BMO Financial Group

BMO Financial Corp. and

BMO Harris Bank N.A.

2015 Comprehensive Capital Analysis and Review

Dodd-Frank Act Company-Run Stress Test

Supervisory Severely Adverse Scenario Results Disclosure

March 5, 2015

Overview

BMO Financial Corp. (BFC), a U.S. bank and financial holding company, is a wholly-owned subsidiary of Bank of Montreal (BMO) and is regulated by the Board of Governors of the Federal Reserve System (FRB). BFC's wholly owned principal banking subsidiary, BMO Harris Bank N.A. (BHB), is regulated by the Office of the Comptroller of the Currency (OCC).

As a bank holding company with total consolidated assets of $50 billion or more, BFC is subject to the **Supervisory and Company-Run Stress Test Requirements for Covered Companies**[1] rule issued by the FRB to implement the stress test requirements established in section 165(i)(1) and (2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). In addition, BHB is subject to the **Annual Stress Test**[2] rule issued by the OCC. The rules and guidance provided by the OCC for the BHB stress test are consistent with those provided by the FRB for BFC's Dodd-Frank Act stress test.

The annual Dodd-Frank Act company-run stress test results presented in this report estimate the impact of a hypothetical severely adverse macro-economic scenario (Supervisory Severely Adverse Scenario) provided by the FRB and the OCC on the capital position of BFC and BHB over a nine-quarter planning horizon. The Supervisory Severely Adverse Scenario is described in additional detail below.

BFC and BHB performed their internal stress tests using their own models, practices, methodologies and assumptions to project pre-provision net revenue, provisions, losses and capital ratios under the Supervisory Severely Adverse Scenario except in those cases where practices, methodologies and assumptions were specifically prescribed by rules, instructions or guidance published by the FRB[3] and/or the OCC[4]. Consequently BFC results might differ, potentially materially, from the projections that the FRB makes using its own models, methodologies and assumptions.

In addition, companies are required to assume a uniform set of conditions regarding capital actions over the planning horizon to enable comparison of results across institutions and neutralize the effect of company-specific assumptions regarding capital actions. Under this requirement, BFC and BHB must calculate their pro forma capital ratios using the following factors and assumptions regarding their capital actions over the planning horizon for the Supervisory Severely Adverse Scenario:

1. For the initial quarter of the planning horizon (Q4 2014), take into account actual capital actions taken throughout the quarter;
2. For each of the subsequent quarters (Q1 2015 through Q4 2016), include in the projection of capital:
    i. common stock dividends equal to the quarterly average dollar amount of common stock dividends that the company paid in the previous year (i.e., the initial quarter of the planning horizon and the preceding three calendar quarters);
    ii. payments on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest, or principal due on such instrument during the quarter; and

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[1] 'Supervisory and Company-Run Stress Test Requirements for Covered Companies' Final Rule, 12 C.F.R Part 252

[2] 'Annual Stress Test' Final Rule, 12 C.F.R Part 46

[3] 'Comprehensive Capital Analysis and Review 2015 Summary Instructions and Guidance' published by FRB on October 17, 2014

[4] Dodd-Frank Act Stress Testing (DFAST) Reporting Instructions released by OCC December 2014

iii. an assumption of no redemption or repurchase of any capital instrument that is eligible for inclusion in the numerator of a regulatory capital ratio.[5]

In actual practice, if a severely adverse scenario were to occur, BFC and BHB would take capital and other management actions mandated by their internal policies and which are necessary or appropriate to respond to such stress.

BFC and BHB are well-capitalized with strong, pre-stress actual Basel I Tier 1 common capital ratios of 11.52% and 15.16%, respectively, at September 30, 2014. As depicted by the results of the Supervisory Severely Adverse Scenario presented below, BFC and BHB maintain strong capital levels with minimum Tier 1 common ratios of 7.31% and 11.84%, respectively, over the planning horizon, which are considerably higher than the applicable Basel I regulatory minimum value of 5.0%, despite reduced pre-provision net revenue and higher losses.

Supervisory Severely Adverse Scenario

The Supervisory Severely Adverse Scenario released by the FRB[6] and OCC is characterized by a deep and prolonged recession in which the unemployment rate increases from the third quarter of 2014, peaking at 10% in the middle of 2016. By the end of 2015, the level of real GDP is approximately 4.5% lower than its level in the third quarter of 2014; it begins to recover thereafter. Despite this decline in real activity, higher oil prices cause the annualized rate of change in the CPI to reach 4.25% in the near term, before subsequently falling back. In response to this economic contraction, Treasury yields of all maturities remain depressed throughout the scenario period. Short-term interest rates remain near zero through 2017; long-term Treasury yields drop to 1% in the fourth quarter of 2014 and then edge up slowly over the remainder of the scenario period. Driven by the assumed decline in corporate credit quality, spreads on investment-grade corporate bonds jump from about 170 basis points to 500 basis points at their peak. As a result, despite lower long-term Treasury yields, corporate financial conditions tighten significantly in 2015 and the yield on investment-grade corporate bonds spikes in the third quarter of 2015 before slowly declining for the remainder of the scenario period. Mortgage rates also increase over the course of 2015, driven by some widening in spreads. Consistent with these developments, asset prices contract sharply in the scenario. Equity prices fall by approximately 60% from the third quarter of 2014 through the fourth quarter of 2015, and equity market volatility increases sharply. House prices decline by approximately 25% during the scenario period relative to their level in the third quarter of 2014, while commercial real estate prices are more than 30% lower at their trough.

Supervisory Severely Adverse Scenario Estimates

BFC and BHB maintain strong regulatory capital ratios throughout the planning horizon from Q4 2014 through Q4 2016. The minimum and ending values are depicted below. Also shown below are risk-weighted assets projections as well as loan loss and income statement forecasts throughout the scenario.

[5] For similar reasons, the supervisory guidance requires that a company assume that it will not issue any new common stock, preferred stock, or other instrument that would be included in regulatory capital in the second through ninth quarters of the planning horizon, except for any common stock issuances associated with expensed employee stock compensation.

[6] The supervisory scenario descriptions can be obtained from the CCAR Instructions: http://www.federalreserve.gov/newsevents/press/bcreg/20141023a.htm

Projected stressed capital ratios through Q4 2016			
(%)	Actual Q3 2014	Stressed capital ratios [1]	
		Ending	Minimum
BMO Financial Corp.			
Tier 1 common ratio [2]	11.52%	7.31%	7.31%
Common equity Tier 1 capital ratio [3]	NA	8.00%	8.00%
Tier 1 risk-based capital ratio	11.52%	8.00%	8.00%
Total risk-based capital ratio	15.50%	11.06%	11.06%
Tier 1 leverage ratio	8.34%	5.82%	5.82%
BMO Harris Bank N.A.			
Tier 1 common ratio [2]	15.16%	11.84%	11.84%
Common equity Tier 1 capital ratio [3]	NA	12.35%	12.35%
Tier 1 risk-based capital ratio	15.16%	12.35%	12.35%
Total risk-based capital ratio	16.57%	13.54%	13.54%
Tier 1 leverage ratio	11.70%	9.65%	9.65%

[1] The pro forma stressed capital ratios are calculated using capital action factors and assumptions as described above. These projections represent hypothetical estimates under severely adverse economic conditions specified in the Supervisory Severely Adverse Scenario. These estimates are not forecasts of expected financial results. The minimum capital ratios presented are for the period Q4 2014 to Q4 2016. The pro forma stressed capital ratios reflect the decision of BFC and BHB to not include Accumulated Other Comprehensive Income in regulatory capital, as permitted.
[2] All bank holding companies are required to calculate the Basel I Tier 1 common ratio for each quarter of the scenario horizon.
[3] Common equity Tier 1 capital ratio is the Basel III ratio adopted by the Federal Reserve pursuant to the U.S. Basel III Final Rule and is effective for BFC and BHB beginning Q1 2015.

Actual Q3 2014 and projected Q4 2016 risk-weighted assets[1]			
Billions of dollars	Actual Q3 2014	Projected Q4 2016 (Standard approach)	Projected Q4 2016 (General approach)
BFC Risk-Weighted Assets	78.3	74.2	71.7

[1] For each quarter beginning Q1 2015, risk-weighted assets are calculated under the Basel III standardized risk-based capital approach, except for the Tier 1 common ratio which uses the general risk-based capital approach for all quarters.

BFC projected loan losses, by type of loan, Q4 2014 - Q4 2016		
(%)	Billions of dollars	Portfolio loss rates (%) [1]
Loan Losses	3.4	6.4%
First-lien mortgages	0.4	5.8%
Junior liens and HELOCs	0.3	7.7%
Commercial and industrial [2]	1.4	9.1%
Commercial real estate [3]	0.8	8.7%
Credit cards	0.1	22.2%
Other consumer [4]	0.1	1.8%
Other loans [5]	0.3	2.7%

[1] Average loan balances used to calculate portfolio loss rates exclude loans held for sale and are calculated over nine quarters.
[2] Commercial and Industrial loans include small and medium enterprise loans and corporate cards.
[3] Commercial real estate loans include loans secured by farmland.
[4] Other consumer loans include auto, student loans, personal loans, and overdraft lines of credit.
[5] Other loans include all other commercial loans and leases.

BFC projected losses, revenue, and net income before taxes from Q4 2014 through Q4 2016		
(%)	Billions of dollars	Percentage of average assets
Pre-provision net revenue [1]	0.4	0.3%
Other revenue	0.0	—%
Less		
Provisions	4.0	3.6%
Realized losses/gains on securities (AFS/HTM)	—	—%
Trading and counterparty losses	0.1	0.1%
Other losses/gains	—	—%
Equals		
Net income before taxes [2]	(3.7)	(3.4)%

[1] Pre-provision net revenue includes losses from operational risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs. Other revenue includes one-time income (and expense) items not included in pre-provision net revenue.
[2] Numbers in the table might not foot due to rounding.

Stress Testing Methodologies

The stress testing methodologies used by BFC and BHB are focused on defining the relationship between macroeconomic variables and business volumes, revenues and losses in order to develop pro-forma financial statements and estimate impact on capital availability. Key outputs from these processes are pro-forma balance sheets and income statements, which are used to develop risk-weighted assets, average leverage assets and capital projections and which are used to estimate stressed regulatory capital ratios. BFC and BHB use models, quantitative and qualitative methodologies, and management judgment, where applicable, to produce a comprehensive projection of business performance under a hypothetical severe stress scenario. All projected results are reviewed and challenged by teams of BMO subject matter experts, and senior cross-functional and multi-disciplinary management committees, as well as by the Capital Committee of the BFC board of directors.

The risks evaluated consist of a broad spectrum that includes credit risk, market risk, operational risk, other-than-temporary-impairment (OTTI) of securities, business risk, and other applicable risks. The macroeconomic variables provided by the FRB and OCC are expanded as required, and these assumptions and interest rate curves are used to make projections. The specific methodologies employed are described below.

Credit and Other Losses

BFC and BHB loss estimation processes are supported by well-established frameworks complemented by conservative assumptions and robust governance. Loss estimation for each scenario is driven by scenario-specific inputs, credit migrations, and Probability of Default (PD) and Loss Given Default (LGD) stress models. Results are benchmarked against key internal and external metrics of performance.

Commercial and Consumer net charge-offs are estimated using quantitative and qualitative approaches that forecast stress PD, stress LGD and exposure at default, as well as obligor rating transition matrices for Commercial loans. Commercial and Consumer models are conservatively calibrated to BFC and BHB's historical loss experience and use risk characteristics of loan segments and portfolios to derive results under the Supervisory Severely Adverse scenario.

Operational losses are estimated using a loss distribution approach model that predicts losses across the spectrum of operational losses, which includes legal settlements, ongoing fees and reserves. This modeled stress result uses a higher percentile confidence level to account for increased potential tail risk in periods of stress.

Trading losses are estimated using market-risk stress testing models. OTTI on available-for-sale securities and equity investments is estimated at an individual investment level.

Pre-provision Net Revenue

BFC and BHB use quantitative and qualitative methodologies based on applicable macro-economic variables to estimate net interest income, non-interest revenue and non-interest expense. Net interest income components are estimated using the projected balance sheet (structural and non-structural), non-performing loan migration, net charge-offs, loan and deposit purchase accounting and non-contractual net interest income. Non-interest revenue and non-interest expense are estimated utilizing historical experience, expert judgment and quantitative approaches. While a majority of the categories are quantitatively modeled, certain categories are judgmentally derived.

Provision for Loan and Lease Losses

BFC and BHB utilize the loss estimates generated by their methodologies in quantifying their allowance for loan and lease losses. The provisions for loan and lease losses are estimated to ensure that they are more than adequate to absorb quarterly losses through the planning horizon.

Capital Position

The impact of estimated pre-provision net revenue and losses, changes in asset levels, permitted capital and other management actions and changes in risk-weighted assets are used to estimate BFC and BHB's capital position. Risk-weighted assets, average assets for leverage purposes and regulatory capital were calculated based on the Basel I methodology for Q4 2014, and based on the applicable transitional Basel III methodology for non-advanced approaches institutions for the remaining eight quarters of the planning horizon, Q1 2015 through Q4 2016. The Tier 1 common equity ratio is calculated based on the current Basel I methodology throughout the stress horizon. The decline in capital ratios from actual Q4 2014 levels to the minimums projected in the hypothetical Supervisory Severely Adverse Scenario primarily reflects the impact of higher credit losses combined with reduced pre-provision net revenue, partly offset by lower asset levels.

The annual Dodd-Frank Act company-run stress test results presented in this report (Stress Test Results) have been prepared in accordance with U.S. GAAP. The Stress Test Results present certain projected financial measures for BFC and BHB under the hypothetical economic and market scenario and assumptions provided by the FRB and OCC described herein. The Stress Test Results are not forecasts of actual financial results for either BFC or BHB. Investors in securities issued by Bank of Montreal and its affiliates should not rely on the Stress Test Results as being indicative of expected future results.

The stress testing of financial institutions conducted by the FRB is based on models and methodologies developed or employed by the FRB. The FRB does not disclose details of its models and methodologies. Therefore, BFC may not be able to explain certain variances between the FRB's projections and BFC Stress Test Results included herein.