Morgan Stanley

2015 Dodd-Frank Act Stress Test (DFAST)

Company-Run Dodd-Frank Stress Test Submitted to the Federal Reserve Bank on January 5, 2015

Updated as of June 15, 2015 to include Morgan Stanley Private Bank, National Association

Table of Contents

Morgan Stanley

Notice

The results presented in sections 2, 4 and 5 herein contain forward-looking projections that represent estimates based on the hypothetical, severely adverse economic scenario prescribed by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). The estimates also reflect certain required assumptions regarding Morgan Stanley's (the "Company's") capital actions, which are described on page 4. The quantitative outputs and qualitative discussion herein should not be viewed as forecasts of expected outcomes or capital ratios or as a measure of the solvency or actual financial performance or condition of the Company or its U.S. bank operating subsidiaries, including Morgan Stanley Bank, N.A. ("MSBNA") and Morgan Stanley Private Bank, National Association ("MSPBNA"). Instead, the outputs and discussions are estimates from forward-looking exercises that consider possible outcomes based on hypothetical, highly adverse economic scenarios.

The outputs of the analyses and the discussion contained herein may not align with those produced by the Federal Reserve or other financial institutions conducting similar exercises, even if similar hypothetical stress scenarios were used, due to differences in methodologies and assumptions used to produce those outputs. In addition, the results contained herein may not be comparable to results of prior stress tests conducted by the Company, the Federal Reserve or other financial institutions due to the evolving regulatory framework and other factors.

Morgan Stanley

1. Requirements for Dodd-Frank Stress Tests

- In October 2014, the Federal Reserve issued a final rule to modify the regulations for capital planning and stress testing contained in the existing capital plan and stress test rules. As amended, this final rule set forth the Supervisory and Company-run Stress Test Requirements for Bank Holding Companies ("BHCs") with total consolidated assets of $50 billion or more ("Covered Company"), including the Company.

- The rule requires Covered Companies to disclose publicly the results of their run of the Federal Reserve's Supervisory Severely Adverse stress scenario, which describes the hypothetical evolution of certain specific macroeconomic and market variables consistent with a severely adverse recession.

- The planning horizon begins with actual results as of September 30, 2014 and includes a nine quarter forecast beginning with the fourth quarter of 2014 and ending with the fourth quarter of 2016.

- Each Covered Company is required to employ the following assumptions (the "Dodd Frank Act Stress Testing Capital Actions") regarding its projected capital actions beginning with the second quarter of the nine quarter forecast horizon:

  - Payment of common stock dividends equal to the quarterly average dollar amount of common stock dividends paid in the previous year;

  - Payments on any other instrument eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest or principal due on such instrument; and

  - No redemption or repurchase of any capital instrument eligible for inclusion in the numerator of a regulatory capital ratio.

Morgan Stanley

- Additionally, as one of the six large BHCs with substantial trading and counterparty exposures, the Company was required to apply a hypothetical, instantaneous global market shock to its trading book, private equity positions and counterparty credit exposures as of the market close on October 8, 2014.[1]

- As one of eight large BHCs with substantial trading or custodial operations, the Company was also required to incorporate the hypothetical, instantaneous and unexpected default of its largest counterparty across its derivatives and securities financing transaction activities into the supervisory stress scenarios. The as-of date for the counterparty default scenario component was also October 8, 2014.[1]

- The results of the Company's stress test, under the Supervisory Severely Adverse stress scenario assuming the Dodd Frank Stress Testing Capital Actions, are presented under section 2 "Company-Run Dodd-Frank Stress Test – Holding Company" included herein.

- The results of MSBNA's stress test, under the Supervisory Severely Adverse and Supervisory Adverse stress scenarios, are presented under section 4 "Company-Run Dodd-Frank Stress Test – MSBNA" included herein.

- The results of MSPBNA's stress test, under the Supervisory Severely Adverse and Supervisory Adverse stress scenarios, are presented under section 5 "Company-Run Dodd-Frank Stress Test – MSPBNA" included herein.

Morgan Stanley

[1] Consistent with the Federal Reserve requirement to use a business day during the week of October 6, 2014 that corresponds to a BHC's weekly internal risk reporting cycle.

2. Company-Run Dodd-Frank Stress Test – Holding Company

Projected Capital Ratios through December 31, 2016

Under the Supervisory Severely Adverse Scenario

		Stressed Ratios Under Supervisory Severely Adverse Scenario [1] [2]	
	As of September 30, 2014	**As of December 31, 2016 [3]**	**Minimum Over Planning Horizon**
Tier 1 Common Risk-based Capital Ratio	15.0%	8.4%	8.2%
Common Equity Tier 1 Risk-based Capital Ratio	15.2%	8.6%	8.6%
Tier 1 Risk-based Capital Ratio	17.1%	8.9%	8.9%
Total Risk-based Capital Ratio	19.9%	11.5%	11.3%
Tier 1 Leverage Ratio	8.3%	5.6%	5.6%

(1) The capital ratios are calculated using the Dodd-Frank Act Stress Testing Capital Actions described on page 4. 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 ratios do not necessarily occur in the same quarter of the planning horizon.

(2) With respect to the Common Equity Tier 1, the Tier 1 and the Total Risk-based Capital ratios, for each quarter in 2014, risk-weighted assets ("RWAs") are calculated using Basel I and Basel 2.5, including certain transitional adjustments related to numerator deductions. For each quarter in 2015 and 2016, the U.S. Basel III standardized approach is used to calculate RWAs for credit risk and market risk. In addition, the numerator for all quarters in 2014 through 2016 reflects the U.S. Basel III transitional rules. However, with respect to the Tier 1 Common Capital ratio, the numerator is calculated using Basel I and RWAs are calculated using Basel I and Basel 2.5 for all quarters of the planning horizon.

(3) The most significant cause of reduction in capital ratios under the Supervisory Severely Adverse Scenario resulted from trading and counterparty losses that were modelled to occur in the first quarter of the forecast horizon. Ending capital ratios under the Supervisory Severely Adverse Scenario reflected the ongoing accretion of earnings, net of operational risk and credit losses, as well as the level of assets and RWAs projected through the forecast horizon.

Morgan Stanley

2. Company-Run Dodd-Frank Stress Test – Holding Company (cont'd)

Projected Risk-Weighted Assets as of December 31, 2016

Under the Supervisory Severely Adverse Scenario

	As of September 30, 2014 [1]	Stressed RWAs Under Supervisory Severely Adverse Scenario December 31, 2016	
		Basel I and Basel 2.5 [2]	U.S. Basel III Standardized Approach
Risk-Weighted Assets ($ in billions)	$380	$443	$482

(1) Actual RWAs as of September 30, 2014 are calculated using Basel I and Basel 2.5 and do not include transitional elements.

(2) Basel I and Basel 2.5 RWAs as of December 31, 2016 represent the denominator for the Tier 1 common ratio and do not include transitional elements.

Morgan Stanley

Projected Losses, Revenue and Net Income before Taxes

October 1, 2014 Through December 31, 2016

Under the Supervisory Severely Adverse Scenario

	Cumulative Amount ($Bn)	% of Average Assets [1]
Pre-Provision Net Revenue [2]	$3.0	0.4%
Other Revenue [3]	0.0	
Less: Provision for Loan and Lease Losses	2.6	
Less: Realized Losses / Gains on AFS/HTM Securities [4]	0.1	
Less: Trading and Counterparty Losses [5]	15.0	
Less: Other Losses / Gains [6]	2.8	
Net Income Before Taxes	$(17.5)	(2.3%)
Memo Items:		
Other Comprehensive Income [7]	$0.3	
Other Effects on Capital	**4Q 2015**	**4Q 2016**
Accumulated Other Comprehensive Income [8]	$(0.8)	$(0.7)

(1) Average assets reflect the nine-quarter average of total assets.
(2) Pre-provision net revenue includes losses from operational risk events, mortgage put-back expenses and other real estate owned ("OREO") costs.
(3) Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.
(4) Represents available-for-sale ("AFS") securities and held-to-maturity ("HTM") securities.
(5) Trading and counterparty losses include mark-to-market and CVA losses and losses arising from the counterparty default scenario component applied to derivatives and securities lending, and repurchase agreement activities.
(6) Other losses/gains include projected stress losses on loans measured at fair value.
(7) Represents the change over the forecast horizon. Other comprehensive income primarily includes incremental unrealized losses/gains on AFS securities, defined benefit pension plan and projected changes in the Cumulative Translation Adjustment.
(8) Represents the inception-to-date balance of other comprehensive income as of 4Q 2015 and 4Q 2016, adjusted to include 40% of unrealized gains or losses on AFS securities and defined benefit pension plan in the 2015 capital calculations and 60% of unrealized gains or losses on AFS securities and defined benefit pension plan in the 2016 capital calculations.

Morgan Stanley

Projected Loan Losses by Type of Loans

October 1, 2014 Through December 31, 2016

Under the Supervisory Severely Adverse Scenario

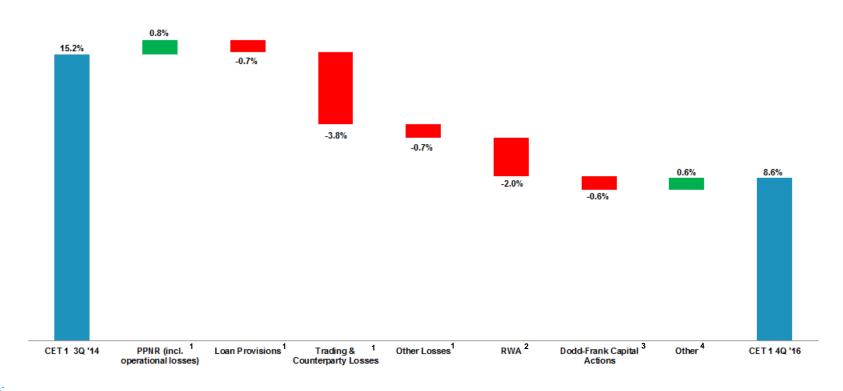|	Cumulative Amount ($Bn)	Portfolio Loss Rates [1]
Loan Losses	$2.0	2.7%
First Lien Mortgages, Domestic	0.0	0.1%
Junior Liens and HELOCs, Domestic	0.0	1.9%
Commercial and Industrial	1.2	7.9%
Commercial Real Estate	0.3	4.3%
Credit Cards	N/A	N/A
Other Consumer	0.0	0.2%
Other Loans [2]	0.4	2.1%

N/A—Not Applicable
(1) Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans measured at fair value and are calculated over nine quarters. Portfolio loss rates represent cumulative portfolio losses as a percentage of the average loan portfolio balance.
(2) Other loans include loans to depositories and other financial institutions and loans for purchasing or carrying securities.

Morgan Stanley

Key Drivers of Annual Supervisory Severely Adverse Scenario Pro Forma Common Equity Tier 1 Capital Ratio ("CET 1")

Notes:
(1) Reflects pre-tax impact.
(2) Increase in RWAs primarily driven by the transition to Basel III Standardized Approach.
(3) Reflects share repurchases (4Q14 only) and cash dividends declared on common and preferred stock in accordance with the assumptions prescribed in the Dodd Frank Act Stress Testing Capital Actions discussed on page 4.
(4) Other includes adjustments for deferred tax assets, employee incentive plan shares, tax provisions, intangible amortization and other capital adjustments.

Morgan Stanley

3. Forecast Methodologies – Supervisory Severely Adverse Scenario

Overview

- The Company's capital ratios under the Supervisory Severely Adverse Scenario reflect the effect of the prescribed hypothetical macroeconomic and market environment on the revenues and the resources (e.g., assets, expenses and headcount) available to the major products or businesses within each of the Company's business segments.

- Under the Supervisory Severely Adverse Scenario, the Company employed various forecast methodologies to quantify the impact of the hypothetical assumptions over the forecast time horizon.

- Several of these forecast methodologies were based on models, which like all models, have certain limitations. The models were based on various assumptions such as the historical relationships between the Company performance and relevant macroeconomic and market variables as well as expectations of customer behavior. Changes to these assumptions can materially affect forecast results.

Pre-Provision Net Revenue ("PPNR")

- The Company's forecast reflected a detailed process in which each major business developed a projection over the nine-quarter forecast horizon. The projection considered:

  – key macroeconomic and market variables that historically demonstrated the highest correlation to the level and growth rate of industry and Company net revenues;

  – the business' expectations of customer behavior and competitive dynamics under this scenario; and

  – the impact of reduced market activity on operating costs, including projected headcount reductions and lower brokerage and clearing expenses, partially offset by an increase in operational risk related costs, which are described on page 14 under "Losses".

Morgan Stanley

Balance Sheet

- The Company's balance sheet forecast reflected a combination of historical data and forecast models tailored to the specific characteristics of each product line.

- The Company utilized historical data to ensure the forecast reflected a level of assets consistent with the macroeconomic and market assumptions and also utilized return on asset calculations to evaluate the reasonability and consistency of revenue and balance sheet projections.

Risk-Weighted Assets

- The Company's RWA forecast reflected the application of the Federal Reserve's capital rules in effect for a given quarter.

- The Company's methodology aligned projections of standardized market and credit risk calculations to projected movements in the balance sheet and tied projections of model-driven market RWAs to the macroeconomic and market variables included in the Company's forecast.

Losses

- **Market Risk** included all mark-to-market positions such as trading portfolios, private equity investments, credit valuation adjustments ("CVA") and loans carried at fair value or held for sale.

- Stress losses were estimated by repricing the Company's mark-to-market trading, private equity and CVA portfolios by applying the Federal Reserve's prescribed global market shock. Mark-to-market stress losses were calculated on loans measured at fair value and loans held for sale by computing changes in market value under the Federal Reserve's prescribed hypothetical macroeconomic and market environment.

Morgan Stanley

Losses (cont'd)

- **Credit Default Risk** included losses on: (i) loans held for investment; (ii) loans measured at fair value and loans held for sale; (iii) incremental default losses on trading mark-to-market positions; (iv) largest counterparty default; and (v) available for sale securities.

- Credit default losses for commercial and industrial loans, including loans held for investment, loans measured at fair value and loans held for sale, were estimated using stressed Probability of Default, Loss Given Default and Exposure At Default under the prescribed stressed conditions.

- Losses for the largest counterparty default were computed by applying the prescribed shocks and the prescribed recovery rate to the relevant stressed exposures. The stressed default losses of the counterparties were then rank ordered and the largest counterparty was selected.

- Credit default losses for trading positions were estimated using the Company's Incremental Default Risk ("IDR") model. The IDR model represents a version of the Company's Incremental Risk Charge model, which is compliant with Basel III, to calculate the default risk of mark-to-market exposures.

Morgan Stanley

Losses (cont'd)

- **Operational Risk** loss estimates were calculated using methodologies that comprise the Company's Basel III model.

    – The model has seven units of measure, each of which corresponds to one of the seven risk types defined by the Basel Committee on Banking Supervision.

    – The Company applies a loss distribution approach where the loss frequency and loss severity of operational losses for each of the risk types are separately modeled and then aggregated.

Capital Position

- The Company's capital position was projected by aggregating revenue and loss estimates as outlined above and deriving their respective impact on the levels of Tier 1 Common, Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital on a quarterly basis over the nine-quarter forecast horizon.

Morgan Stanley

4. Company-Run Dodd-Frank Stress Test – MSBNA

Projected Capital Ratios through December 31, 2016

Under the Supervisory Severely Adverse Scenario

		Stressed Ratios Under Supervisory Severely Adverse Scenario [1] [2]	
	As of September 30, 2014	As of December 31, 2016 [3]	Minimum Over Planning Horizon
Tier 1 Common Risk-based Capital Ratio	12.4%	12.3%	11.8%
Common Equity Tier 1 Risk-based Capital Ratio	12.4%	12.6%	12.3%
Tier 1 Risk-based Capital Ratio	12.4%	12.6%	12.3%
Total Risk-based Capital Ratio	14.2%	15.2%	14.6%
Tier 1 Leverage Ratio	10.5%	10.0%	8.5%

(1) 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 ratios do not necessarily occur in the same quarter of the planning horizon.

(2) With respect to the Common Equity Tier 1, the Tier 1 and the Total Risk-based Capital ratios, for each quarter in 2014, RWAs are calculated using Basel I and Basel 2.5, including certain transitional adjustments related to numerator deductions. For each quarter in 2015 and 2016, the U.S. Basel III standardized approach is used to calculate RWAs for credit risk and market risk. In addition, the numerator for all quarters in 2014 through 2016 reflects the U.S. Basel III transitional rules. However, with respect to the Tier 1 Common Capital ratio, the numerator is calculated using Basel I and RWAs are calculated using Basel I and Basel 2.5 for all quarters of the planning horizon.

(3) The most significant cause of change in capital ratios under the Supervisory Severely Adverse Scenario resulted from loan and operational risk losses. Ending capital ratios under the Supervisory Severely Adverse Scenario reflected the planned capital actions, ongoing accretion of earnings, net of operational risk and credit losses, as well as the level of assets and RWAs projected through the forecast horizon.

Note: The forecast methodologies for MSBNA DFAST Stress Test results are similar to those utilized for the Company (described on pages 11-14). The largest counterparty default component is not applicable to MSBNA.

Morgan Stanley

Because certain of MSBNA's capital ratios under the Supervisory Adverse Scenario are lower than those under the Supervisory Severely Adverse Scenario, MSBNA's capital ratios under the Supervisory Adverse Scenario are also presented below. The lower ratios are driven by several factors including increased RWAs from relatively higher business growth and an increase in unrealized losses on AFS securities reflected in accumulated other comprehensive income ("AOCI"). Unlike MSBNA, the Holding Company's capital ratios under the Supervisory Adverse Scenario are higher than those under the Supervisory Severely Adverse Scenario and therefore are not presented herein.

Projected Capital Ratios through December 31, 2016

Under the Supervisory Adverse Scenario

	As of September 30, 2014	Stressed Ratios Under Supervisory Adverse Scenario [1] [2]	
		As of December 31, 2016 [3]	Minimum Over Planning Horizon
Tier 1 Common Risk-based Capital Ratio	12.4%	11.7%	11.6%
Common Equity Tier 1 Risk-based Capital Ratio	12.4%	11.9%	11.7%
Tier 1 Risk-based Capital Ratio	12.4%	11.9%	11.7%
Total Risk-based Capital Ratio	14.2%	13.9%	13.7%
Tier 1 Leverage Ratio	10.5%	10.9%	9.0%

(1) 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 ratios do not necessarily occur in the same quarter of the planning horizon.

(2) With respect to the Common Equity Tier 1, the Tier 1 and the Total Risk-based Capital ratios, for each quarter in 2014, RWAs are calculated using Basel I and Basel 2.5, including certain transitional adjustments related to numerator deductions. For each quarter in 2015 and 2016, the U.S. Basel III standardized approach is used to calculate RWAs for credit risk and market risk. In addition, the numerator for all quarters in 2014 through 2016 reflects the U.S. Basel III transitional rules. However, with respect to the Tier 1 Common Capital ratio, the numerator is calculated using Basel I and RWAs are calculated using Basel I and Basel 2.5 for all quarters of the planning horizon.

(3) The most significant cause of change in capital ratios under the Supervisory Adverse Scenario resulted from loan and operational risk losses and reduction in AOCI. Ending capital ratios under the Supervisory Adverse Scenario reflected the planned capital actions, ongoing accretion of earnings, net of operational risk and credit losses, as well as the level of assets and RWAs projected through the forecast horizon.

Morgan Stanley

Projected Capital Ratios through December 31, 2016

Under the Supervisory Severely Adverse Scenario

	As of September 30, 2014	Stressed Ratios Under Supervisory Severely Adverse Scenario [1] [2]	
		As of December 31, 2016 [3]	Minimum Over Planning Horizon
Tier 1 Common Risk-based Capital Ratio	N/A	N/A	N/A
Common Equity Tier 1 Risk-based Capital Ratio	21.7%	31.1%	20.1%
Tier 1 Risk-based Capital Ratio	21.7%	31.1%	20.1%
Total Risk-based Capital Ratio	21.8%	31.6%	20.3%
Tier 1 Leverage Ratio	10.1%	9.3%	9.3%

(1) 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 ratios do not necessarily occur in the same quarter of the planning horizon.

(2) With respect to the Common Equity Tier 1, the Tier 1 and the Total Risk-based Capital ratios, for each quarter in 2014, RWAs are calculated using Basel I and Basel 2.5, including certain transitional adjustments related to numerator deductions. For each quarter in 2015 and 2016, the U.S. Basel III standardized approach is used to calculate RWAs for credit risk and market risk. In addition, the numerator for all quarters in 2014 through 2016 reflects the U.S. Basel III transitional rules. Tier 1 Common Capital Ratio is not calculated for MSPBNA, as it is not required by the Office of the Comptroller of the Currency ("OCC").

(3) Ending capital ratios under the Supervisory Severely Adverse Scenario reflect planned capital infusions supporting significant asset and RWA growth, as well as ongoing accretion of earnings, offset by operational risk and credit losses, projected through the forecast horizon.

Note: The forecast methodologies for MSPBNA DFAST Stress Test results are similar to those utilized for the Company (described on pages 11-14). The largest counterparty default and global market shock components are not applicable to MSPBNA.

Morgan Stanley

Because certain of MSPBNA's capital ratios under the Supervisory Adverse Scenario are lower than those under the Supervisory Severely Adverse Scenario, MSPBNA's capital ratios under the Supervisory Adverse Scenario are presented below. The lower ratios are driven by increased RWAs from higher business growth. Unlike MSPBNA, the Holding Company's capital ratios under the Supervisory Adverse Scenario are higher than those under the Supervisory Severely Adverse Scenario and therefore are not presented herein.

Projected Capital Ratios through December 31, 2016

Under the Supervisory Adverse Scenario

		Stressed Ratios Under Supervisory Adverse Scenario [1] [2]	
	As of September 30, 2014	As of December 31, 2016 [3]	Minimum Over Planning Horizon
Tier 1 Common Risk-based Capital Ratio	N/A	N/A	N/A
Common Equity Tier 1 Risk-based Capital Ratio	21.7%	34.0%	19.8%
Tier 1 Risk-based Capital Ratio	21.7%	34.0%	19.8%
Total Risk-based Capital Ratio	21.8%	34.4%	19.9%
Tier 1 Leverage Ratio	10.1%	10.7%	9.3%

(1) 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 ratios do not necessarily occur in the same quarter of the planning horizon.

(2) With respect to the Common Equity Tier 1, the Tier 1 and the Total Risk-based Capital ratios, for each quarter in 2014, RWAs are calculated using Basel I and Basel 2.5, including certain transitional adjustments related to numerator deductions. For each quarter in 2015 and 2016, the U.S. Basel III standardized approach is used to calculate RWAs for credit risk and market risk. In addition, the numerator for all quarters in 2014 through 2016 reflects the U.S. Basel III transitional rules. Tier 1 Common Capital Ratio is not calculated for MSPBNA, as it is not required by the OCC.

(3) Ending capital ratios under the Supervisory Adverse Scenario reflect planned capital infusions supporting significant asset and RWA growth, as well as ongoing accretion of earnings, offset by operational risk and credit losses, projected through the forecast horizon.

Note: The forecast methodologies for MSPBNA DFAST Stress Test results are similar to those utilized for the Company (described on pages 11-14). The largest counterparty default and global market shock components are not applicable to MSPBNA.

Morgan Stanley