BMO Financial Corp.

2015 Mid-Cycle Dodd-Frank Act Stress Test

BHC Severely Adverse Scenario Results Disclosure

July 21, 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 or "the Fed").

As a bank holding company (BHC) 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").

The 2015 Dodd-Frank Act company-run mid-cycle stress test results presented in this report estimate the impact of a hypothetical severely adverse macroeconomic scenario (BHC Severely Adverse scenario) selected by BFC on its capital position over a nine-quarter forecast horizon. The BHC Severely Adverse scenario is described in additional detail below.

BFC performed its internal stress tests using its own models, practices, methodologies and assumptions to project pre-provision net revenue, provisions, losses and capital ratios under the BHC Severely Adverse scenario except in those cases where practices, methodologies and assumptions were specifically prescribed by rules, instructions or guidance published by the FRB.[2]

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

1. For the initial quarter of the forecast horizon (Q1 2015), take into account actual capital actions taken throughout the quarter;
2. For each of the subsequent quarters (Q2 2015 through Q2 2017), 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 forecast 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.[3]

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

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

[2] 'Comprehensive Capital Analysis and Review 2015 Summary Instructions and Guidance' published by FRB on October 17, 2014 and 'Dodd-Frank Act Mid-Cycle Stress Tests 2013 Summary Instructions' published by FRB on May 13, 2013

[3] 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 forecast horizon, except for any common stock issuances associated with expensed employee stock compensation.

BFC is well-capitalized with a strong, pre-stress actual Basel III Tier 1 Capital ratio of 12.54% as of March 31, 2015. As depicted by the results of the BHC Severely Adverse scenario presented below, BFC maintains strong capital levels, with a minimum Tier 1 Capital ratio of 7.41% over the forecast horizon, which is considerably higher than the applicable Basel III regulatory minimum value of 6.0%. BFC maintains pro-forma regulatory capital ratios that are higher than the regulatory minimums throughout the forecast horizon despite reduced pre-provision net revenue and higher losses.

BHC Severely Adverse Scenario

The BHC Severely Adverse scenario is characterized by economic and political stress between Greece and other European Union member states, which escalate further as Greece proves unwilling to compromise on necessary reforms, eventually being found to be in breach of its current four-month bridge financing agreement with the European authorities and the IMF. Funds are not committed, leaving Greece unable to meet payments. A full default occurs and Greece elects to leave the Eurozone, resulting in massive losses and a run on the local banks. Though European banks have reduced their exposures to Greek debt from nearly 200B to 45B euros, the European Stability Mechanism (ESM) and the European Central Bank (ECB) - now holders of the debt - are left with the loss. Greece's exit from the Eurozone creates widespread uncertainty about the viability of the currency union. Anti-Eurozone parties in Spain, France and Italy gain significant momentum, while support wanes in Germany. In this uncertain environment, yields on peripheral Eurozone government debt begin to increase despite quantitative easing by ECB. With 55% of ESM funds already committed, the remainder is seen as insufficient to bail out a country such as Spain, adding further upward pressure on yields, particularly with over one-third of the fund being wiped out by losses on Greek debt. Furthermore, after suffering a write-off of over 25 billion euros in Greek debt held under its security market measures program (which would need to be bailed in by taxpayers), ECB becomes unwilling to boost holdings in stressed sovereign debt (partially blocked from doing so by the current rating quality constraints of the program), curbing the ability for further quantitative easing.

Altogether these factors put immense pressure on European financial institutions, particularly poorly capitalized banks in Italy and Spain. Several institutions fail, leading to a sharp rise in funding costs and elevated counterparty risk. This produces a pronounced effect on the derivatives market and counterparty trading, where U.S. banks have significant exposure. Uncertainty in the market leads to mispriced valuation of assets and a freeze in some markets. As a result, interbank lending spreads rise sharply to 2.25% by Q3 2015, while bank balance sheets and exposures are questioned. The U.S. financial system once again enters a crisis, with several highly-levered hedge funds going under within the first few days, and investment banks scrambling to properly assess their assets. The Federal Reserve is constrained to act because rates already lie at their lower bound, and further entrance into asset markets may push the limitations of their desired market influence within each sub-segment. Therefore, while easing measures are taken in Q2 2015, they are inadequate to reverse a sharp decline in lending activity and broader destabilization in financial markets.

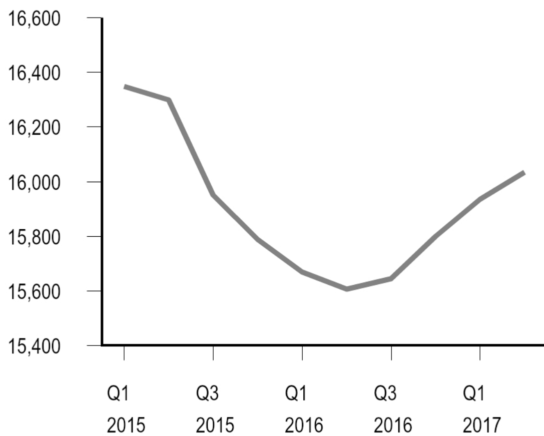
Business investment deteriorates rapidly, as firms are all but frozen out of lending markets. BBB spreads grow to 6.2% by Q3 2015 as investors rush out of risk assets following several years of chasing yields. Similarly, the S&P 500 suffers a 45% decline as investors exit pricey risk assets. Despite these outflows, the trade-weighted U.S. dollar appreciates by over 35% as safe-haven flows pour into the economy. Correspondingly, increased demand for U.S. dollar exposure and fears of deflation sees ten-year Treasury yields fall to 1.0% by Q1 2016. The combination of small global demand and currency appreciation significantly restrains exports.

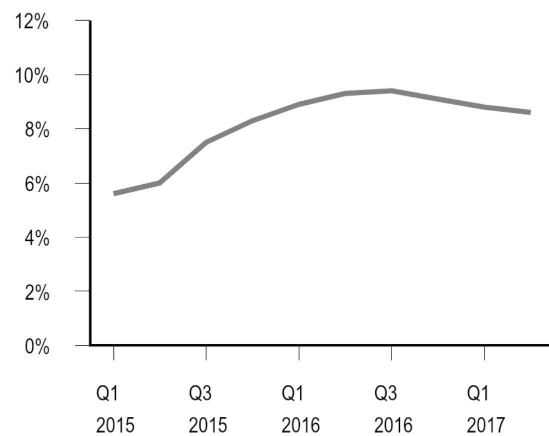
Financial market stress quickly enters the household segment, with consumers caught in a credit crunch just as they have begun to start increasing their debt burden. This results in a sharp pullback in household expenditures, while the still-fragile housing market recovery backslides with prices

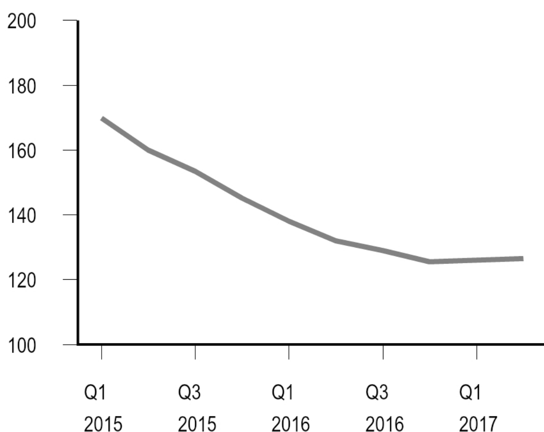
tumbling for a prolonged period: 27% by Q4 2016. The U.S. government, though having some fiscal flexibility relative to years past, is still constrained in its ability to implement large scale stabilizing spending measures, providing little resistance to the cycle. Overall, the economy suffers a 4.6% peak-to-trough decline in GDP beginning in Q2 2015, pushing the unemployment rate up 3.9% to 9.4% by Q2 2016.

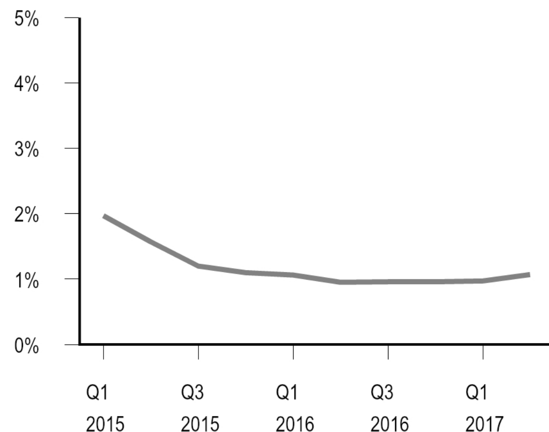
The Midwest experiences an even deeper downturn with a peak-to-trough decline in GDP of 6.6%, with the combination of a strong U.S. dollar and weakening export demand hindering the manufacturing and transportation sectors. Over a third of manufactured goods in the Midwest are intended for export, with manufacturing, wholesaling and transportation accounting for over 25% of the region's economy (compared to less than 20% for the rest of the domestic economy). Furthermore, Illinois' sluggish housing market and underperforming Midwest commercial property markets suffer from the rapid erosion of credit and decrease in demand as the unemployment rate spikes well above 10% in most states.

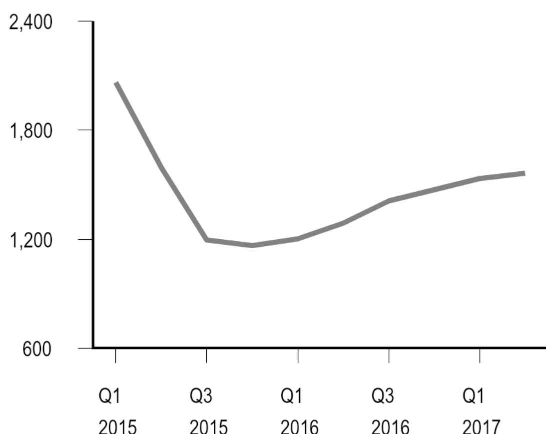
The charts below provide a view of the path specific U.S. macroeconomic variables, which are drivers of the estimation process, follow through the forecast horizon.

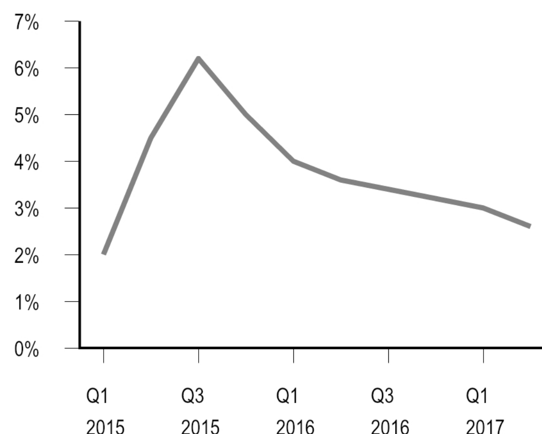












BHC Severely Adverse Scenario Estimates

BFC maintains strong regulatory capital ratios throughout the forecast horizon from Q1 2015 through Q2 2017. The minimum and ending values are depicted below. Also shown below are risk-weighted asset projections as well as loan loss and income statement forecasts throughout the scenario.

BFC projected stressed capital ratios through Q2 2017

Ratio	Actual Q1 2015	Stressed capital ratios [1]	
		Ending	Minimum
Tier 1 common ratio [2]	11.96%	7.12%	7.12%
Common equity Tier 1 capital ratio	12.54%	7.41%	7.41%
Tier 1 risk-based capital ratio	12.54%	7.41%	7.41%
Total risk-based capital ratio	16.18%	10.43%	10.43%
Tier 1 leverage ratio	9.24%	5.78%	5.78%

[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 BHC Severely Adverse scenario. These estimates are not forecasts of expected financial results. The minimum capital ratios presented are for the period Q2 2015 to Q2 2017.

[2] Determined on a U.S. Basel I basis as required.

BFC actual Q1 2015 and projected Q2 2017 risk-weighted assets [1]

Billions of dollars	Actual Q1 2015	Projected Q2 2017 (Standardized approach)	Projected Q2 2017 (General approach)
BFC Risk-Weighted Assets	81.7	75.2	70.9

[1] For each quarter of the forecast horizon, 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, from Q2 2015 through Q2 2017		
Loan Type	**Billions of dollars**	**Portfolio loss rates (%) [1]**
Total Loan Losses	3.5	6.3%
First-lien mortgages	0.4	6.4%
Junior liens and HELOCs	0.4	10.8%
Commercial and industrial [2]	1.3	7.7%
Commercial real estate [3]	0.7	7.6%
Credit cards	0.1	14.3%
Other consumer [4]	0.2	2.2%
Other Loans	0.4	3.9%

[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.

BFC projected losses, revenue, and net income before taxes from Q2 2015 through Q2 2017		
Item	**Billions of dollars**	**Percentage of average assets**
Pre-provision net revenue [1]	0.04	0.0%
Other revenue	0.0	0.0%
Less		
Provisions	4.4	4.1%
Realized losses/(gains) on securities (AFS/HTM)	0.01	0.0%
Trading and counterparty losses/(gains)	0.1	0.1%
Other losses/(gains)	0.0	0.0%
Equals		
Net income/(loss) before taxes [2]	(4.4)	(4.2)%

[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 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 uses 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 used for the BHC Severely Adverse scenario 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 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's historical loss experience and use risk characteristics of loan segments and portfolios to derive results under the BHC 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 uses 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 projected balance sheet (structural and non-structural), non-performing loan migration, net charge-offs, 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 utilizes the loss estimates generated by its methodologies in quantifying 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 forecast 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's capital position. Risk-weighted assets, average assets for leverage purposes and regulatory capital were calculated based on the Basel III methodology for non-advanced approaches institutions throughout the forecast horizon. The Tier 1 Common capital ratio is calculated based on the Basel I methodology throughout the stress horizon. The decline in capital ratios from actual Q1 2015 levels to the minimums projected in the hypothetical BHC 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 Mid-Cycle 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 under the hypothetical economic and market scenario and assumptions designed by BFC. The Stress Test Results are not forecasts of actual financial results for BFC. 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.