



November 4, 2019

TCF Financial Corporation

Investor Presentation - November 2019

Cautionary Statements for the Purposes of Safe Harbor Provisions of the Securities Litigation Reform Act



Any statements contained in this presentation regarding the outlook for the Corporation's businesses and their respective markets, such as projections of future performance, targets, guidance, statements of the Corporation's plans and objectives, forecasts of market trends and other matters are forward-looking statements based on the Corporation's assumptions and beliefs. Such statements may be identified by such words or phrases as "will likely result," "are expected to," "will continue," "outlook," "will benefit," "is anticipated," "estimate," "project," "management believes" or similar expressions. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those discussed in such statements, and no assurance can be given that the results in any forward-looking statement will be achieved. For these statements, TCF claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Any forward-looking statement speaks only as of the date on which it is made, and we disclaim any obligation to subsequently revise any forward-looking statement to reflect events or circumstances after such date or to reflect the occurrence of anticipated or unanticipated events.

This presentation also contains forward-looking statements regarding TCF's outlook or expectations with respect to the merger and integration with Chemical Financial Corporation ("Chemical"). Examples of forward-looking statements include, but are not limited to, statements regarding outlook and expectations with respect to strategic and financial benefits of the merger, including the expected impact of the transaction on TCF's future financial performance (including anticipated accretion to earnings per share, the tangible book value earn-back period and other operating and return metrics), the expected costs to be incurred in connection with the merger, and operational aspects of post-merger integration.

Certain factors could cause the Corporation's future results to differ materially from those expressed or implied in any forward-looking statements contained herein. These factors include the factors discussed in Part I, Item 1A of the Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 under the heading "Risk Factors" or otherwise disclosed in documents filed or furnished by the Corporation with or to the SEC after the filing of such Annual Report on Form 10-K, the factors discussed below, and any other cautionary statements, written or oral, which may be made or referred to in connection with any such forward-looking statements. Since it is not possible to foresee all such factors, these factors should not be considered as complete or exhaustive: deterioration in general economic, political and banking industry conditions; cyber-security breaches, hacking, denial of service, security breaches, loss or theft of information, or other cyber-attacks that disrupt TCF's business operations or damage its reputation; fluctuation in interest rates that result in decreases in the value of assets or a mismatch between yields earned on TCF's interest-earning assets and the rates paid on its deposits and borrowings; lack of access to liquidity; inability to grow deposits, increase earnings and revenue, manage operating expenses, or pay and receive dividends; adverse effects related to competition from traditional competitors, non-bank providers of financial services and new technologies; soundness of other financial institutions and other counterparty risk, including the risk of default, operational disruptions, security breaches, or diminished availability of counterparties who satisfy our credit quality requirements; adverse developments affecting TCF's branches, including supermarket branches; risks related to developing new products, markets or lines of business; adverse changes in monetary, fiscal or tax policies; heightened consumer protection, supervisory or regulatory practices or requirements; deficiencies in TCF's compliance programs or risk mitigation frameworks; the effect of any negative publicity or reputational damage; technological or operational difficulties; failure to keep pace with technological change, including with respect to customer demands or system upgrades; risks related to TCF's loan sales activity; dependence on accurate and complete information from customers and counterparties; the failure to attract and retain key employees; inability to successfully execute on TCF's growth strategy through acquisitions or expanding existing business relationships; changes in accounting standards or interpretations of existing standards; adverse federal, state or foreign tax assessments; litigation or government enforcement actions; ineffective internal controls; and the effects of man-made and natural disasters, any of which may negatively affect our operations and/or our customers.

Two Becoming One to Create a Premier Midwest Bank



Chemical Financial Corporation



The New TCF

A premier Midwest bank with the size, scale and product offerings to compete and win in our markets in order to accelerate value creation for shareholders, customers, employees and communities



TCF Financial Corporation

STRENGTHS



Sizable commercial customer base



Robust Michigan presence



Scalable small business banking program



Trusted wealth management platform



STRENGTHS



Large retail customer base



Broad Midwest urban footprint



Strong digital experience



Specialty lending expertise

**2019
MERGER OF
EQUALS**

1917
Founded as Chemical State Savings Bank

2001
Acquired Shoreline Financial Corporation

2010
Acquired O.A.K. Financial Corp

2015
Acquired Lake Michigan Financial Corporation

2016
Talmer / Chemical Merger of Equals

2008
Launched Inventory Finance

1999
Launched TCF Leasing, Inc.

1997
Acquired Standard Financial

1995
Acquired Great Lakes Bancorp

1923
Founded as Twin City Building & Loan Assoc.

A Premier Midwest Commercial Bank



Who We Are

“As we build the New TCF, we are bringing together the **best of both banks** and will leverage each one’s unique and **complementary strengths**. Through our partnership, we will **accelerate value creation** for our shareholders and **deliver full-service solutions** for our broader

customer base. With our new size and scale, our vision is not to simply survive in an evolving banking landscape, but to **thrive, compete and win.**”

“We are better and stronger together as the new TCF.”

- Craig R. Dahl, TCF President and CEO

TCF at a Glance¹

\$46B

total assets

29th

largest publicly-traded U.S. based bank holding company³

\$6.1B

market cap²

Top 10

deposit market share in the Midwest⁴

10.9%

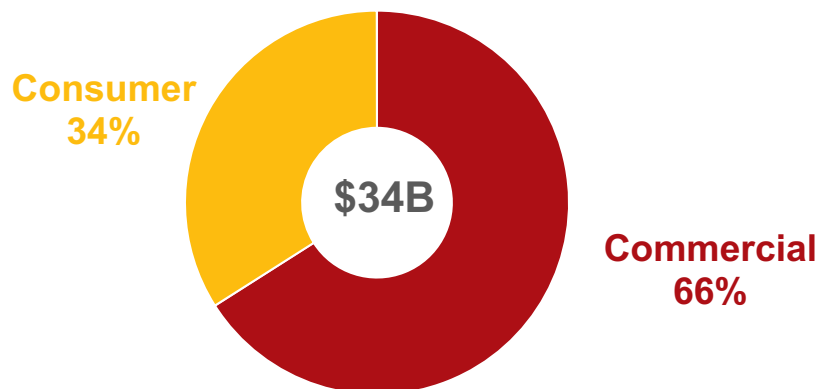
CET 1 ratio

Financial Targets
(Post-MOE Cost Savings)⁵

Top Quartile
ROATCE

Below
Peer Median
Adjusted efficiency ratio

High Quality Loan and Lease Portfolio¹



Strong Midwest-focused Footprint



Core banking footprint in key urban MSAs in the Midwest and a broad statewide footprint in Michigan

1.5M

retail customers with branches primarily located in MI, IL and MN⁶

¹ Data as of September 30, 2019

² Based on TCF's closing stock price on October 31, 2019

^{3,4} See "Source References" slide

⁵ Financial targets compared to TCF Peer Group which includes KEY, RF, MTB, HBAN, CMA, ZION, PBCT, CIT, SNV, EWBC, FHN, FCNC.A, FNB, WTFC, ASB, BKU, VLY and IBKC. ROATCE and adjusted efficiency ratio are non-GAAP financial measures. A reconciliation of the ROATCE and adjusted efficiency ratio targets to the most directly comparable GAAP measure is not provided because the Corporation is unable to provide such reconciliation without unreasonable effort, however, it is expected to be consistent with historical non-GAAP reconciliation included in the appendix.

⁶ Additional branch locations in AZ, CO, IN, OH, SD and WI

Experienced Management Team



Large Bank Experience

- Seasoned management team with deep banking expertise, including large bank experience
- Executive and senior leadership team represents a broad cross-section of experience across leading Midwest and other national banking institutions



Entrepreneurial Backgrounds

- Experienced in organically growing & operating businesses:
 - **Capital Solutions** *built \$5B business organically*
 - **Inventory Finance** *built \$3B business organically*
 - **Commercial Banking Expansion in Detroit, Grand Rapids and Cleveland** *Lift out of key commercial leaders in market and growth of commercial portfolios.*



Ability to Recruit Talent

- Strong bench strength of talent as a result of bringing together the best of both organizations
- Size and scale of the current platform supports continued recruitment of top banking talent across Midwest markets
- Opportunity to add bankers from larger regional banks who can lead a build-out/expansion of a market or product vertical

A Full-scale Product Offering Across Commercial and Consumer Client Base



2020 Strategic Priorities

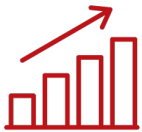


Focus on driving improved return on average tangible common equity and efficiency through key strategic priorities



Deliver on Merger Cost Savings

Drive organizational efficiencies by executing on \$180 million of merger-related cost savings; unique opportunity for TCF to drive relative growth in earnings vs. peers over the next 12-18 months



Continue to Grow Organically & Leverage the Best of Both Banks

Build on the positive momentum generated by Legacy TCF and Chemical by leveraging complementary products in adjacent markets to drive future growth



Maintain Strong Risk and Credit Culture

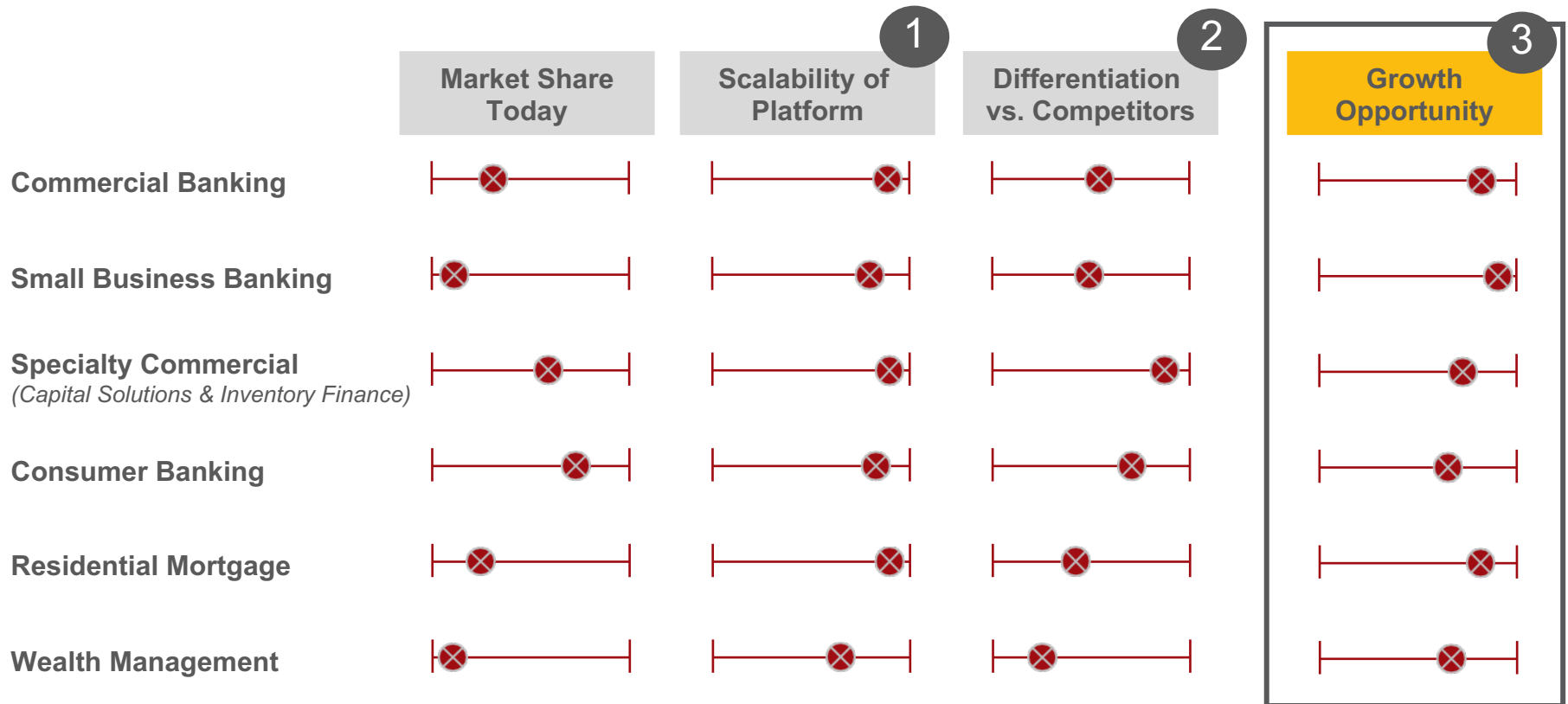
Apply scalable risk management framework across the larger organization to maintain credit, liquidity and capital discipline



Execute & Complete Integration Program

Integrate systems, branding and culture as One TCF and provide a consistent customer experience by the fourth quarter of 2020

Growth Opportunities Across All Businesses



Low High

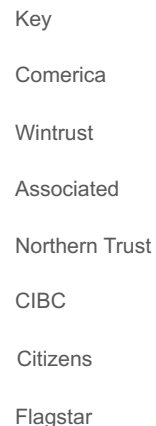
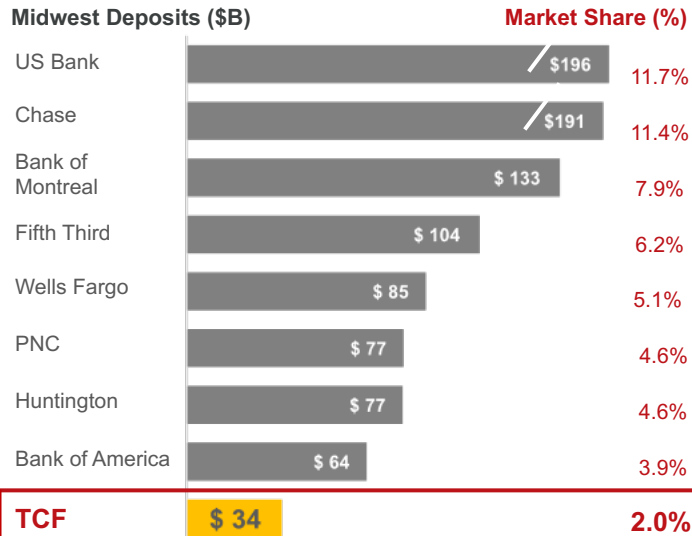


- 1 Highly scalable set of businesses
- 2 Select differentiated product sets enabling us to compete and win
- 3 Scalability and product differentiation create growth opportunities

Deposit Growth Opportunities Across Midwest Footprint



9th Largest Deposit Market Share in the Midwest¹

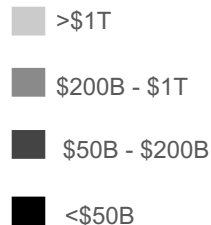


Growth Opportunities Across TCF's Primary Markets

	TCF Deposits (\$B)	TCF Deposits Rank	Deposit Market Share
Greater Michigan	\$10.5	2	12.1 %
Detroit, MI	7.7	7	5.5
Chicago, IL	6.7	13	1.5
Minneapolis-St. Paul, MN	6.7	3	3.5
Denver, CO	0.9	15	1.0
Youngstown, OH	0.8	7	7.1
Milwaukee, WI	0.6	17	1.0
Cleveland, OH	0.5	16	0.7
TCF's Primary Markets	\$34.4	8	3.1

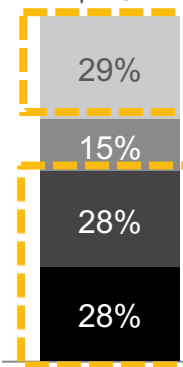
Over 50% of deposits held across TCF's Primary Midwest Markets are held by banks with less than \$50B in total assets²

Deposits held by banks with assets:



TCF Opportunities

\$1.0T



Deposits in TCF's Primary Midwest Markets²

Opportunities for TCF:

Compete with local and regional presence against lethargy of big banks

Utilize enhanced scale to compete against large regional banks

Leverage more robust digital banking offerings to compete against smaller community banks

^{1,2} See "Source References" slide

Attractive Midwest Markets



Greater Michigan

\$87B

total market deposits¹

6M

total population¹

\$282B

total GDP²

#1 largest growth in prime working age employment in the U.S.³

#12 Michigan GDP growth from 2009-2018²

Detroit

\$141B

total market deposits¹

4M

total population¹

\$261B

total GDP²

#5 for innovation in the U.S.⁴

#3 in the U.S. for attracting millennials⁶



Twin Cities

\$190B

total market deposits¹

4M

total population¹

\$260B

total GDP²

#1 for Fortune 500 companies per capita⁵

#3 best metro area to start a business⁵

30% faster projected population growth vs. national avg.⁸



Chicago

\$462B

total market deposits¹

10M

total population¹

\$680B

total GDP²

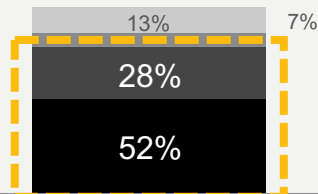
#5 largest MSA in the U.S.⁷

#1 most diversified economy in the U.S.⁷

#1 for corporate investments in the U.S.⁷

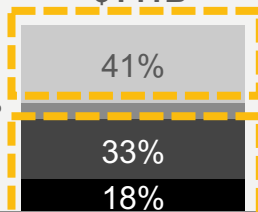
Total Market Deposits by Bank Asset Size¹

\$87B



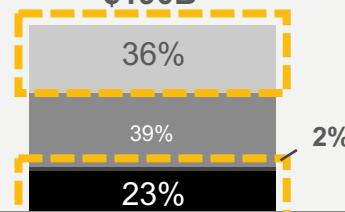
7%

\$141B



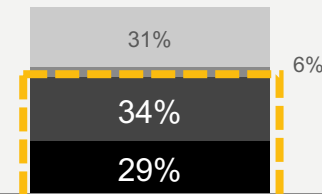
8%

\$190B



2%

\$462B



6%

Deposits held by banks with assets:

>\$1T

\$50B - \$200B

\$200B - \$1T

<\$50B









TCF Opportunities

¹⁻⁸ See "Source References" slide

Business Synergy Opportunities



Key Business Organic Growth Opportunities

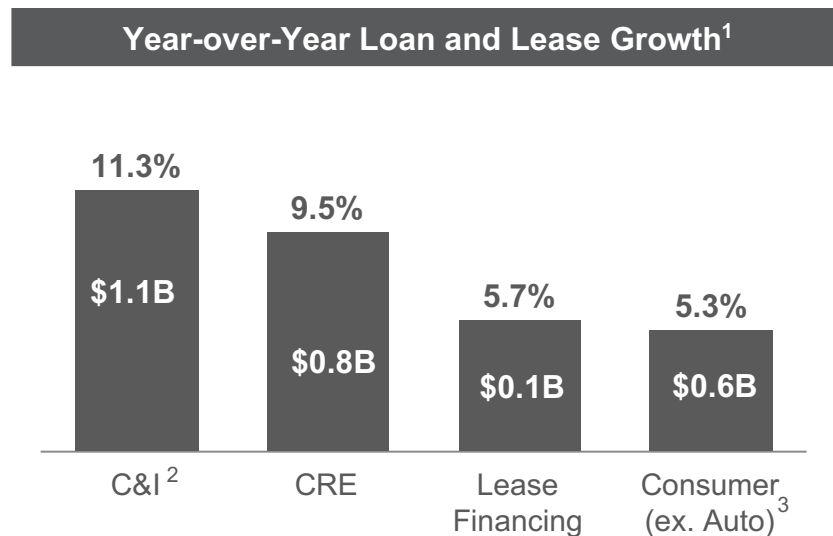
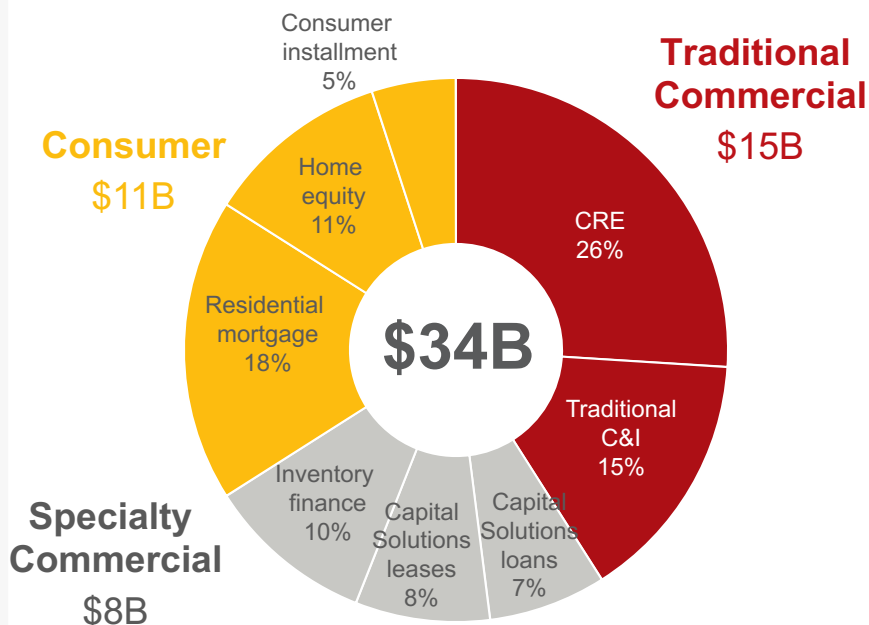
Leasing Products Across Commercial Client Base	More Robust Mortgage Platform	Expanded Product Set to Inventory Finance Dealers	Chemical Commercial Platform to Broader Footprint
<ul style="list-style-type: none"> No legacy Chemical leasing product for commercial clients Opportunity to leverage TCF's leasing products across Chemical's robust commercial client base Systems and back office support currently in place 	<ul style="list-style-type: none"> Deploy mortgage banking platform across larger retail customer base Opportunity to grow market share Consolidating to one origination platform #4 mortgage originator in MI in 2018¹ ~\$900M of mortgage originations in IL, MN, OH, WI in 2018¹ 	<ul style="list-style-type: none"> Offer broader commercial product set directly to inventory finance dealers in footprint Potential products include commercial deposits, treasury management, owner-occupied CRE, merchant processing, wealth management 	<ul style="list-style-type: none"> Market opportunities include Chicago, Minneapolis, Milwaukee, Denver Similar expansion to Cleveland in 2013 Additionally expand Business Banking platform to Legacy TCF markets and leverage brand and locations
>67,000 Commercial clients	1.5M Retail customers \$1.6B Mortgage originations in MI in 2018 ¹	>850 Inventory Finance dealers in MI and OH	2013 Legacy Chemical launches in OH ~\$1B Commercial commitments in OH
Ease to Action			
 Timing: Immediate  Action: Easy	 Timing: 1-2 Quarters  Action: Moderate	 Timing: 1-2 Quarters  Action: Moderate	 Timing: Over 4 Quarters  Action: Hard

¹ See "Source References" slide

Well-diversified Loan and Lease Portfolio



Loan portfolio comprised primarily of commercial-based portfolios (66% of total loans) with upside growth potential driven by multiple lending origination businesses



Traditional Commercial

Traditional C&I and commercial real estate lending primarily within the footprint



Consumer

Residential mortgage, home equity and consumer installment loans



Specialty Commercial

Capital Solutions provides loan and lease financing across the U.S. in select equipment sectors based on management expertise

Inventory Finance leverages exclusive manufacturer agreements to provide floorplan financing across the U.S. and Canada

¹ Based on changes from combined TCF and Chemical reported financials

² Includes traditional C&I, Capital Solutions loans and inventory finance

³ Excludes Legacy TCF auto finance balances of \$2.3B at 3Q18 and \$0.0B at 3Q19 (total combined loan and lease balances of \$33.2B at 3Q18 and \$33.5B at 3Q19)

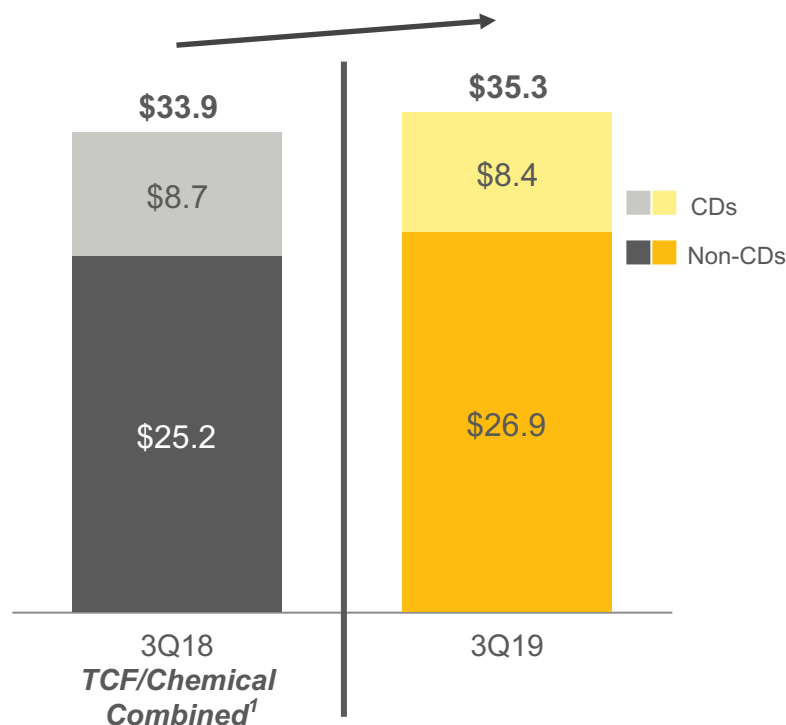
Preferred Deposit Composition



Focus on funding loan and lease growth through a well-diversified deposit mix with opportunities for organic growth in both commercial and consumer deposit offerings

Deposit Growth (\$ Billions)

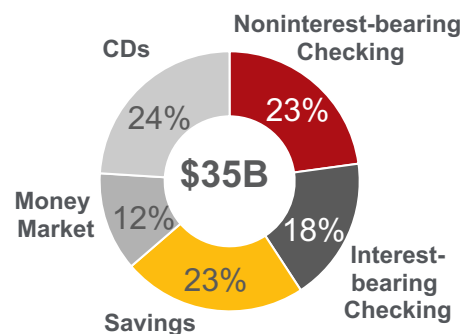
YoY Deposit Growth of 4% / non-CD growth of 7%



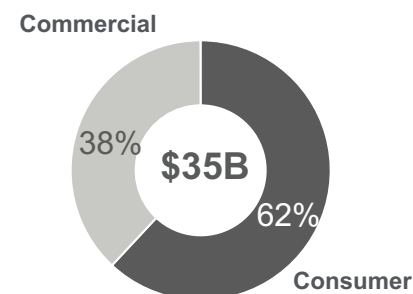
\$1.7B of combined non-CD growth, or 7%, YoY

Well-diversified Deposit Mix by Type and Product

by type:



by product:



3Q19 Cost of Deposits: 0.94%²

Opportunities for Organic Growth



Commercial Deposits

- Opportunities to increase market share across all markets
- Leverage Chemical commercial deposit and treasury management system and sales process



Consumer Deposits

- Opportunities to increase market share across all markets
- Leverage investments in Legacy TCF digital channels across the full deposit base

¹ Combined TCF and Chemical reported financials

² Annualized

Technology Strategy that Brings Together the Best of Both Banks



Bringing together the complementary IT investments of both banks will drive efficiencies, enhance the customer experience and position TCF for success



Deepen Customer Relationships Through Innovation

- Enhance person-to-person interactions with digital integrations
- Expand technology offerings (*AI, voice, location experiences, etc.*)
- Leverage digital identification verification to service customers differently



Offer Exceptional Customer Experiences

- Deepen personalization capabilities
- Incorporate emerging customer experience trends
- Design based on customer behaviors, taking segmentation to the next level
- Remove friction points



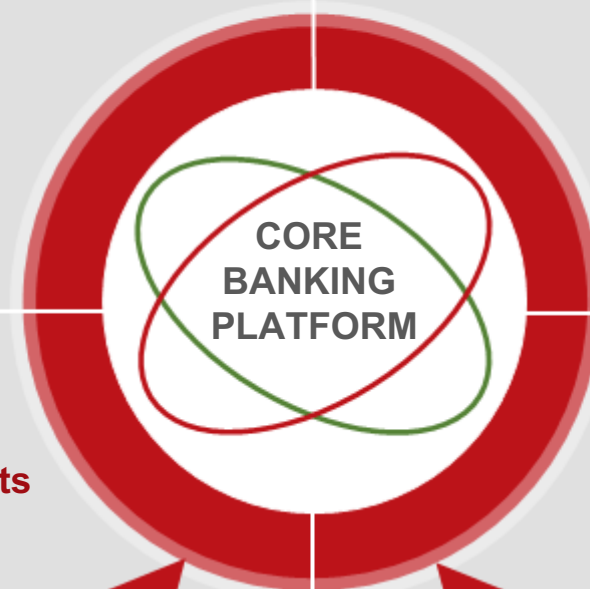
Utilize Digital To Test New Products And Services

- Launch with MVP mindset; integrate and learn
- Digital only product offerings and markets
- Leverage additional Fin Tech partnerships



Omni-Channel Experiences

- Expand self-service capabilities
- Grow digital product offerings across all lines of business
- Increase cross channel awareness



Legacy Chemical

Leverage prior investments in core banking platform

CORE SYSTEM

One, consolidated core platform
Streamlined to drive efficiencies
Singular set of centralized data



Legacy TCF

Leverage prior investments in customer-facing digital technology platform

Merger of Equals Integration Remains on Track



TCF Financial Corporation and Chemical Financial Corporation closed merger-of-equals (MOE) on August 1, 2019 creating a **\$46 billion¹** premier Midwest commercial bank

Recent MOE Actions

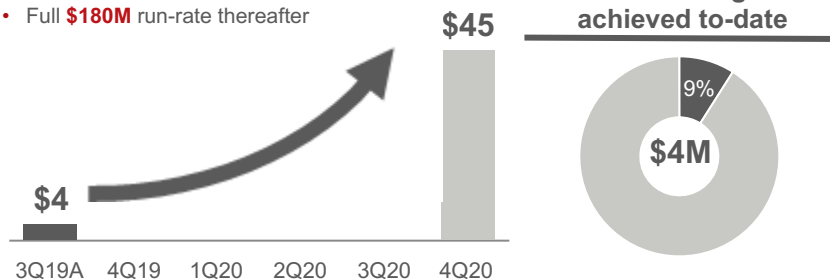
- **Announced board of directors** and implemented governance and committee structures
- Developed consolidated internal policies including credit underwriting, risk appetite statement, BSA policies and concentration limits
- Began **cultural integration activities** including town halls and other employee-focused activities
- Named **over 90%** of functional leadership roles
- Prepared for first wave of **system conversions**
- Selected and finalized contract for the **core banking platform**
- **Optimized the balance sheet** through the completion of several repositioning actions
- Continued to **serve customer base with limited disruption**
- Initiated termination of legacy pension plans

Other Business Actions

- Implemented **branch rationalization initiatives**
 - Announced closing of 4 out-of-market branches in Indiana and Ohio (3Q19)
 - Announced closing of 17 in-store branches in Minnesota and Illinois as part of ongoing branch profitability analysis (4Q19)

Cost Savings Timing Expectations

- **\$75M** of annualized cost savings by 3Q20
- Full **\$180M** run-rate thereafter



\$45mm in 4Q20 = \$180mm annualized

Upcoming Priorities

- Implement a combined benefits plan effective as of January 1, 2020 with reduced cost
- Consolidation onto a single mortgage lending platform
- Various waves of system roll-outs prior to final systems conversion in 3Q20
- Continuation of staffing optimizations
- Launch business synergy initiatives

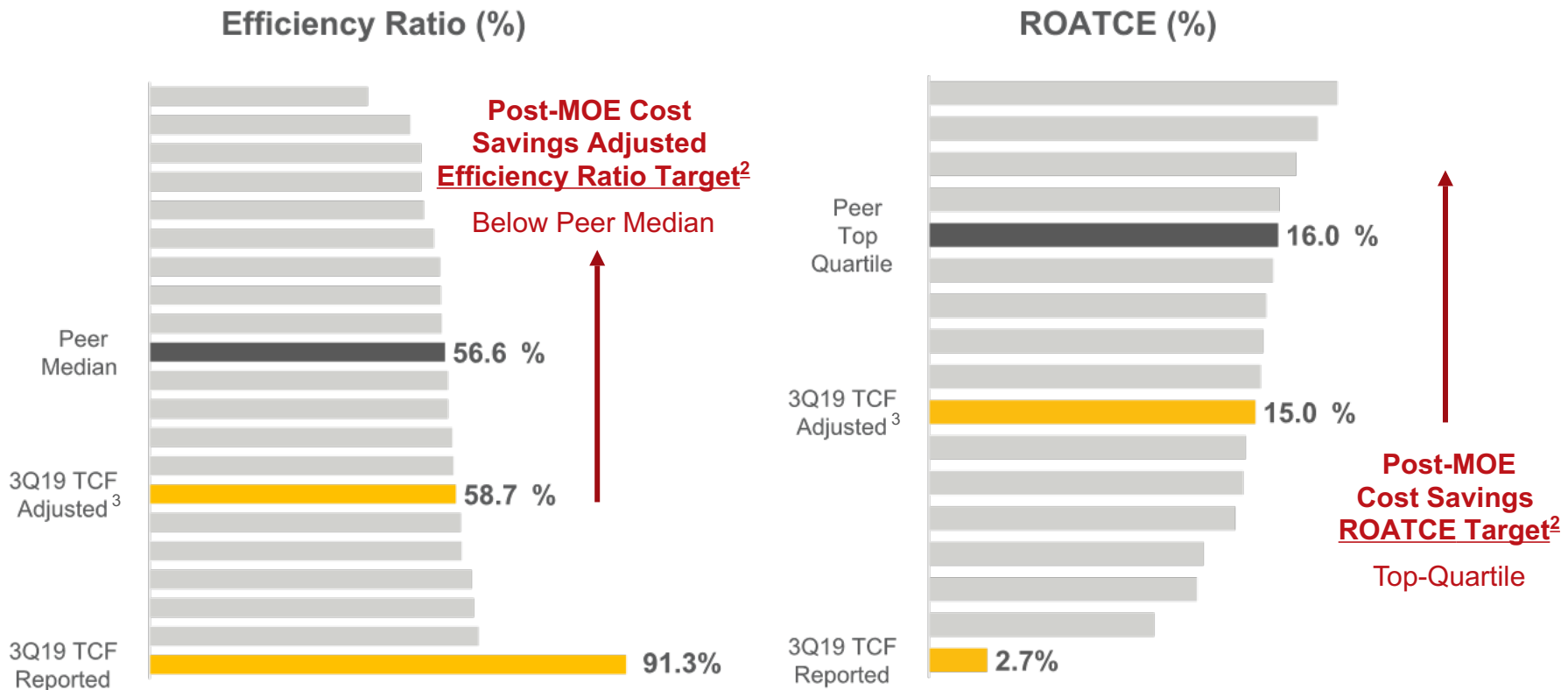
¹ As of September 30, 2019

Driving Shareholder Value Through Strong Returns and Efficiencies



We believe ROATCE and Efficiency Ratio are aligned with shareholder value creation

Targeting Strong Performance Relative to Peer Banks¹



¹ See "Source References" slide

² Financial targets compared to TCF Peer Group which includes KEY, RF, MTB, HBAN, CMA, ZION, PBCT, CIT, SNV, EWBC, FHN, FCNC.A, FNB, WTFC, ASB, BKU, VLY and IBKC. ROATCE and adjusted efficiency ratio are non-GAAP financial measures. A reconciliation of the ROATCE and adjusted efficiency ratio targets to the most directly comparable GAAP measure is not provided because the Corporation is unable to provide such reconciliation without unreasonable effort, however, it is expected to be consistent with historical non-GAAP reconciliation included in the appendix.

³ Denotes a non-GAAP financial measure; see Appendix for "Non-GAAP Reconciliation" slides

Strong Credit and Risk Culture



Track record of strong credit quality with a scalable risk management framework

Net Charge-offs (3Q19)

\$29M

Net
Charge-offs

0.39%¹

as a percentage of
average loans and leases

Nonaccrual Loans and Leases (3Q19)

\$182M

Nonaccrual loans
and leases

0.54%

as a percentage of total
loans and leases

Provision (3Q19)

\$27M

Provision for Credit Losses

Over 90-Day Delinquencies (3Q19)

0.09%

as a percentage of
total loans and leases

Allowance for Loan and Lease Losses (3Q19)

\$121M

Allowance for loan
and lease losses

0.36%

as a percentage of
total loans and leases

\$297M

ALLL + credit discount
on acquired loans

0.89%

as a percentage of
total loans and leases

A Robust and Scalable Risk Management Framework



Prior investments to support a **scalable** risk management infrastructure that can support a \$50B+ organization



Improved loan and lease **diversification** with reduced concentrations in specialty lending and continued run-off of auto



Aligned **risk appetite statement** and framework across the organization



Continue to leverage **robust stress testing framework**



Experience and expertise across all three internal lines of defense

¹ Annualized

Strong Capital Position



\$150M share repurchase authorization approved by the board of directors

CET1 Ratio
(3Q19)

10.9%



CET1 Ratio
(Near-term Target)

~10.0%



ROATCE
(Post-Cost Savings Target)¹

Top-Quartile

Capital Priorities



Organic Growth

Ample opportunities for growth given complementary business platforms and adjacent markets



Dividends

Dividend payout ratio target of **30% - 40%**



Share Repurchases

Evaluate share repurchases based on excess capital after organic growth and dividends



Corporate Development

Remain disciplined for opportunities including whole banks, lending or deposit platforms, or portfolios

¹ Financial targets compared to TCF Peer Group which includes KEY, RF, MTB, HBAN, CMA, ZION, PBCT, CIT, SNV, EWBC, FHN, FCNC.A, FNB, WTFC, ASB, BKU, VLY and IBKC. ROATCE is a non-GAAP financial measure. A reconciliation of the ROATCE target to the most directly comparable GAAP measure is not provided because the Corporation is unable to provide such reconciliation without unreasonable effort, however, it is expected to be consistent with historical non-GAAP reconciliation included in the appendix.

We Are One



Company-wide employer brand **cultural initiative** that emphasizes the **passion and collaboration** of our team members to provide an exceptional customer experience



Dejana Ewing
Relationship Banker
Studying to become a nurse



Courtney Abela
Corporate Marketing Manager
Avid traveler



Andrew Hakala
IT Manager
Trumpet Virtuoso



Donnell White
Chief Diversity Officer
Director of Strategic Partnerships
Avid golfer

We celebrate the unique perspectives and background that combine us to make **One TCF**. We value:



Community



Culture



Diverse teams

An Attractive Investment Opportunity



A compelling shareholder value creation story, currently trading at a discount to peers, presents an attractive investment opportunity

Accelerated Profitability

Targeting **strong ROATCE and efficiency ratio performance** relative to peers with \$180 million of merger-related cost savings serving as a unique catalyst for success given the current banking environment.

Scale to Compete and Grow

Enhanced scale as a premier Midwest bank provides opportunities for organic growth without building concentrations and ability to leverage management's track record of creating shareholder value through M&A.

Revenue Synergy Opportunities

Ability to leverage the strengths of **complementary businesses in adjacent markets** with limited overlap to provide new revenue synergy opportunities across the organization.

Strong Capital Position

Maintaining a strong capital position while executing on profitability targets allows for **opportunistic deployment of capital** via organic growth, dividends, share repurchases and corporate development initiatives.

Appendix



Focused Digital Banking Strategy to Enhance the Customer Experience

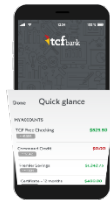


Digital offerings are competitive with larger institutions and are well ahead of smaller competitors...



Face / Touch ID

Log in quickly using facial recognition or fingerprint ID – no need to type a login ID and password



Quick glance

Use one-click quick glance to view your account balance and recent transactions



Lock & unlock

Instantly lock your debit card if it's lost or stolen



Mobile deposit

Deposit mobile deposit checks to your account without going to the bank



Online account open

Ability to open an account online in minutes



Apple Watch app

Access your account via our convenient Apple Watch app

...and augmented by a robust branch network

500+

branches



Instant-issue
debit cards



Image-enabled
ATMs



CRM and CX
Programs

In Our Communities



TCF Foundation

A Foundation for High Standards

- **\$2.3 million** to 650 charitable partners in 2018
- **\$500K** in additional team member-driven philanthropy

Employee Matching Gift Program matches 100% on gifts up to \$10,000. We donated **\$1.3 million** to charitable contributions in 2018



Community Building

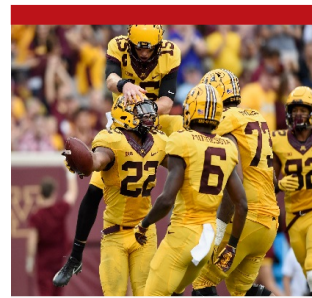
TCF Bank replaces Cobo name on Detroit's convention center; this is more than just naming rights...this represents transformational change for the community to break from a divisive history



Investing in Community

\$20 million grant to organizations and initiatives primarily within southeast Michigan's seven counties in areas including the arts, education, health and human services

\$5 million initial commitment to \$35 million Detroit Strategic Neighborhood Fund to support economic development efforts in targeted areas



Strong Community Ties

Naming rights to TCF Bank Stadium and **\$8 million** to Athlete's Village project supports student programs

\$1.4 million in scholarships to Minnesota collegiate students over 14 years



A Healthy Approach to Savings

Comprehensive financial education programs for high school teens and adults

200,000+ students reached through the TCF Financial Scholars Program (2013-2018)

765,000+ hours of learning promoted

Non-GAAP Reconciliation



Computation of adjusted diluted earnings per common share:		Quarter Ending
		Sep. 30, 2019
(Dollars in thousands, except per share data)		
Net income available to common shareholders	\$	19,654
Less: Earnings allocated to participating securities		—
Earnings allocated to common stock	(a)	19,654
Plus: Merger-related expenses		111,259
Non-core items:		
Plus: Loss on transfer of legacy TCF auto loans to held-for-sale		19,264
Plus: Termination of interest rate swaps		17,302
Less: Gain on sales of certain investment securities		(5,869)
Plus: Write-down of company-owned vacant land parcels		5,890
Plus: Loan servicing rights impairment		4,520
Total non-core items		41,107
Less: Related income tax expense, net of benefits		46,213
Total adjustments, net of tax		106,153
Adjusted earnings allocated to common stock	(b) \$	125,807
Weighted-average common shares outstanding used in diluted earnings per common share calculation	(c)	128,754,588
Diluted earnings per common share	(a) / (c) \$	0.15
Adjusted diluted earnings per common share	(b) / (c)	0.98

Non-GAAP Reconciliation



Computation of adjusted return on average assets, common equity, average tangible common equity and average tangible common

Quarter Ending

Sep. 30,
2019

(Dollars in thousands, except per share data)

Adjusted net income after tax expense:			
Income after tax expense	(a)	\$	24,978
Plus: Merger-related expenses			111,259
Plus: Non-core items			41,107
Less: Related income tax expense, net of tax benefits			46,213
Adjusted net income after tax expense for ROAA calculation	(b)	\$	131,131
Net income available to common shareholders	(c)	\$	19,654
Plus: Other intangibles amortization			4,544
Less: Related income tax expense			1,085
Net income available to common shareholders used in ROATCE calculation	(d)	\$	23,113
Adjusted net income available to common shareholders:			
Net income available to common shareholders		\$	19,654
Plus: Merger-related expenses			111,259
Plus: Non-core items			41,107
Less: Related income tax expense, net of tax benefits			46,213
Net income available to common shareholders used in adjusted ROAA and ROACE calculation	(e)		125,807
Plus: Other intangibles amortization			4,544
Less: Related income tax expense			1,085
Net income available to common shareholders used in adjusted ROATCE calculation	(f)	\$	129,266
Average balances:			
Average assets	(g)	\$	39,094,366
Total equity			4,683,129
Less: Non-controlling interest in subsidiaries			25,516
Total TCF Financial Corporation shareholders' equity			4,657,613
Less: Preferred stock			169,302
Average total common shareholders' equity used in ROACE calculation	(h)		4,488,311
Less: Goodwill, net			890,155
Less: Other intangibles, net			142,925
Average tangible common shareholders' equity used in ROATCE calculation	(i)	\$	3,455,231
ROAA	(a) / (g)		0.26 %
Adjusted ROAA	(b) / (g)		1.34
ROACE	(c) / (h)		1.75
Adjusted ROACE	(e) / (h)		11.21
ROATCE	(d) / (i)		2.68
Adjusted ROATCE	(f) / (i)		14.96

Non-GAAP Reconciliation



Computation of adjusted efficiency ratio, core noninterest income and core noninterest expense:

		Quarter Ending
		Sep. 30,
		2019
(Dollars in thousands, except per share data)		
Noninterest expense	(a)	\$ 425,620
Less: Merger-related expenses		111,259
Less: Write-down of company-owned vacant land parcels		5,890
Adjusted noninterest expense		\$ 308,471
Less: Lease financing equipment depreciation		19,408
Less: Amortization of intangibles		4,544
Adjusted noninterest expense, efficiency ratio	(b)	\$ 284,519
Net interest income		\$ 371,793
Noninterest income		94,258
Total revenue	(c)	\$ 466,051
Noninterest income		\$ 94,258
Plus: Loss on transfer of legacy TCF auto loans to held-for-sale		19,264
Plus: Termination of interest rate swaps		17,302
Less: Gain on sales of certain investment securities		(5,869)
Plus: Loan servicing rights impairment		4,520
Adjusted noninterest income		\$ 129,475
Net interest income		\$ 371,793
Plus: Net interest income FTE adjustment		2,488
Adjusted net interest income		\$ 374,281
Less: Lease financing equipment depreciation		19,408
Adjusted total revenue, efficiency ratio	(d)	\$ 484,348
Efficiency ratio	(a) / (c)	91.32 %
Adjusted efficiency ratio	(b) / (d)	58.74

Non-GAAP Reconciliation



Computation of tangible common equity to tangible assets and tangible book value per common share:

			Quarter Ending Sep. 30, 2019
(Dollars in thousands, except per share data)			
Total equity		\$	5,693,417
Less: Non-controlling interest in subsidiaries			23,313
Total TCF Financial Corporation shareholders' equity			5,670,104
Less: Preferred stock			169,302
Total common shareholders' equity	(a)		5,500,802
Less: Goodwill, net			1,265,111
Less: Other intangibles, net ⁽¹⁾			215,910
Tangible common shareholders' equity	(b)	\$	4,019,781
Total assets	(c)	\$	45,692,511
Less: Goodwill, net			1,265,111
Less: Other intangibles, net ⁽¹⁾			215,910
Tangible assets	(d)	\$	44,211,490
Common stock shares outstanding	(e)		153,571,381
Common equity to assets	(a) / (c)		12.04 %
Tangible common equity to tangible assets	(b) / (d)		9.09
Book value per common share	(a) / (e)	\$	35.82
Tangible book value per common share	(b) / (e)		26.18

Source References



Slide	Source
4	³ S&P Global Market Intelligence (data as of September 30, 2019) ⁴ S&P Global Market Intelligence (deposit data as of June 30, 2019); Midwest region includes IL, IN, OH, MI, MN and WI)
9	¹ S&P Global Market Intelligence (deposit data as of June 30, 2019); Midwest region includes IL, IN, OH, MI, MN and WI) ² S&P Global Market Intelligence (deposit data as of June 30, 2019); TCF's Primary Midwest Markets include Detroit, Greater Michigan, Minneapolis-St. Paul, Chicago, Youngstown, Milwaukee and Cleveland
10	¹ S&P Global Market Intelligence (deposit data as of June 30, 2019) ² Bureau of Economic Analysis ³ The Pew Charitable Trusts (2007-2017) ⁴ CNN Money ⁵ Minnesota Department of Employment and Economic Development ⁶ Michigan Economic Development Corporation ⁷ World Business Chicago ⁸ S&P Global Market Intelligence (2019-2024)
11	¹ S&P Global Market Intelligence (2018 HMDA data)
16	¹ S&P Global Market Intelligence (peer data as of 2Q19; TCF reported and adjusted data as of 3Q19)