# Morgan Stanley

2013 Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Stress Tests

Updated to Include Morgan Stanley Bank N.A.

Comprehensive Capital Plan submitted to the Federal Reserve Bank on January 7, 2013

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March 14, 2013 - Morgan Stanley (the "Company") announced today that it received no objection from the Board of Governors of the Federal Reserve System (the "Federal Reserve") to the Company's 2013 capital plan that was submitted to the Federal Reserve on January 7, 2013, as previously disclosed. This capital plan included the Company's potential cash acquisition of the remaining 35% interest in Morgan Stanley Smith Barney Holdings LLC (the "Wealth Management JV"), the completion of which is subject to applicable regulatory approvals.

#### 1. Background to Comprehensive Capital Analysis and Review ("CCAR") and Dodd-Frank Stress Tests

In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") was signed into federal law requiring the Federal Reserve to conduct annual stress tests of Bank Holding Companies ("BHCs") with total consolidated assets of \$50 billion or more ("Covered Company"). In connection with the CCAR process, the Federal Reserve issued final rules on capital plans ("Capital Plans") in November 2011, requiring large BHCs such as the Company to submit Capital Plans on an annual basis in order for the Federal Reserve to assess the BHCs' systems and processes that incorporate forward-looking projections of revenues and losses to monitor and maintain their internal capital adequacy. The rules also require that such companies receive no objection from the Federal Reserve before executing a capital action.

# **Dodd-Frank Stress Test Requirements**

In October 2012, the Federal Reserve issued a final rule on Supervisory and Company-run Stress Test Requirements for Covered Companies, including the Company, and requires the Company to conduct semi-annual company-run stress tests under baseline, adverse and severely adverse economic scenarios. Under this rule, the Federal Reserve is also required to conduct an annual supervisory stress test of Covered Companies, including the Company. The rule requires Covered Companies to disclose publicly the results of their stress tests under the Federal Reserve's Severely Adverse Stress Scenario, which describes the hypothetical evolution of certain specific macroeconomic and market variables consistent with a severely adverse post-war recession. Each Covered Company is further required to employ the following assumptions (the "Dodd Frank Act Stress Testing Capital Actions") regarding its projected capital actions over the planning 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.

Additionally, as a BHC 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 November 14, 2012. The hypothetical global market shock prescribed by the Federal Reserve was generally based on the price and rate movements observed in the second half of 2008. It also incorporated hypothetical Eurozone-based shocks, including sharp increases in government yields, widening corporate and sovereign credit default swap spreads, and a large depreciation of the euro against major currencies.

The results of the Company's company-run stress test, under the Federal Reserve's severely adverse stress scenario, assuming the Dodd Frank Act Stress Testing Capital Actions and global market shock, (the "Supervisory Stress Scenario") are presented under "Company-Run Stress Test – Holding Company" included herein.

### 2. Forecast Methodologies Reflected in Company-Run Stress Test

The Company's capital ratios under the Supervisory Stress Scenario reflect the effect of prescribed 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 Stress Scenario, the Company employed various forecast methodologies to quantify the impact of the hypothetical assumptions over the forecast time horizon including, but not limited to, the following:

### Revenues

The Company's revenue forecast, under the Supervisory Stress Scenario, reflected a detailed process in which each major business developed a projection over the nine-quarter capital planning horizon. This forecast incorporates the impact of the hypothetical macroeconomic and market environment prescribed under the Supervisory Stress Scenario. The Supervisory Stress Scenario revenue forecast also reflected the level of resources projected to be employed by each major business over the capital planning horizon, as well as the business' expectations of customer behavior and competitive dynamics.

#### Losses

The Supervisory Stress Scenario measured stress losses from market risk, credit default risk and operational risk exposures across the Company, utilizing the following methodologies:

**Market Risk:** Market risks included all mark-to-market positions including credit valuation adjustments ("CVA"), loans carried at fair value, and private equity investments. Stress losses were estimated by re-pricing the Company's mark-to-market portfolio by applying the Federal Reserve's prescribed global market shock.

**Credit Default Risk:** Credit default stress losses reflected losses on: (i) loans held for investment, including commercial and industrial, other consumer and other loans; (ii) secured financing transactions, including repurchase agreements and stock loans; (iii) available for sale securities; as well as (iv) incremental default losses on mark to market and CVA positions.

Credit default losses for commercial and industrial loans were estimated using stressed Probability of Default, Loss Given Default and Exposure at Default under the prescribed stressed conditions. In addition, stressed credit transition matrices were used in the calculation of the changes to the Allowance for Credit Losses.

Credit default losses for positions that are marked to market 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 the Basel Committee's market risk capital framework (also known as "Basel 2.5"), to calculate the default risk of mark-to-market exposures and CVAs.

**Operational Risk:** Operational risk loss estimates were calculated based on the Company's Internal Loss Data ("ILD") model. The ILD model calculated estimates for the operational risk types defined by the Basel Committee on Banking Supervision.

### **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, Tier 1 Capital and Total Capital on a quarterly basis over the nine-quarter capital planning horizon.

### 3. Company-Run Stress Test - Holding Company

The results presented below contain forward-looking projections that represent estimates based on the hypothetical, severely adverse economic scenario prescribed by the Federal Reserve. The estimates also reflect certain required assumptions regarding the Company's capital actions, which are noted above. 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 Company's or MSBNA's solvency or actual financial performance or condition. Instead, the outputs and discussions are estimates from forward-looking exercises that consider possible outcomes based on a set of hypothetical, highly adverse economic scenarios. In addition, the outputs of the analyses and the discussion contained herein may not align with those produced by the Federal Reserve and other financial institutions conducting similar exercises, even if a similar set of hypothetical stress scenarios were used, due to differences in methodologies and assumptions used to produce those outputs.

The most significant cause of reduction in capital ratios under the Supervisory Stress Scenario resulted from the application of the prescribed global market shock, reflected in Trading and Counterparty Losses and Other Losses and Gains. Additionally, Risk Based Capital Ratios were further reduced by increases in Risk Weighted Assets ("RWAs") in the second quarter (1Q 2013) of the capital planning horizon related to reporting of the Company's RWAs under Basel 2.5, which became effective on January 1, 2013.

# Projected Capital Ratios through December 31, 2014 Under the Supervisory Stress Scenario

Stressed Ratios Under **Supervisory Stress Scenario** Minimum Actual Over As of As of Planning September 30, December 31, Horizon 2012 2014 **(1)** Tier 1 common capital ratio..... 13.9% 7.5% 6.7% Tier 1 capital ratio..... 16.9% 9.4% 8.5% Total risk-based capital ratio..... 17.0% 10.4% 9.6% Tier 1 leverage ratio..... 7.2% 5.7% 4.6%

<sup>(1)</sup> The minimum capital ratios do not necessarily occur in the same quarter of the planning horizon.

# Projected Losses, Revenue and Net Income before Taxes September 30, 2012 through December 31, 2014 Under the Supervisory Stress Scenario (dollars in billions)

	_	Amount
Pre-provision net revenue (1)	\$	6.3
Other losses (2)		(0.1)
Less: Provision for loan and lease losses		1.0
Less: Realized losses/gains on AFS /HTM securities (3)		0.0
Less: Trading and counterparty losses (4)		11.1
Less: Other losses/gains (5)	_	6.7
Net income before taxes	\$	(12.6)

- (1) Pre-provision net revenue includes losses from operational risk events, mortgage put-back expenses and other real estate owned (OREO) costs.
- (2) Other losses include one time expenses, and the results of discontinued operations, which are not reflected in pre-provision net revenue.
- (3) Represents available-for-sale ("AFS") and held-to-maturity ("HTM") securities.
- (4) Trading and counterparty losses include the market-to-market losses associated with the global market shock and changes in CVA and incremental default losses.
- (5) Other losses/gains primarily include the projected stress losses on loans measured at fair value.

# Projected Loan Losses by Type of Loans (1) September 30, 2012 through December 31, 2014 Under the Supervisory Stress Scenario (dollars in billions)

	Cumulative Amount	Portfolio Loss Rates (2)
Loan Losses	\$ 0.8	1.5%
First lien mortgages, domestic	0.0	0.2%
Junior liens and HELOCs, domestic	0.0	0.5%
Commercial and industrial	0.6	3.5%
Commercial real estate	0.0	4.4%
Credit cards	N/A	N/A
Other consumer	0.1	0.7%
Other loans	0.1	0.6%

#### N/A – Not Applicable

- 1) Excludes held-for-sale loans and loans measured at fair value.
- (2) Represents cumulative portfolio losses as a percentage of the average loan portfolio balance.

#### 4. Company-Run Stress Test – Morgan Stanley Bank N.A. ("MSBNA")

Section 165(i)(2) of the Dodd-Frank Act requires national banks and federal savings associations with total consolidated assets of more than \$10 billion to conduct annual stress tests. For 2013, this requirement was applicable only to national banks and federal savings associations with total consolidated assets of more than \$50 billion. The Company's only wholly owned subsidiary meeting this requirement was MSBNA. Accordingly, MSBNA conducted its own stress test under the supervisory scenarios and guidance provided by the Office of the Comptroller of the Currency ("OCC"). The OCC advised MSBNA that it need not include the OCC's global market shock scenarios in its stress testing given the limited scope of MSBNA's current activities.

The reduction in MSBNA's capital ratios was mainly due to an increase in RWAs from growth in certain businesses, credit losses driven by scenario assumptions and an anticipated increase in the asset base of MSBNA driven by an increase in sweep deposits following the planned purchase of Citigroup Inc.'s remaining interest in the Morgan Stanley Wealth Management joint venture. Additionally, Risk Based Capital Ratios were further reduced by increases in RWAs in the second quarter (1Q 2013) of the capital planning horizon related to reporting of MSBNA's RWAs under Basel 2.5.

# Projected Capital Ratios through December 31, 2014 Under the Supervisory Stress Scenario

	Actual As of September 30, 2012	Minimum Over Planning Horizon (1)
Tier 1 common capital ratio	14.7%	9.7%
Tier 1 capital ratio	14.7%	9.7%
Total risk-based capital ratio	17.1%	11.3%
Tier 1 leverage ratio	13.3%	10.0%

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

# Forward-Looking Statements

The information above contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they are made and which reflect current estimates, projections, expectations or beliefs. These forward-looking statements are subject to numerous risks and uncertainties, and there are important factors that could cause actual results to differ materially from those in any such forward-looking statements, many of which are beyond the control of Morgan Stanley. There can be no assurance that the above-mentioned acquisition of the Wealth Management JV will occur as described.