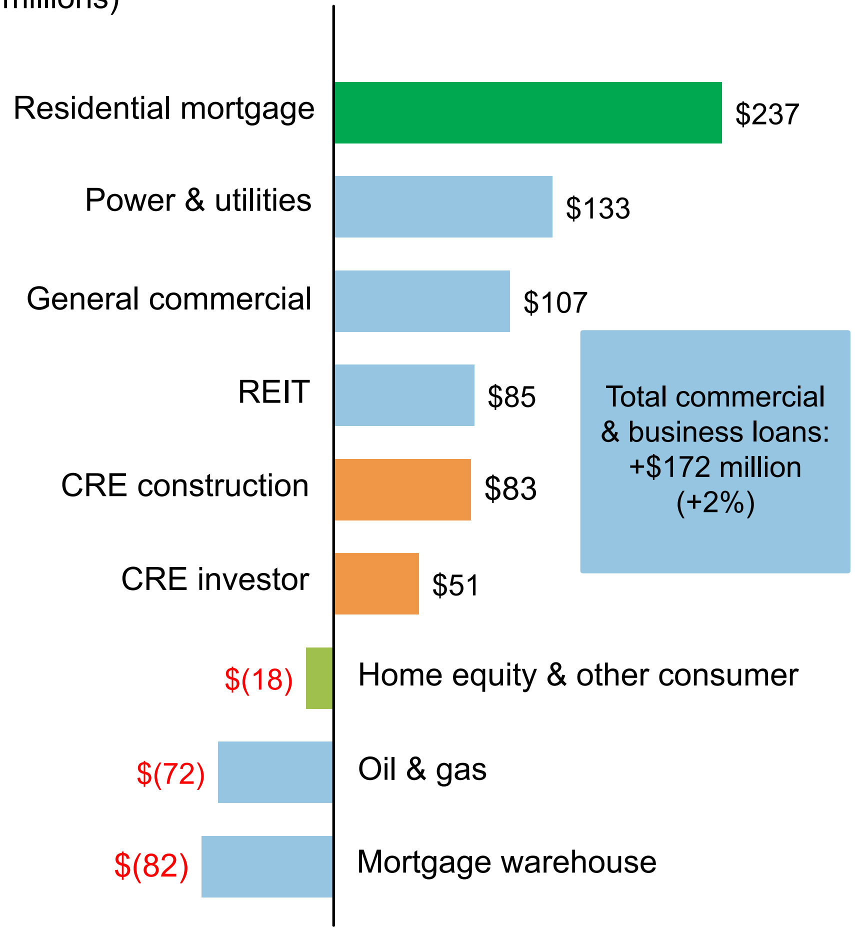
Average Quarterly Loans

($ in billions)



Average Net Loan Change (from 4Q19)

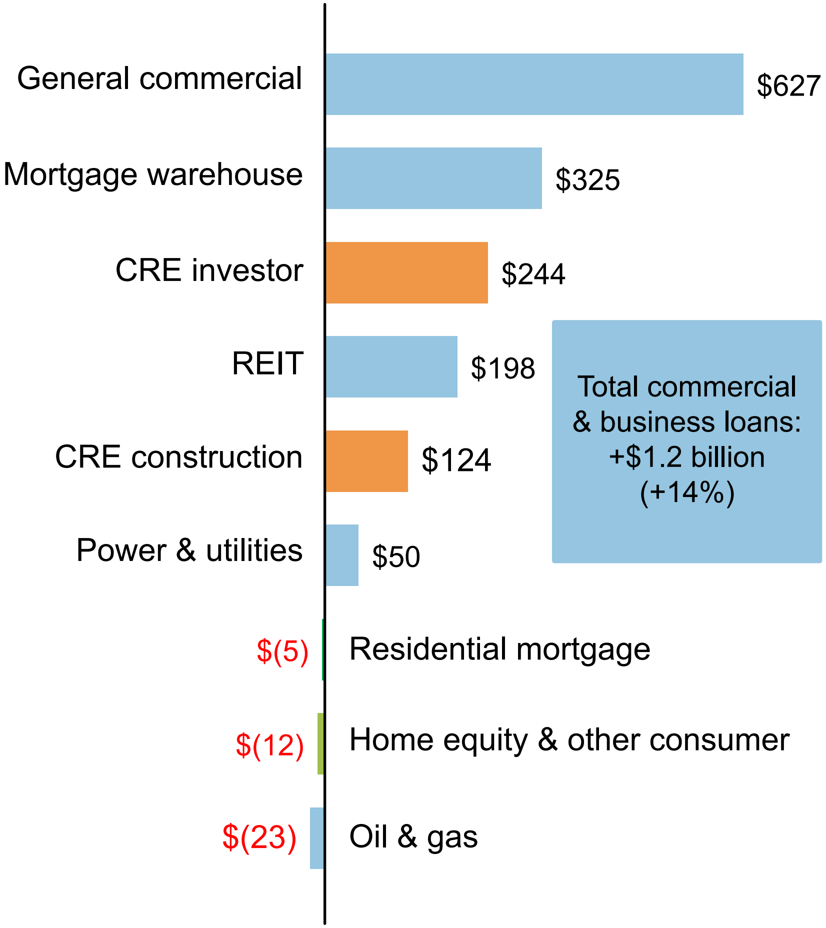
($ in millions)



LOAN PORTFOLIO TRENDS

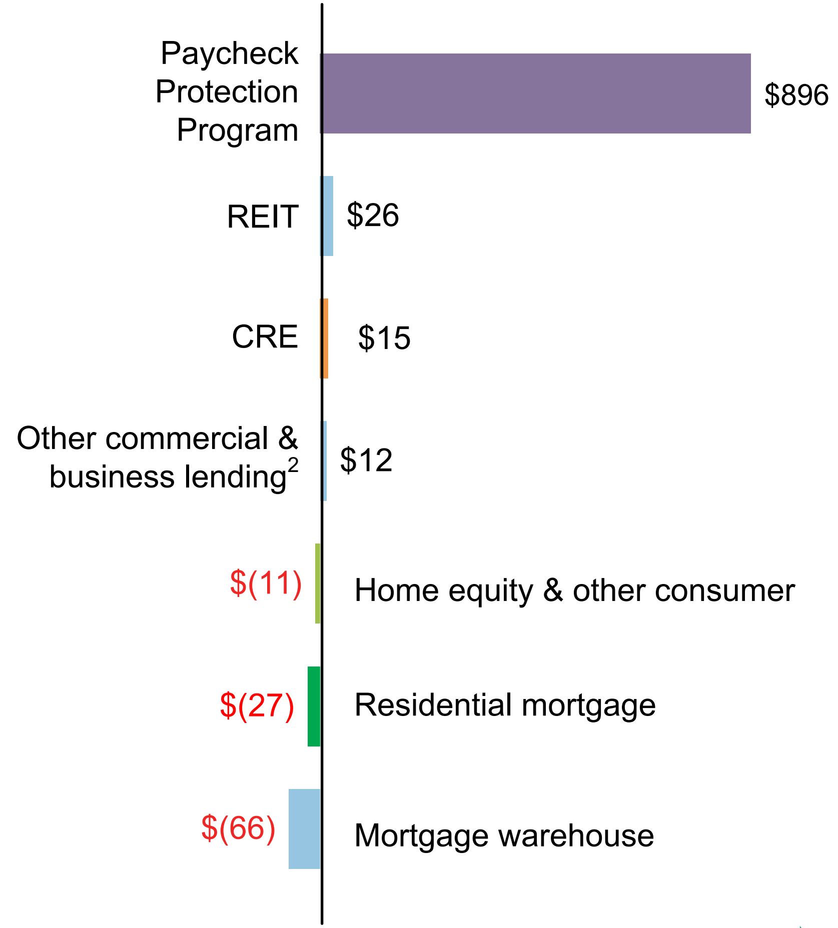
EOP Loan Change[1] 4Q19 to 1Q20

($ in millions)



Loan Change[1] from 3/31/20 to 4/21/20

($ in millions)



[1]Excludes loans held for sale.
[2]Commercial and business lending excluding mortgage warehouse and REIT loans.

COVID-19 RELIEF

Data as of April 21, 2020

We utilized the PPP and initiated our COVID-19 Relief Program to help our customers overcome challenges related to the pandemic

PPP Highlights

- Originated over **3,600 loans** totaling nearly **$900 million**
- PPP borrowers employ nearly **90,000 people**
- Fully fund PPP loans by drawing from the **Federal Reserve PPP Lending Facility**
- Anticipate most PPP loans will be **forgiven by the SBA** in 3Q 2020

Balance Segmentation	Loans	Amount of Loans
>= $2MM	96	$325MM
=< $2MM and > $350K	427	$349MM
<= $350K	3,102	$222MM
Total	**3,625**	**$896MM**

Loan Deferrals & Modifications[1]

Loan Deferrals

- $733 million (1,451 loans) including:
  - Commercial Real Estate
    - $265 million (24 loans) Corporate CRE
    - $38 million (94 loans) Regional/Business Banking
  - Commercial & Business Lending
    - $133 million (64 loans) Corporate Banking
    - $46 million (355 loans) Business Banking
  - $250 million (914 loans) of residential mortgage and consumer loans[2]

Fee Waivers

- Approximately $415,000 in fees waived or refunded for consumers and small businesses during first 30 days of our COVID-19 Relief Program

[1]Includes approved and completed modifications as of April 21, 2020.
[2]We have also approved deferrals on $151 million of loans in our mortgage portfolio serviced for others, representing approximately 1.7% of that portfolio.

KEY COMMERCIAL LOAN EXPOSURES

($ IN MILLIONS) AS OF 3/31/2020

	C&BL	Utilization	CRE	Utilization	Total	% of total loans
Retailers/Shopping Centers[1]						
Retailers	$ 149.7	81%	$ 527.5	91%	$ 677.2	2.78%
Retail REITs	303.9	67%	148.7	100%	452.6	1.86%
Subtotal	453.6	71%	676.1	93%	1,129.8	4.64%
Oil & Gas						
Texas E&P[2]	231.2	65%	—	—%	231.2	0.95%
Other E&P	235.1	70%	—	—%	235.1	0.97%
Subtotal	466.4	68%	—	—%	466.4	1.91%
Hotels, Amusement & Related						
Hotels	1.3	98%	215.8	72%	217.1	0.89%
Parking Lots and Garages	23.2	76%	69.5	87%	92.7	0.38%
Casinos	30.7	100%	—	—%	30.7	0.13%
Recreation & Entertainment	25.0	52%	7.4	99%	32.4	0.13%
Movie Theaters	22.6	99%	—	—%	22.6	0.09%
Subtotal	102.8	77%	292.7	76%	395.5	1.62%
Restaurants						
Full-Service Restaurants	82.2	90%	12.8	100%	95.1	0.39%
Limited-Service Restaurants	14.6	93%	9.7	100%	24.2	0.10%
Subtotal	96.8	90%	22.5	100%	119.3	0.49%
Transportation & Other						
Transportation Services	54.4	86%	0.1	100%	54.5	0.22%
Fracking Sand Mining	26.6	61%	—	—%	26.6	0.11%
Subtotal	81.0	76%	0.1	1%	81.1	0.33%
Total	$ 1,200.6	72%	$ 991.4	87%	$ 2,192.0	9.00%

[1]Retailers primarily anchored by grocery excluded
[2]Includes Permian, South Texas & Eagle Ford, and East Texas/North LA/AR

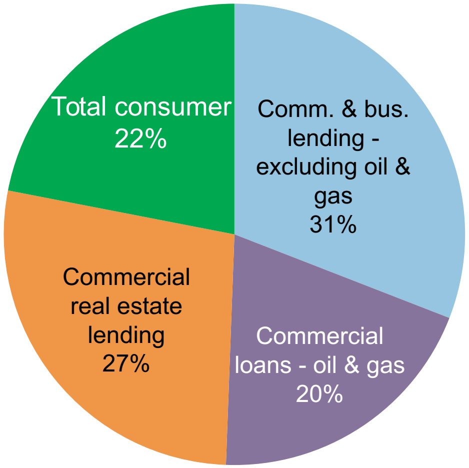
CECL UPDATE

CECL Adopted in 1Q 2020

- Allowance for credit losses on loans (ACLL) increased $171 million, or 76%, at the end of 1Q 2020 from 4Q 2019
- Assumptions based on Moody's Baseline scenarios (as of January 1st and March 27th)
- Net, after-tax, reduction in equity of $98 million
- Increase over previous CECL guidance due to additional probable TDR loans

- Reserves on oil & gas increased $64 million
- Moody's Baseline at March 27th plus additional oil & gas and key commercial loan exposures

Allowance by Portfolio



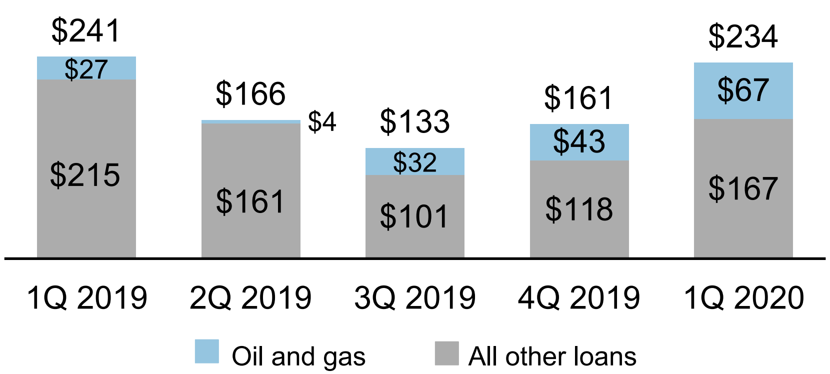
Loan category	ACLL[1] 12/31/19	Day 1 CECL Adoption[2]	Net 1Q Reserve Build[2]	ACLL[2] 3/31/2020	ACLL[2] / Loans
Commercial and business lending - excluding oil & gas	$100,422	-$8,218	$29,581	$121,785	1.35%
Commercial loans - oil & gas	13,226	55,460	8,870	77,557	16.63%
Commercial real estate lending	73,662	27,930	6,643	108,235	1.94%
Total consumer	35,968	55,975	-5,450	86,493	0.93%
Total	**$223,278**	**$131,147**	**$39,644**	**$394,069**	**1.62%**

($'s in thousands)

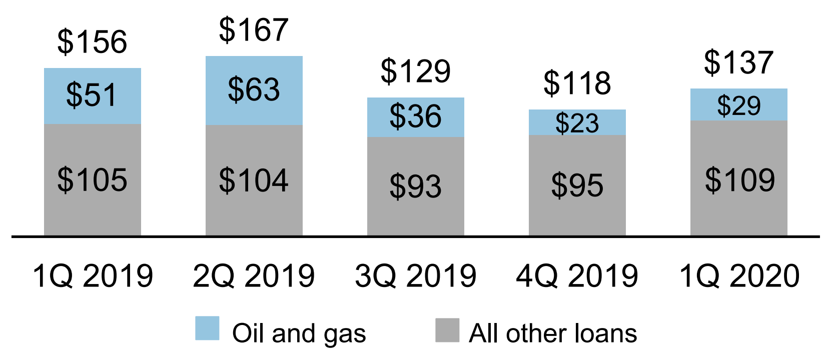
[1]Includes ALLL and the allowance for unfunded commitments.
[2]Includes funded and unfunded reserve for loans, excludes reserve for HTM securities.

CREDIT QUALITY - QUARTERLY TRENDS
($ IN MILLIONS)

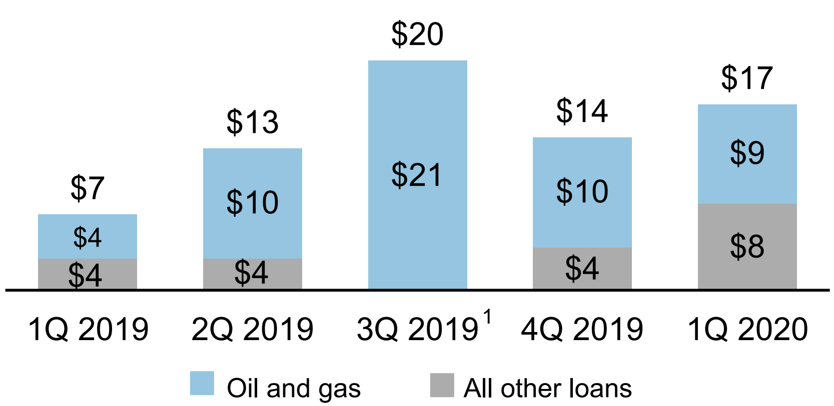
Potential Problem Loans



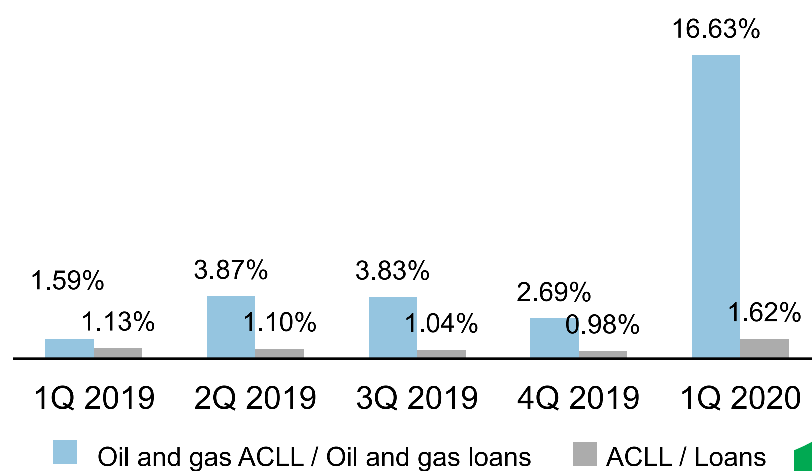
Nonaccrual Loans



Net Charge Offs



ACLL[2] to Total Loans / Oil and gas loans

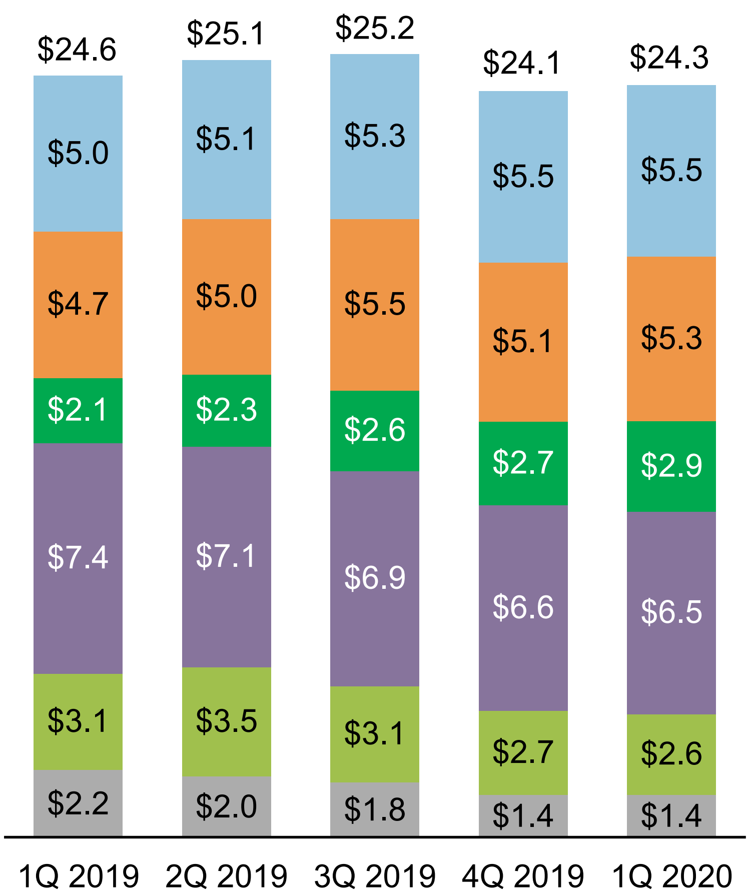


[1]3Q 2019 included a net recovery of $1 million for all other loans.
[2]ACLL figure does not include ~$61,000 for HTM securities in 1Q20.

DEPOSIT PORTFOLIO - QUARTERLY TRENDS

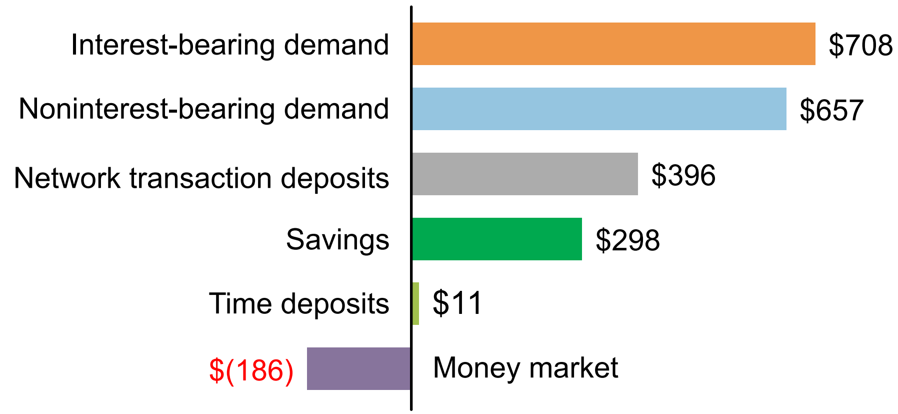
Average Quarterly Deposits

($ in billions)

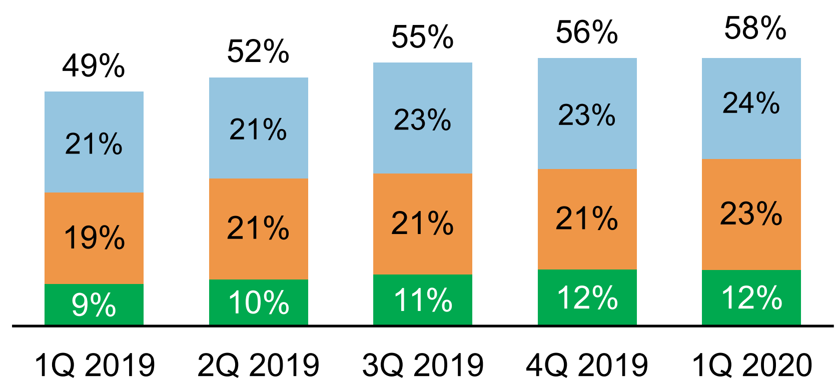


EOP Deposit Change (from 4Q19)

($ in millions)



EOP Low-cost Deposit Mix Trend



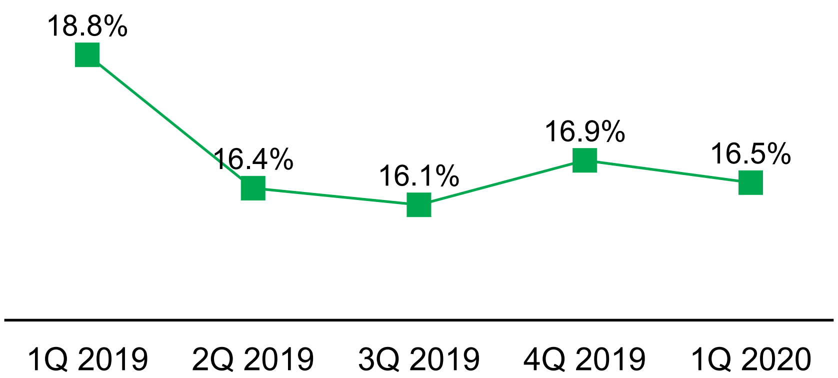
Network transaction deposits
Time deposits
Money market
Savings
Interest-bearing demand
Noninterest-bearing demand

LIQUIDITY MEASURES

Liquidity Highlights

- Liquidity remains abundant with $11 billion of funding available from FHLB Chicago, Fed funds lines, unencumbered securities and the Discount Window
- Fully fund Paycheck Protection Program loans through the Federal Reserve PPP Lending Facility
- Loan to deposit ratio of 95% is within seasonal first quarter range
- Wholesale funds / total assets ratio is stable

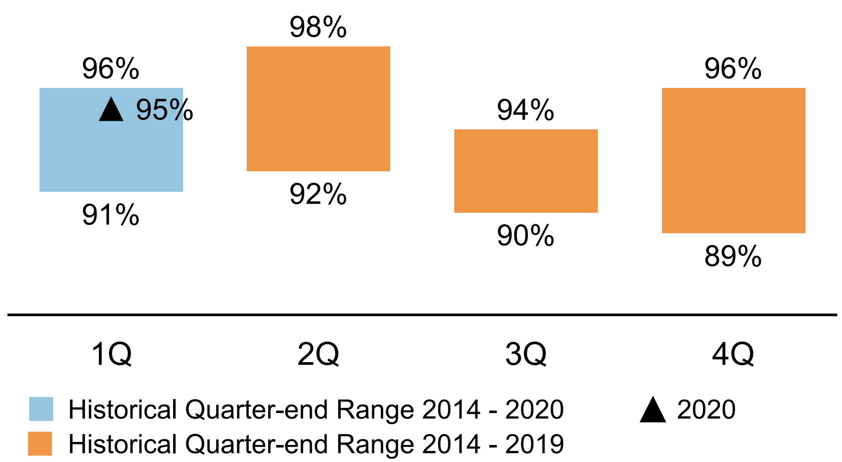
Wholesale Funds[2] / Total Assets



Funding Availability[1] *($ in billions)*

FHLB Chicago	$6.0
Fed funds lines available	$1.9
Unencumbered securities available for repurchase or sale	$1.8
Fed Discount Window	$1.3
Total	$11.0

EOP Loan to Deposit Ratio

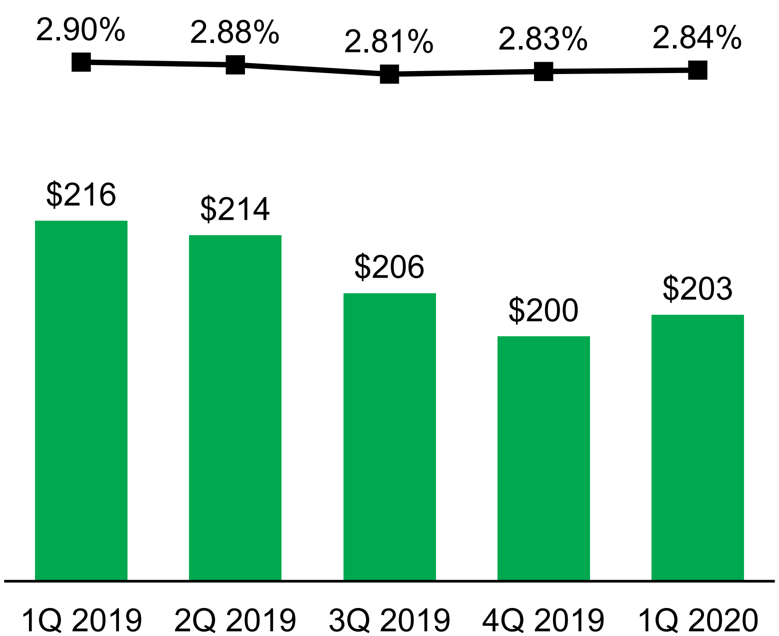


[1]As of March 31, 2020. Does not include funds available to Associated through the Paycheck Protection Program Lending Facility.
[2]Wholesale funds includes FHLB advances, net Fed funds, institutional money markets, brokered CDs, commercial paper, senior debt, sub-debt and other long-term funding.

NET INTEREST INCOME AND MARGIN TRENDS

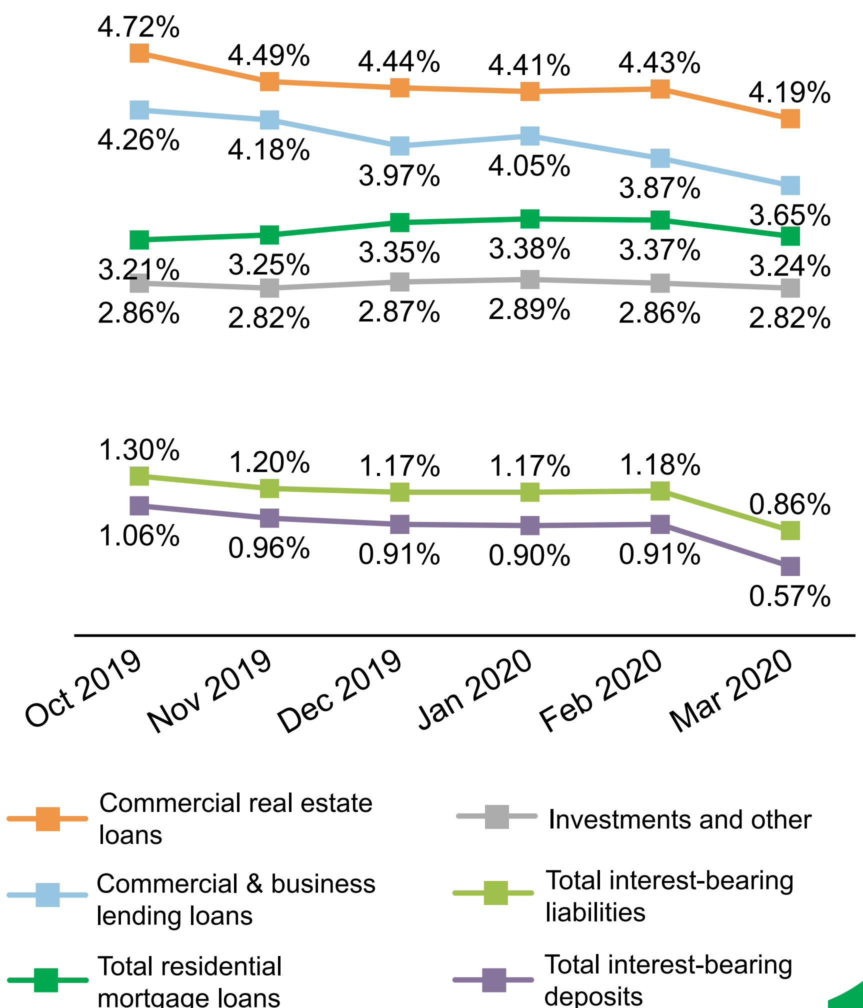
Net Interest Income & Net Interest Margin

($ in millions)



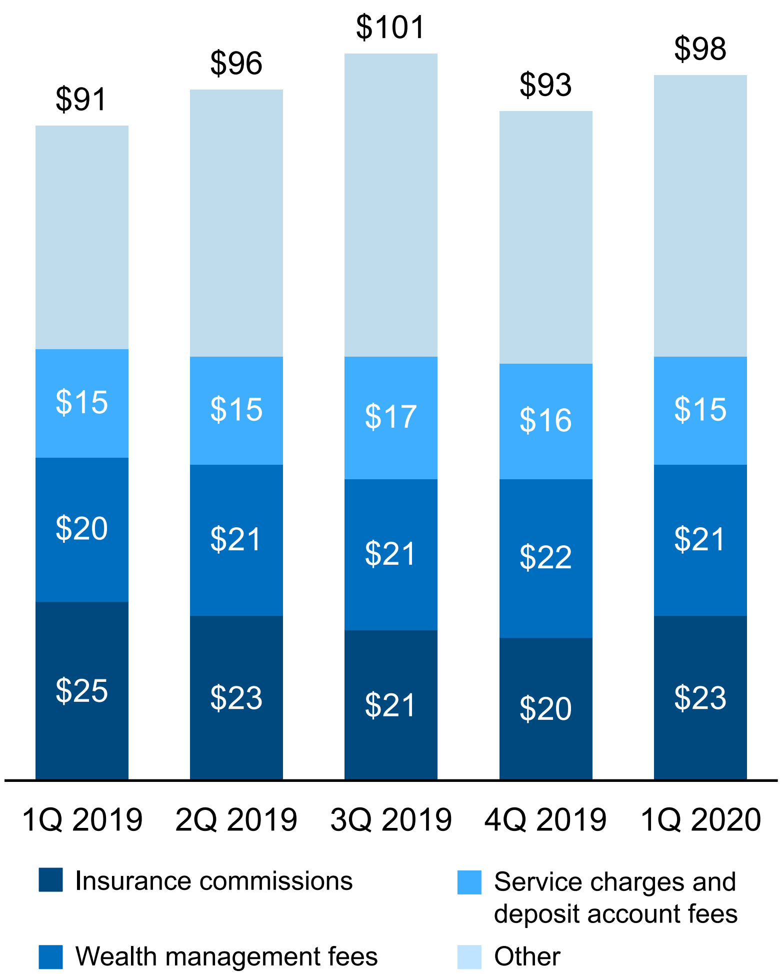
- ***March NIM increased to 2.89%*** *driven by higher commercial loan volumes, LIBOR - Fed funds expansion and interest-bearing deposit cost reductions*

Average Monthly Yields

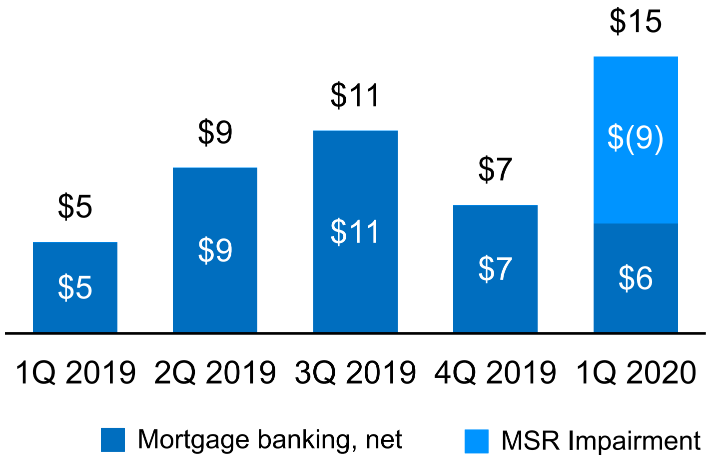


NONINTEREST INCOME - QUARTERLY TRENDS
($ IN MILLIONS)

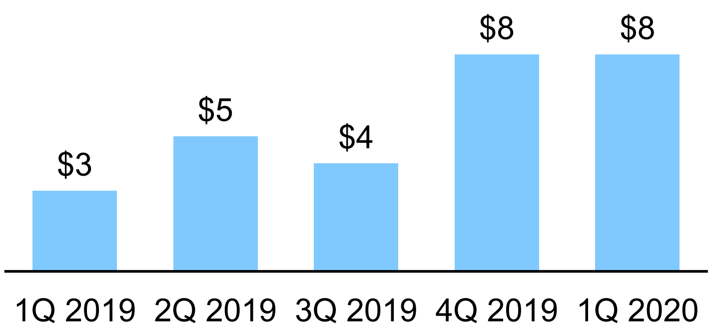
Noninterest Income



Gross Mortgage Banking Income



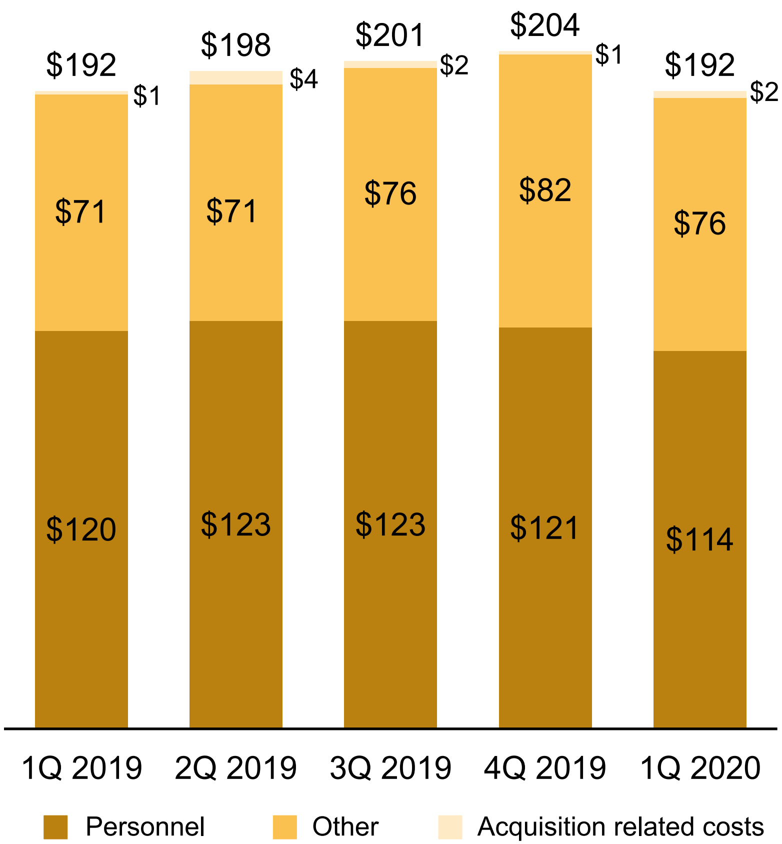
Capital Markets Fees



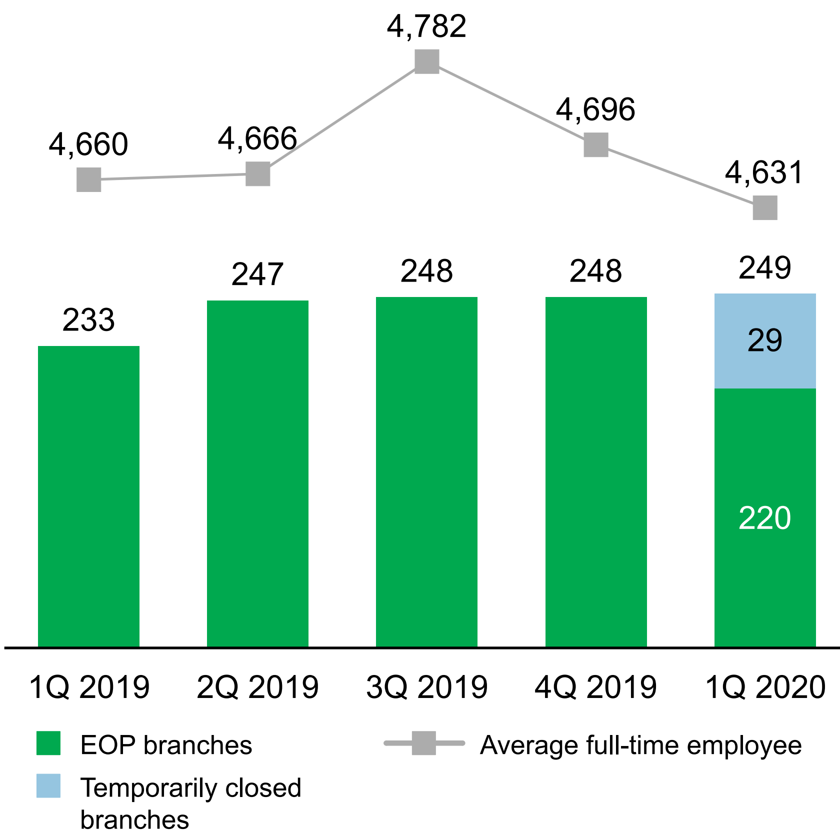
NONINTEREST EXPENSE TRENDS

($ IN MILLIONS)

Noninterest Expense



EOP Branch Count and Average FTE[1]

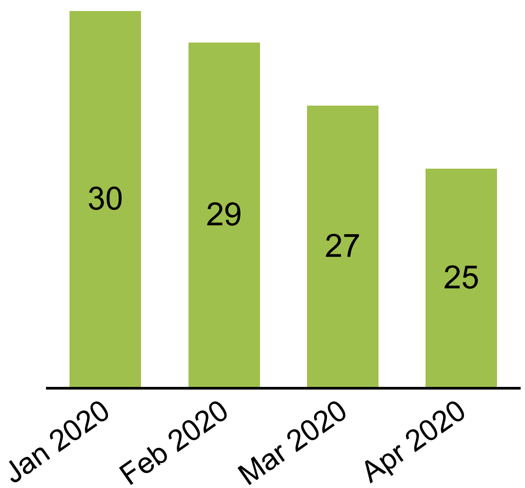


[1]Includes Huntington acquired branches in 2Q 2019 and full-quarter effect of additional staffing requirements from the Huntington acquisition in 3Q 2019.

CUSTOMER ACTIVITY UPDATE

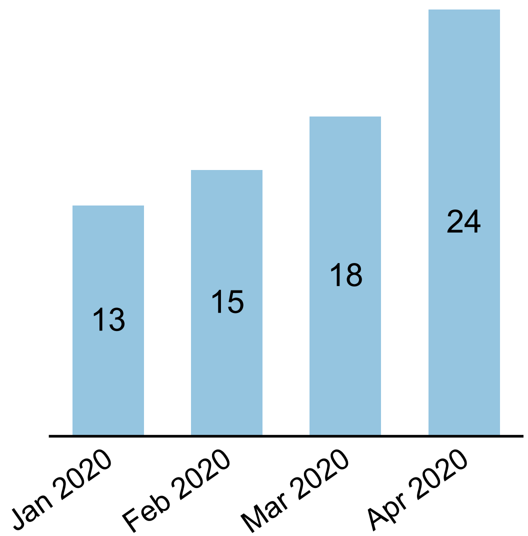
Average Daily Branch Activity[1]

*Our mid-April **branch activity declined 17%** from January...*



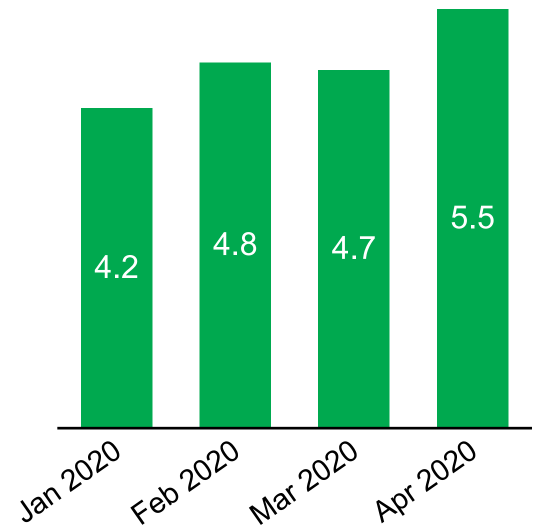
Average Monthly Mobile Banking Sessions Per User[2]

*...as our customers **ramped up mobile sessions by 86%...***



Average Daily Customer Care Calls[3]

*...and **call volume grew 32%** as we increasingly interacted with customers through non-branch channels*



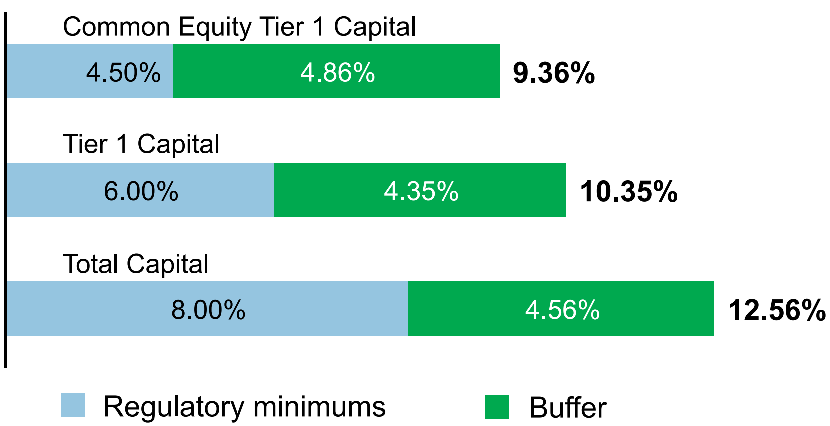
[1]Average daily branch transactions displayed in thousands; April 2020 data is through April 12, 2020.
[2]Average monthly sessions per mobile consumer user; April 2020 data is through April 12, 2020.
[3]Average daily call center calls displayed in thousands; February volume was elevated due to the Staunton acquisition; April 2020 data is through April 14, 2020.

STRONG CAPITAL POSITION

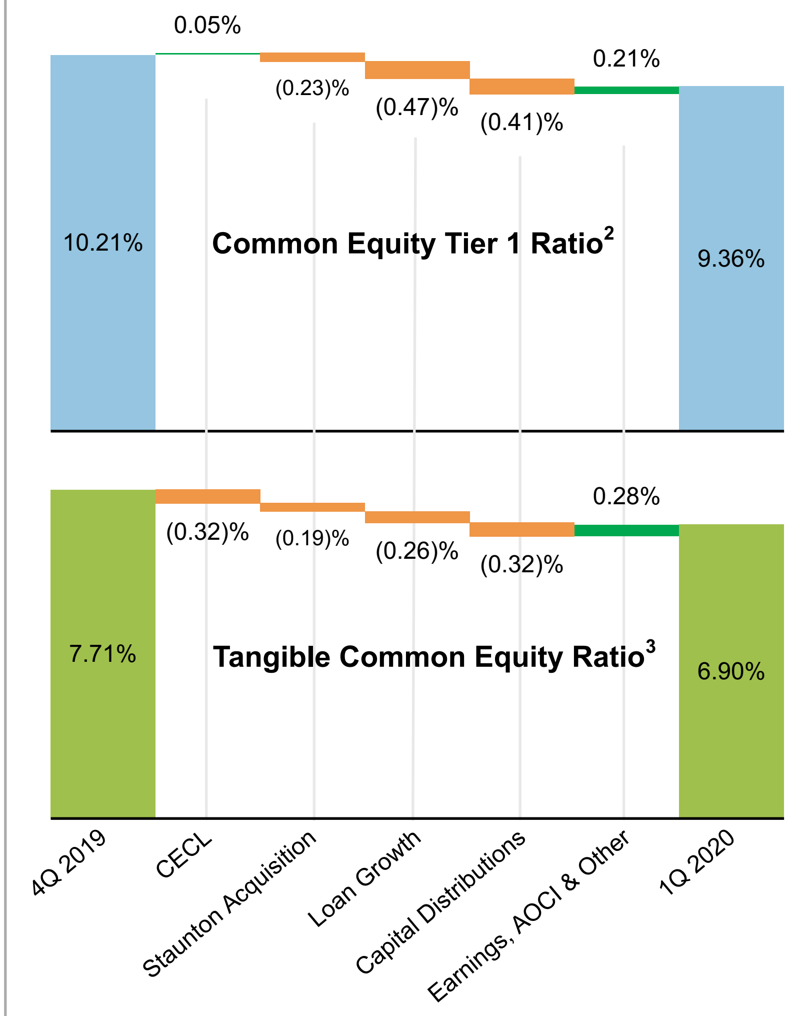
Highlights

- Strong asset growth and the First Staunton acquisition moderated capital ratios during 1Q 2020
- Election to utilize modified CECL transition mitigated CECL impact to regulatory capital; CECL negatively impacted TCE ratio
- Expect CET1 ratio to grow over balance of 2020
- Regulatory capital ratios not expected to be impacted by PPP

Regulatory Capital Ratios as of 3/31/20



Capital Ratio Walkdowns[1]



[1]Capital distributions include share repurchases and common stock dividends.
[2]CET1 CECL adoption impact includes modified transition amount.
[3]Tangible common equity / tangible assets. This is a non-GAAP financial measure. See Appendix for a reconciliation of non-GAAP financial measures to GAAP financial measures.

2020 OUTLOOK

We are withdrawing our prior guidance due to extraordinary economic uncertainty.
We expect to update our guidance as conditions become more clear.

Balance Sheet Management

- Maintain loan to deposit ratio under 100%, excluding PPP
- Target investments / total assets ratio of 15%, excluding PPP

Expense Management

- Anticipate noninterest expense run rate to be flat from Q1 through the remainder of 2020
- Effective tax rate of 18% to 20%

Fee Businesses

- Mortgage banking expected to remain solid due to elevated refinancing
- Anticipate lower service charges and other fee-based revenue due to our COVID-19 Relief Program
- Expect lower wealth management fees resulting from weak market conditions for assets under management

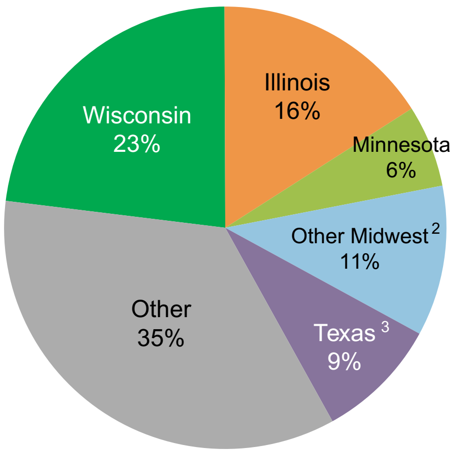
Capital Management

- Share repurchase program will remain suspended until economic conditions improve and stabilize

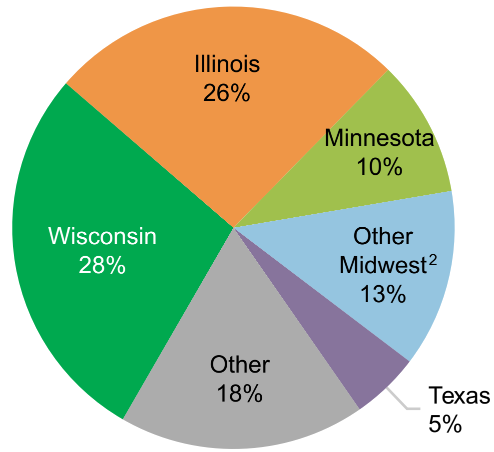
APPENDIX

LOAN STRATIFICATION OUTSTANDINGS AS OF MARCH 31, 2020

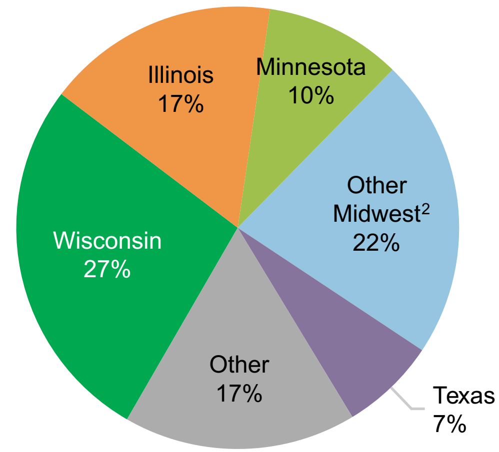
C&BL by Geography
$9.5 billion



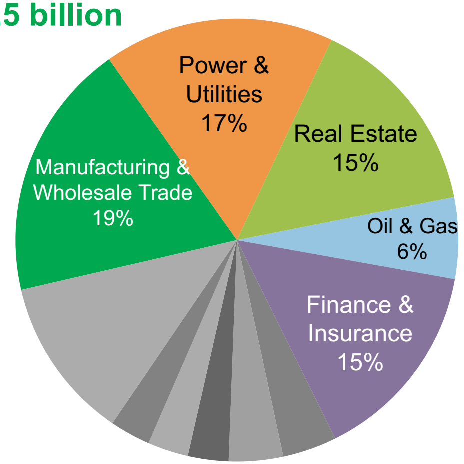
Total Loans[1]



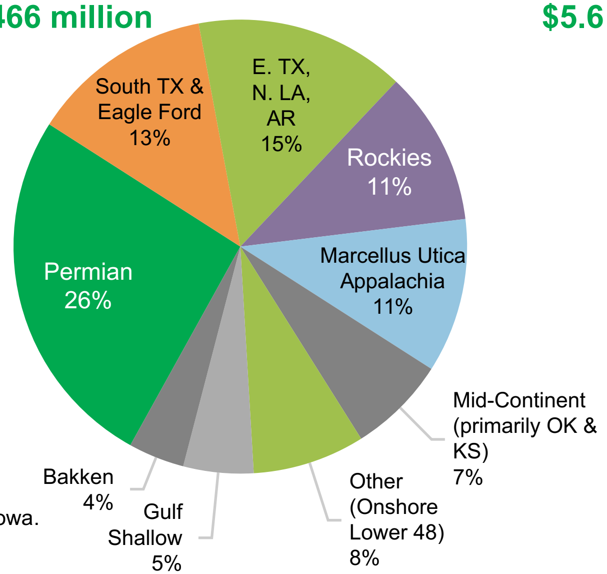
CRE by Geography
$5.6 billion



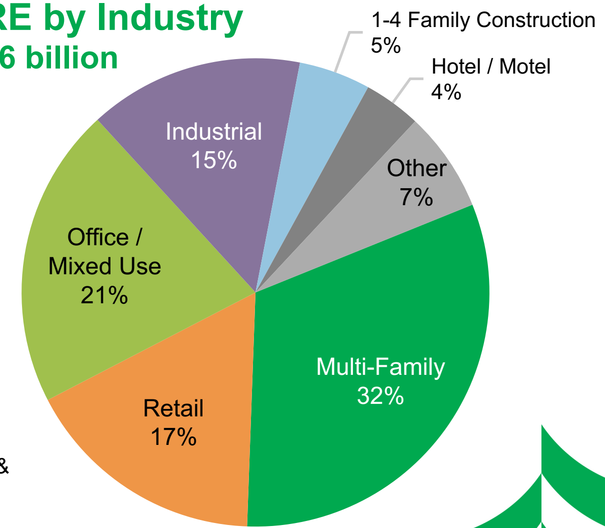
C&BL by Industry
$9.5 billion



Oil and Gas Lending[4]
$466 million



CRE by Industry
$5.6 billion



[1]Excludes $347 million Other consumer portfolio.
[2]Other Midwest includes Missouri, Indiana, Ohio, Michigan and Iowa.
[3]Principally reflects the oil and gas portfolio.
[4]Chart based on commitments of $714 million.

RECONCILIATION AND DEFINITIONS OF NON-GAAP ITEMS

($ in millions, except per share data)

Acquisition Related Costs	1Q 2020	1Q 2020 per share data[2]
GAAP earnings	$ 42	$ 0.27
Contract terminations and conversion costs	1	
All other acquisition related costs	1	
Total acquisition related costs	$ 2	
Less additional tax expense	$ —	
Earnings, excluding acquisition related costs[1]	$ 43	$ 0.28

Tangible Common Equity and Tangible Assets Reconciliation[3]	1Q 2020	4Q 2019
Common equity	$ 3,534	$ 3,665
Goodwill and other intangible assets, net	(1,284)	(1,265)
Tangible common equity	$ 2,250	$ 2,401
Total assets	$ 33,908	$ 32,386
Goodwill and other intangible assets, net	(1,284)	(1,265)
Tangible assets	$ 32,624	$ 31,122

[1]This is a non-GAAP financial measure. Management believes these measures are meaningful because they reflect adjustments commonly made by management, investors, regulators, and analysts to evaluate the adequacy of earnings per common share and provide greater understanding of ongoing operations and enhanced comparability of results with prior periods.
[2]Diluted earnings and per share data presented after-tax.
[3]The ratio tangible common equity to tangible assets excludes goodwill and other intangible assets, net. This financial measure has been included as it is considered to be a critical metric with which to analyze and evaluate financial condition and capital strength.