



**BMO Financial Corp. and
BMO Harris Bank N.A.**

**2014 Comprehensive Capital Analysis
and Review**

**Dodd-Frank Act Company-Run Stress Test
Supervisory Severely Adverse Scenario Results Disclosure**

March 20, 2014

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 FRB³ and/or the OCC⁴. 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 2013), take into account actual capital actions taken throughout the quarter;
2. For each of the subsequent quarters (Q1 2014 through Q4 2015), 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

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 2014 Summary Instructions and Guidance' published by FRB on November 1, 2013

⁴ <http://www.occ.gov/tools-forms/forms/bank-operations/stress-test-reporting.html>

- 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
 - 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 10.84% and 15.15%, respectively, at September 30, 2013. As depicted by the results of the severely adverse scenario presented below, BFC and BHB maintain strong capital levels with minimum Tier 1 common ratios of 9.02% and 13.49%, respectively, over the planning horizon, which are considerably higher than the applicable Basel I regulatory minimum value of 5.0%. BFC and BHB maintain pro-forma regulatory capital ratios that are higher than the regulatory minimums throughout the planning horizon despite reduced pre-provision net revenue, higher losses and the mandated capital actions described above.

Supervisory Severely Adverse Scenario

The Supervisory Severely Adverse Scenario released by the FRB⁶ and OCC is characterized by a substantial weakening in economic activity across all of the economies included in the scenario, and features a significant reversal of recent improvements to the U.S. housing market and the euro area economy. In the U.S. this scenario features a severe recession with a peak-to-trough GDP decline of 4.7%, resulting in the unemployment rate increasing by 4%. This rate peaks at 11.25% in mid-2015, remaining above any level experienced during the past 70 years from late 2014 to mid-2016. The CPI index declines to less than 1% by the end of 2014 before increasing to 1.5% from the end of 2015 through 2016. The international component of the scenario features recessions in the euro area, the United Kingdom and Japan, and below-trend growth in developing Asia. The euro area slips into recession in Q4 2013 and remains so until end of 2014. During this period, the level of euro area real GDP contracts by 5.75% and the level of real GDP in the United Kingdom falls 3%. In addition, there is considerable weakening of conditions in developing Asia and a recession in Japan beginning in Q4 2013 and lasting until Q3 2015. These disruptions in international markets have a severe effect on American exports, while the disruptions to emerging markets in Asia are assumed to be less acute.

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 scenarios can be obtained from the FRB website at <http://www.federalreserve.gov/newsevents/press/bcreg/20131101a.htm>

Supervisory Severely Adverse Scenario Estimates

BFC and BHB maintain strong regulatory capital ratios throughout the planning horizon from Q3 2013 through Q4 2015. The minimum and ending values are depicted below.

Projected stressed capital ratios through Q4 2015			
(%)	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
BMO Financial Corp.			
Tier 1 common ratio ²	10.84%	9.02%	9.02%
Common equity tier 1 capital ratio ³	N/A	9.85%	9.85%
Tier 1 risk-based capital ratio	10.84%	9.85%	9.85%
Total risk-based capital ratio	15.20%	13.84%	13.84%
Tier 1 leverage ratio	7.95%	7.53%	6.92%
BMO Harris Bank N.A.			
Tier 1 common ratio ²	15.15%	13.49%	13.49%
Common equity tier 1 capital ratio ³	N/A	13.92%	13.92%
Tier 1 risk-based capital ratio	15.15%	13.92%	13.92%
Total risk-based capital ratio	16.77%	15.25%	15.25%
Tier 1 leverage ratio	11.46%	10.38%	9.55%

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, which are more adverse than expected. These estimates are not forecasts of actual financial results. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015. 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 2015.

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 2013 and projected Q4 2015 risk-weighted assets ¹			
Billions of dollars	Actual Q3 2013	Projected Q4 2015	
		Current General Approach	Basel III Standardized Approach
BFC Risk-Weighted Assets	75.10	63.20	69.15

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 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.

Projected loan losses, by type of loan, Q4 2013 – Q4 2015		
(%)	Billions of dollars	Portfolio loss rates (%) ¹
Loan Losses	2.5	5.0%
First-lien mortgages	0.3	4.0%
Junior liens and HELOCs	0.3	6.0%
Commercial and industrial ²	0.7	4.8%
Commercial real estate ³	0.6	7.8%
Credit cards	0.1	17.0%
Other consumer ⁴	0.2	2.6%
Other loans	0.3	4.5%

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 student loans and automobile loans.

Projected losses, revenue, and net income before taxes from Q4 2013 through Q4 2015		
(%)	Billions of dollars	Percentage of average assets
Pre-provision net revenue ¹	0.7	0.7%
Other revenue ²	0.0	0.0%
<i>Less</i>		
Provisions	3.1	3.0%
Realized losses/gains on securities (AFS/HTM)	0.0	0.0%
Trading and counterparty losses ³	0.0	0.0%
Other losses/gains ⁴	0.0	0.0%
<i>Equals</i>		
Net income before taxes ⁵	- 2.4	- 2.3%

¹ Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

² Other revenue includes one-time income (and expense) items not included in pre-provision net revenue

³ Trading and counterparty losses include mark-to-market and credit valuation adjustment (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁴ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option, and goodwill impairment losses.

⁵ 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, methodologies and management judgement, where applicable, to produce a comprehensive projection of business performance under a hypothetical severe stress scenario. 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 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. All losses are reviewed and challenged by teams of experts, and senior cross-functional and multi-disciplinary management committees.

Commercial net charge-offs are estimated using stress PD, transition matrices, stress LGD and exposure at default primarily calibrated to BFC and BHB's loss experience. These models are tailored to particular commercial loan portfolios.

Consumer net charge-offs are estimated using PD, LGD and exposure at default models, calibrated to BFC's and BHB's loss experience. These models incorporate quantitatively predictive portfolio segments and their risk characteristics.

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 macroeconomic variables to estimate net-interest income, non-interest revenue and non-interest expense. Net-interest income components are estimated using the 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 judgement and quantitative approaches. While a majority of the categories are judgementally derived, certain categories are quantitatively modeled.

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 current Basel I methodology for the initial 5 quarters in the planning horizon, Q4 2013 through Q4 2014, and based on applicable transitional Basel III methodology for non-advanced approaches institutions for the last 4 quarters of the planning horizon, Q1 2015 through Q4 2015. 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 Q3 2013 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 OCC and FRB 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.