M&T Bank Corporation

Manufacturers and Traders Trust Company

Company-Run Stress Test Mid-Cycle Dodd-Frank Act Stress Test Results Disclosure

October 6, 2017

Explanatory Note

In accordance with Section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("DFA") and related regulations issued by the Board of Governors of the Federal Reserve System ("FRB"), bank holding companies with total consolidated assets of \$50 billion or more ("covered companies"), including M&T Bank Corporation ("M&T"), are required to conduct semiannual stress tests to assess the potential impact of certain hypothetical economic scenarios on, among other things, their prospective earnings, losses and capital levels, which are intended to test the resiliency of a covered company's financial position under severely adverse economic conditions and reflect the Dodd-Frank Act Stress Test ("DFAST") capital actions as described under the heading "Summary of Stress Test Results". Covered companies are also required to disclose a summary of these company-run stress test results for select scenarios over a nine quarter forecast horizon. The purpose of the stress test is to assess whether M&T and M&T Bank have sufficient capital to absorb losses and support operations during a period of severely adverse economic and financial stress.

Per the disclosure requirements mentioned above, the stress test results disclosed herein are M&T's estimates of resources, losses and capital levels under the company developed severely adverse scenario ("M&T Severely Adverse Scenario"). **These estimates do not represent forecasts of expected results.** The economic assumptions embedded in the M&T Severely Adverse Scenario represent a hypothetical economic outcome that is more adverse than consensus economist expectations.

For the 2017 mid-cycle DFAST, the M&T Severely Adverse Scenario considers companyspecific risks and vulnerabilities. In addition to severely adverse macroeconomic conditions, the scenario includes certain idiosyncratic events designed to affect exposures, asset composition, concentrations and revenue mix specific to M&T. Unlike the annual DFAST disclosures, in which all bank holding companies subject to DFAST are required to publish results for the same Supervisory Severely Adverse Scenario provided by the FRB, the mid-cycle DFAST disclosures feature internally developed company-specific scenarios. As such, a company's mid-cycle DFAST results are not necessarily comparable to its annual DFAST Supervisory Severely Adverse Scenario results or the mid-cycle DFAST results disclosed by other bank holding companies.

M&T Severely Adverse Scenario Design

A primary goal of M&T's capital adequacy process and stress testing is the identification and measurement of risks and vulnerabilities specific to M&T. As part of its capital adequacy process, M&T's scenario development process is administered by a centralized governing body that has broad representation from the businesses and functional areas across the company to ensure comprehensive consideration of identified and emerging risks and vulnerabilities. In addition to evaluating various macroeconomic assumptions at the national and M&T footprint levels, the process also incorporates certain idiosyncratic events intended to affect M&T-specific exposures and concentrations, above and beyond modeled results.

Macroeconomic variable selection for scenario design is based upon analysis of key material risk drivers of M&T's portfolios and business mix. M&T considers both quantitative methods and qualitative inputs from business experts in selecting appropriate variables for scenario construction. While the process starts with national macroeconomic assumptions, many variables are projected at the state level to capture economic conditions in M&T's footprint.

Some of these state-level variables may be stressed to a greater degree than the national forecast for the purpose of impacting M&T's geographic concentrations. To forecast these variables, M&T utilizes a variety of internal and third party resources.

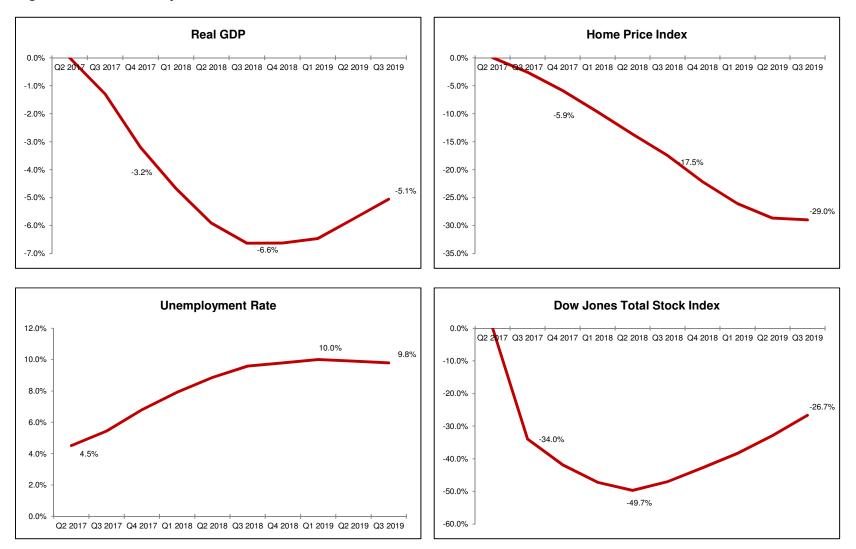
The M&T Severely Adverse Scenario for the 2017 mid-cycle DFAST is characterized by a sudden and pronounced weakening of the global economic environment starting in the third quarter of 2017, along with a reversal of growth in U.S. housing prices. Real GDP experiences a 6.6% cumulative peak-to-trough contraction by the third quarter of 2018. The U.S. unemployment rate rises from 4.5% in the second quarter of 2017 to 10.0% in the first quarter of 2019, remaining elevated throughout the scenario. Housing prices decline by 29.0% peak to trough. Consistent with the trends of these macroeconomic variables, interest rates decline and remain low throughout the forecast horizon with the 3-Month Treasury Rate declining from 0.9% to 0.1% and the 10-Year Treasury Rate declining from 2.3% in the second quarter of 2017 to 0.8% in the fourth quarter of 2017, rebounding to 1.4% by the end of the forecast period.

As noted before, the economic conditions in certain states were stressed to a greater degree compared to the national macroeconomic assumptions. For example, unemployment in New York, where M&T has its largest state exposure, is assumed to rise from 4.4% to 10.3%. The scenario design also incorporates a decline in the state-level Home Price Index ("HPI") of 30.1% in New York and 30.6% in New Jersey, thereby applying stress in the two states in which M&T has its most significant residential mortgage exposure.

In addition to these stressed macroeconomic assumptions, the M&T Severely Adverse Scenario features idiosyncratic events that apply further stress to M&T's key vulnerabilities and concentrations. The idiosyncratic events are designed to have direct, adverse impacts on certain asset concentrations, geographic concentrations, and revenue sources specific to M&T. These M&T-specific idiosyncratic events, combined with significantly stressed macroeconomic assumptions, result in a composite scenario that is more stressful than the severe recession of 2007-2009 and the CCAR 2017 Supervisory Severely Adverse scenario.

Figure 1 provides scenario variable paths of key national macroeconomic assumptions. In addition to the four key variables shown in **Figure 1**, M&T used 20 other variables such as Disposable Income, Mortgage Rate, and key Treasury Rates for its mid-cycle DFAST.





Risk Types and Methodologies

A critical goal of M&T's capital adequacy process and stress testing is the identification and measurement of risks and vulnerabilities specific to M&T. While credit risk related to its loans represents the most significant risk inherent in M&T's portfolio, the capital adequacy and stress testing process is designed to address a comprehensive set of risks. The types of risks considered in the stress test include, but are not limited to, the following:

- **Credit risk** is the potential loss from not being able to collect the principal and interest balance on a loan or other investment contract when it is due. For M&T, most of this risk stems from its loan portfolio that may experience elevated losses in the M&T Severely Adverse Scenario that includes a severely stressed macroeconomic environment and key idiosyncratic events.
- **Operational risk** represents the potential losses resulting from human error, inadequate or failed internal processes and systems, and external events. It also encompasses reputational risk and compliance and legal risk. Reputational risk is the risk to business, earnings and capital levels resulting from damaging publicity, which could adversely affect M&T's ability to attract and retain customers. Legal and compliance risk is characterized as the risk of loss from violations of, or noncompliance with, laws, rules, regulations, prescribed practices or ethical standards, as well as the risk of noncompliance with contractual and other obligations. The M&T Severely Adverse Scenario includes idiosyncratic events designed to further stress operational risks specific to M&T.
- Liquidity risk is the possibility that M&T would have insufficient cash flow or liquid assets available to satisfy current and future obligations, including demands for loans and deposit withdrawals, funding operating costs, and other corporate purposes. Liquidity risk arises whenever the maturities of financial instruments included in assets and liabilities differ. M&T's stress test results take into account the impact of the scenario assumptions on M&T's funding needs and its access to liquidity.
- **Market risk** is the possibility that M&T will suffer losses due to adverse changes in the market prices and/or interest rates of financial instruments. The primary market risk that M&T is exposed to is interest rate risk. Interest rate risk arises from M&T's core banking activities of lending and deposit-taking, because assets and liabilities reprice at different times and by different amounts as interest rates change. As a result, net interest income is subject to the effects of changing interest rates. The M&T Severely Adverse Scenario includes assumptions about key interest rates which are incorporated in M&T's mid-cycle DFAST results.

These risks, under stressed conditions, may result in diminished revenues, higher expenses or elevated losses, thereby impacting M&T's prospective capital levels. M&T's capital adequacy process primarily relies on a model-based approach to project resources and losses under various scenarios. It includes a number of statistical models developed to consider applicable material risks and exposures. In forecasting revenues and losses, these models consider the impact of macroeconomic conditions on loan charge-offs, new originations, prepayments, renewals, pay downs, etc. The models are designed to capture M&T's material exposures and consider M&T's specific portfolio and business characteristics. For estimating the provision for loan losses, M&T leverages its regular provision methodology based on several key considerations. These considerations include loan loss forecasts, projections of portfolio balances over the forecast horizon, and macroeconomic factors of the scenario, as applicable.

In addition to model outputs, M&T's capital adequacy process also considers qualitative components that are guided by management's review and governance regarding the stress test results and processes. These management reviews involve subject matter experts from business units and risk areas across M&T and may result in conservative overlays to modeled outcomes.

Changes to M&T's capital position and capital ratios are calculated by analyzing the impact to capital of projected earnings and changes in asset balances based on the aggregated results of the model outputs and qualitative components, as well as prescribed capital actions. Risk-weighted asset projections are based on risk weightings as specified in applicable regulations pertaining to each type of asset category and projected balance sheet changes.

Summary of Stress Test Results

Table 1 summarizes the projected capital ratios, risk-weighted assets, gains or losses, revenue, and net income before taxes under the M&T Severely Adverse Scenario. The projected capital ratios reflect the DFAST capital actions which include (i) M&T's actual capital actions during the first forecasted quarter, (ii) in each quarter thereafter maintaining common stock dividends equal to the average quarterly amount paid in the previous year, and (iii) no redemptions or issuance of any regulatory capital instruments except for issuances related to expensed employee compensation. M&T's projected Common Equity Tier 1 capital ratio declines from 10.8% as of June 30, 2017 to a minimum of 9.8% in the third quarter of 2019.

The significant contributors to the change in M&T's Common Equity Tier 1 capital ratio under the M&T Severely Adverse Scenario are as follows:

- Elevated credit-related losses, predominately in the form of net loan charge-offs and a provision for loan losses necessary to build the allowance for loan losses. Credit losses include those related to idiosyncratic events included in the M&T Severely Adverse Scenario.
- Pre-provision net revenue that, although adversely affected by the severe economic conditions and idiosyncratic events discussed earlier, partially offsets the capital impact from credit losses.

The changes in the Tier 1 Capital, Total Risk-Based Capital, and Tier 1 Leverage ratios reflect the same factors affecting the Common Equity Tier 1 ratio, and incorporate the prescribed regulatory capital credit for M&T's outstanding capital securities under applicable regulations. Under the M&T Severely Adverse Scenario, using DFAST capital actions, all regulatory capital ratios remain above the required minimum levels throughout the nine quarter forecast horizon.

Table 1: Quantitative Disclosure for M&T Bank Corporation

Projected Capital Ratios					
	Actual	Stressed Capital Ratios ⁽¹⁾			
	Q2 2017	Q3 2019	Minimum		
Common Equity Tier 1 Ratio (%)	10.8%	9.8%	9.8%		
Tier 1 Capital Ratio (%)	12.1%	11.1%	11.1%		
Total Risk-based Capital Ratio (%)	14.2%	13.7%	13.7%		
Tier 1 Leverage Ratio (%)	10.2%	10.3%	10.1%		

 The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q3 2017 to Q3 2019.

Projected Losses, Revenue, and Net Income Before Taxes

	Billions of Dollars	Percent of Average Assets ⁽¹⁾
Pre-provision Net Revenue ⁽²⁾	2.7	2.5%
Other Revenue less	0.0	
Provisions	3.6	
Realized Gain/Losses on Securities (AFS/HTM)	0.0	
Trading and Counterparty Losses	0.0	
Other Losses/Gains Equals	0.0	
Net Income Before Taxes	(0.9)	-0.8%

1. Average assets is the nine-quarter average of total assets.

2. Pre-provision net revenue includes losses from operational risk events

 Actual
 Projected

 Billions of Dollars
 Q2 2017
 Q3 2019

 Risk-Weighted Assets⁽¹⁾
 98.3
 91.7

 1. Risk-weighted assets are calculated under the Basel III standardized capital risk-based approach.
 Standardized capital risk-based approach.

Projected Loan Losses Portfolio Loss **Billions of** Rates (%)⁽¹⁾ Dollars Loan Losses 3.0 3.6% First Lien Mortgages, Domestic 0.3 1.5% Junior Liens and HELOCs, Domestic 0.1 1.6% Commercial and Industrial⁽²⁾ 0.8 4.5% Commercial Real Estate, Domestic 4.5% 1.4 Credit Cards 0.1 16.6% Other Consumer⁽³⁾ 0.3 4.1% Other Loans 0.1 1.8%

1. Average loan balances used to calculate portfolio loss rates exclude loans held for sale and are calculated over nine quarters.

Commercial and industrial loans include small- and medium- size enterprise loans and corporate cards.

3. Other consumer loans include automobile and secured loans.

Capital Ratio Projections for Manufacturers and Traders Trust Company

Pursuant to disclosure guidelines under the FRB's Regulation YY, M&T is also disclosing summary stress test results for its wholly-owned principal FDIC-insured depository subsidiary, Manufacturers and Traders Trust Company ("M&T Bank").

M&T Bank and its consolidated subsidiaries hold approximately 99% of M&T's total assets. Given the proportional size of M&T Bank in relation to the consolidated entity, the impact of the M&T Severely Adverse Scenario on M&T Bank very closely tracks that of M&T.

Substantially all of M&T's pre-provision net revenue, losses, and balance sheet changes are derived from M&T Bank. As a result, M&T Bank's capital ratios are impacted largely in the same way as those for M&T. **Table 2** represents M&T Bank's capital ratios under the M&T Severely Adverse Scenario.

Table 2: Capital Ratio Projections for M&T Bank

Projected Capital Ratios					
	Actual	Stressed Capital Ratios			
	Q2 2017	Q3 2019	Minimum		
Common Equity Tier 1 Ratio (%)	10.4%	9.7%	9.7%		
Tier 1 Capital Ratio (%)	10.4%	9.7%	9.7%		
Total Risk-based Capital Ratio (%)	12.2%	11.8%	11.8%		
Tier 1 Leverage Ratio (%)	8.9%	9.0%	8.8%		

Forward-Looking Statements

Pursuant to the regulations issued by the FRB under the DFA, M&T and M&T Bank are required to conduct a forward-looking company-run stress test exercise that is complementary to the Comprehensive Capital Analysis and Review ("CCAR") exercise and to publicly disclose the results of that exercise to assess M&T and M&T Bank's ability to absorb losses and support operations during adverse economic conditions.

This release contains certain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, including projections of financial condition, results of operations, plans, objectives, growth strategy and liquidity, future performance or business prospects under a hypothetical companydeveloped severely adverse scenario that incorporates a set of assumed economic and financial conditions designed to be more adverse than expected. These statements may address issues that involve significant risks, uncertainties, estimates, expectations, and assumptions made by management. The projections are not intended to be a forecast of expected future economic or financial conditions or a forecast of M&T's expected future financial results or condition and actual results may differ materially from current projections and will be influenced by actual economic and financial conditions and various other factors as described in M&T's periodic and current reports filed with the Securities and Exchange Commission which are available at <u>www.sec.gov</u>. M&T expressly disclaims any obligation to publicly update or revise any forward-looking statements following the date of this release.