TCF Financial Corporation

Dodd-Frank Act Stress Test Disclosure

October 2017

I.   Disclosure

TCF Financial Corporation (TCF), as a publicly held bank holding company, and TCF National Bank, which has deposits insured by the Federal Deposit Insurance Corporation (''FDIC''), are subject to extensive regulation. Among other things, TCF and TCF National Bank are subject to minimum capital requirements, lending and deposit restrictions and numerous other requirements. TCF's primary regulator is the Federal Reserve ("FRB") and TCF National Bank's primary regulator is the Office of the Comptroller of the Currency (''OCC'').

TCF and TCF National Bank are subject to regulatory capital requirements of the FRB and the OCC, respectively, as described below. These regulatory agencies are required by law to take prompt corrective action when institutions are viewed as engaging in unsafe or unsound practices or do not meet certain minimum capital standards. The Federal Deposit Insurance Corporation Improvement Act of 1991 (''FDICIA'') defines five levels of capital condition, the highest of which is ''well-capitalized.'' It requires that undercapitalized institutions be subjected to various restrictions such as limitations on dividends or other capital distributions, limitations on growth, or restrictions on other business activities. Undercapitalized banks must develop a capital restoration plan and the parent bank holding company is required to guarantee compliance with the plan. TCF and TCF National Bank are ''well-capitalized'' under the FDICIA capital standards as of December 31, 2016.

TCF is disclosing results from its 2017 company-run stress test as prescribed by the FRB instructions for FR Y-16 and in OCC instructions to Reporting Form OCC DFAST 10-50. A stress test is defined in thr rule as "a process to assess the potential impact of scenarios on the consolidated earnings, losses, and capital of a company over the planning horizon, taking into account its current condition, risks, exposures, strategies, and activities." A covered institution with total assets between $10 and $50 billion must make public a summary of the results of its annual stress test between October 15th and October 31st of the next calendar year disclosing certain results from its company-run stress test under the FRB provided severely adverse scenario, including a description of the types of risk included in the stress test; a general description of methodologies used in the stress test; estimates of certain financial results and pro forma capital ratios; and an explanation of the most significant causes of the changes in regulatory capital ratios.

The results in this disclosure represent forward looking estimates of TCF's results from December 31, 2016 through March 31, 2019 under the hypothetical Fed Severely Adverse scenario. These estimates do not represent forecasts of expected results. Dividend payment projections are made in accordance with regulatory guidance and TCF's capital planning framework. The economic assumptions used to arrive at these results were provided by the FRB and involve an economic outcome that is more adverse than expected. The stress test was performed at a point in time using the prescribed assumptions. Results were not adjusted to take into account the differences in the actual macroeconomic environment in the first and second quarters of 2017.

Further, the stress test results summarized within this disclosure are not comparable to the stress test results of other financial institutions due to a number of factors including the uniqueness of TCF's business model related to our company's philosophy of lending diversification, financial position and exposure at the time the stress test was performed. Additionally, differences in stress test estimation methodologies, and differences in market conditions between TCF's operating footprint and those of other financial institutions yield stress test results that are not comparable to other financial institutions.

TCF utilizes multiple economic variables throughout its qualitative and quantitative forecasting methodologies. The scenario published by the FRB is characterized by a severe recession in the U.S. with

high sustained unemployment, and significant declines in real estate prices. Figure 1 highlights select economic variables that impact TCF's portfolio and further illustrate the severity of the hypothetical FRB provided scenario.

Figure 1: Fed Severely Adverse Economic Variables

		Actual 4Q 2016	Peak / Trough	Timing	Change
1	Real Gross Domestic Product	3.1%	(7.5)%	2Q 2017	NM
2	Unemployment Rate	4.7%	10.0%	3Q 2018	NM
3	House Price Index	189.8	142.2	1Q 2019	(25)%
4	Commercial Real Estate Price Index	292.9	192.1	1Q 2019	(34)%

II. Overview

TCF is a national bank holding company based in Wayzata, Minnesota. TCF operates through its wholly owned subsidiary TCF National Bank which is headquartered in Sioux Falls, South Dakota. At December 31, 2016, TCF National Bank operated 339 bank branches in Minnesota, Illinois, Michigan, Colorado, Wisconsin, Arizona and South Dakota.

TCF's business model is to generate interest income, fees and other revenue growth through business units that emphasize higher yielding assets and low or no interest cost deposits. TCF's lending strategy is to originate diversified portfolios of high credit quality, primarily secured, loans and leases. TCF's funding strategy is to generate checking accounts and other deposit balances to meet the growth of the loan and lease portfolio. TCF focuses on attracting and retaining retail deposit customers through service and convenience, including branches that are open seven days a week and on most holidays, extensive full-service supermarket branches, ATM networks and internet, mobile and telephone banking. TCF offers retail checking account customers low-cost, convenient access to funds at local merchants and ATMs through its debit card programs.

TCF provides convenient financial services through multiple channels in its primary banking markets. TCF has developed products and services designed to meet specific needs of the largest consumer segments in the market.

III. Risks

TCF's stress testing process is designed to be comprehensive and to address the estimation of results under various macroeconomic scenarios, including revenue, expenses, credit losses, taxes and estimated changes to its balance sheet, including reserves and capital. The need for capital arises from the aggregate level of all risks including credit, interest, concentration, legal, regulatory compliance, operational, liquidity, as well as the potential for reputational and strategic risks. The risks to earnings and capital that are captured in TCF's DFAST results are:

- Credit Risk - Risk of loss resulting from the failure of a borrower or counterparty to meet its financial or contractual obligations.

- Interest Rate Risk - Risk of exposure to adverse movements in interest rates impacting assets and liabilities of varying maturities, resulting in the potential reduction of net interest income.

- Liquidity Risk - Risk of loss due to the inability to meet contractual obligations as they come due and ensure access to adequate funding sources.

- Concentration Risk - Risk of exposure from disproportionate portfolio composition within a single or group of assets or liabilities which may negatively impact earnings and capital levels.

- Operational Risk - Risk of loss from inadequate or failed internal processes, people or systems, or from external events to the extent they were recognized in prior results such as operational losses relating to operational risks such as external fraud.

The above risks are directly stressed by the related macroeconomic scenario. TCF evaluates and manages these risks as well as legal, regulatory compliance, reputation, and strategic risks under its Risk Management framework.

IV.   Methodologies

Stress test forecast results are based on the macroeconomic variables provided by the FRB. Assumptions provided by the FRB, in conjunction with supplemental variables provided by internal and external sources, are used as inputs to forecast financial statements. The stress test forecast utilizes various quantitative and qualitative approaches for assessing risks and forecasting financial results including:

- Econometric models
- Business analytics using macroeconomic variables and historical information
- Analysis of historical results under prior stress environments

The inputs for the process are based on identifying its primary risks and determining the macroeconomic modeling or business analytics that will best project its results under various economic scenarios. TCF conducts financial stress tests across multiple economic scenarios to inform risk management and capital planning on the potential magnitude of risk embedded within its business.

The output results of the stress test provides projected loan and lease balances, pre-provision net revenue, and other balance sheet item balances. The projected balance sheets are constructed in sufficient detail to calculate risk weighted assets and to perform calculations of Common Equity Tier 1, Tier 1 risk based capital, Tier 1 leverage capital and Total risk based capital.

V.   Results of Stress Test - Fed Severely Adverse

Figures 2 and 3 below highlight TCF's forecasted nine quarter revenue, provision for loan and lease losses, net income, and aggregate losses for the Fed Severely Adverse scenario.

Figure 2: Fed Severely Adverse Projected Revenue, Provision for Loan and Lease Losses, and Net Income 1Q 2017 - 1Q 2019

(in millions)	$
1 Pre-Provision Net Revenue	759.9
2 Provision for Loan and Lease Losses	1,039.3
3 Net Income (Loss)	(159.5)

The nine quarter cumulative provision for loan and lease losses was estimated at $1,039.3 million and consists of projected loan loss charge-offs of $643.2 million and an increase in the allowance for loan and lease losses (ALLL) of $396.7 million.

Figure 3: Fed Severely Adverse Projected Aggregate Credit Losses for Loan and Lease Portfolios 1Q 2017 - 1Q 2019

(in millions)	$	% [1]
1 Aggregate Loan and Lease Losses	643.2	3.63%

[1] Denominator of loss rate is based on the average of the nine quarter's balances

While charge-offs represent the realization of loan losses, an increase in ALLL represents the recognition of the loan loss and occurs in advance of the loan loss realization under generally accepted accounting principles (GAAP). The ALLL is management's estimate of incurred credit losses inherent in the loan and lease portfolio at a specified point in time. Changes to ALLL balance are reflected through the provision to ensure adequate coverage of losses inherent in the loan and lease portfolio at the specified point in time.

Deteriorated economic conditions in the Fed Severely Adverse scenario impact TCF's credit quality and earnings. Capital actions and declining Risk Weighted Assets driven by short duration assets result in slightly higher ending Capital ratios at March 31, 2019 which are higher than the minimum capital ratios experienced within the forecast.

Figure 4: TCF Financial Corporation Quarterly Projected Stressed Capital Ratios 4Q 2016 - 1Q 2019

	Actual	Stressed Capital Ratios	
	Dec 31, 2016	Ending	Minimum
1 Common Equity Tier 1 Capital Ratio	10.2%	10.3%	9.7%
2 Tier 1 Risk-Based Capital Ratio	11.7%	11.9%	11.2%
3 Total Risk-Based Capital Ratio	13.7%	14.1%	13.5%
4 Tier 1 Leverage Ratio	10.7%	10.7%	10.2%

Figure 5: TCF National Bank Quarterly Projected Stressed Capital Ratios 4Q 2016 - 1Q 2019

	Actual	Stressed Capital Ratios	
	Dec 31, 2016	Ending	Minimum
1 Common Equity Tier 1 Capital Ratio	11.1%	11.3%	10.7%
2 Tier 1 Risk-Based Capital Ratio	11.2%	11.5%	10.8%
3 Total Risk-Based Capital Ratio	13.4%	14.0%	13.3%
4 Tier 1 Leverage Ratio	10.3%	10.4%	9.8%

VI. Significant causes of the changes in regulatory capital ratios

The ending 1Q 2019 TCF Financial Corporation Fed Severely Adverse Common Equity Tier 1 Capital ratio of 10.3%, as seen in Figure 4, is higher than the 4Q 2016 ratio by 4 bps. The increase is primarily driven by capital actions under taken by the bank within the Fed Severely Adverse scenario, a reduction in Risk Weighted Assets over the forecast horizon driven by short duration assets, and Pre-Provision Net Revenue as a result of revenue exceeding Non-Interest Expense, offset by increased credit losses and associated provision expense.

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

The results in this disclosure represent forward looking estimates of TCF's results under the hypothetical Fed Severely Adverse scenario, and do not represent forecasts of expected results. Any statements contained herein regarding results in future periods are forward-looking statements based on a combination of data required by the FRB to be used and the Company's assumptions and beliefs based on that data. Such statements may be identified by words such as "estimate," "forecast," "project," or similar expressions. Even in the event that the data used in the Fed Severely Adverse Scenario are actually experienced, certain factors could cause the Company'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 Company's Annual Report on Form 10-K for the year ended December 31, 2016 under the heading "Risk Factors." Since it is not possible to foresee all such factors, these factors should not be considered as complete or exhaustive. 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.