



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, DC 20551

August 7, 2020

Mr. David R. Casper
U.S. Chief Executive Officer and Group Head
BMO Financial Corp.
111 West Monroe Street
Chicago, IL 60603

Subject: Response to request for reconsideration of the stress capital buffer requirement, pursuant to the Board's capital plan rule

Dear Mr. Casper:

This letter is in response to the request by BMO Financial Corp. ("BFC") for reconsideration of the stress capital buffer requirement provided to BFC by the Board on June 25, 2020. For the reasons stated below, the Board has affirmed the stress capital buffer requirement previously provided to BFC, incorporating adjustments made pursuant to 12 CFR 225.8(h)(2).

I. Background

The Board's capital plan rule¹ establishes the Board's process for determining the stress capital buffer requirement applicable to a firm subject to the capital plan rule. Pursuant to that rule, the Board generally will provide a firm with notice of its stress capital buffer requirement by June 30 of each year in which the firm submits an annual capital plan.² On June 25, 2020, the Board provided BFC with notice that its stress capital buffer requirement associated with its 2020 annual capital plan submission is 6.3 percent.³

¹ 12 CFR 225.8.

² 12 CFR 225.8(h)(1).

³ See email regarding 2020 CCAR Results (June 25, 2020).

The capital plan rule permits a firm to request reconsideration of the stress capital buffer requirement within 15 calendar days of receiving notice of the requirement.⁴ BFC requested reconsideration of its stress capital buffer requirement on July 10, 2020. The capital plan rule generally provides that the Board will notify a firm of the Board's decision to affirm or modify the firm's stress capital buffer requirement within 30 calendar days of receipt of the firm's request for reconsideration, or within 30 days of the conclusion of an informal hearing regarding such a request.⁵

In each year in which a firm submits an annual capital plan, the Board generally will provide the firm with a final stress capital buffer requirement, as well as confirmation of the firm's final planned capital distributions for that year, by August 31.⁶ Unless otherwise determined by the Board, the final planned capital distributions and final stress capital buffer requirement for a given year become effective on October 1 of that year.⁷ A stress capital buffer requirement that becomes effective will remain effective until superseded.⁸

II. Stress Testing Framework

The stress capital buffer requirement is established based, in part, on the results of a supervisory stress test conducted by the Board. Specifically, a firm's stress capital buffer requirement is the greater of 2.5 percent or the following calculation: (1) the difference between the firm's starting and minimum projected common equity tier 1 (CET1) capital ratios under the severely adverse scenario in the Board's supervisory stress test, plus (2) the sum of the dollar amount of the firm's planned common stock dividends for each of the fourth through seventh quarters of the planning horizon⁹ as a

⁴ 12 CFR 225.8(h)(2)(i) and (j)(2).

⁵ 12 CFR 225.8(j)(5)(ii).

⁶ 12 CFR 225.8(h)(4)(i).

⁷ 12 CFR 225.8(h)(4)(ii)(A).

⁸ 12 CFR 225.8(h)(4)(ii)(B).

⁹ The planning horizon is the period of at least nine consecutive quarters over which the relevant projections extend, beginning with the quarter preceding the quarter in which the firm submits its capital plan.

percentage of risk-weighted assets.¹⁰ The stress capital buffer requirement provided to BFC on June 25, 2020, was calculated based on 2020 supervisory stress test results released by the Board.¹¹

The results of the Board's supervisory stress tests are projected using a set of models developed or selected by the Federal Reserve that take as inputs (1) the supervisory scenarios created by the Federal Reserve and (2) firm-provided data on the firm's financial condition and risk characteristics. To provide firms and the public with greater transparency regarding the Board's process for designing supervisory scenarios for stress testing, in 2013 the Board finalized the Scenario Policy Statement.

¹⁰ 12 CFR 225.8(f)(2).

¹¹ See Board of Governors of the Federal Reserve System, *Dodd-Frank Act Stress Test 2020: Supervisory Stress Test Results* (June 2020), available at <https://www.federalreserve.gov/publications/files/2020-dfast-results-20200625.pdf>. On February 5, 2019, the Board released materials intended to increase the transparency of the stress testing program. See <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20190205a.htm>. First, the Board updated the Policy Statement on the Scenario Design Framework for Stress Testing ("Scenario Policy Statement") to provide additional information regarding the path of home price variables, in particular, reducing uncertainty about the path of these variables in the severely adverse scenario. Second, the Board adopted a final Stress Testing Policy Statement to provide additional information about the Board's principles and policies with regard to the development and validation of supervisory stress test models. See 12 CFR part 252, Appendix A. As described in the Stress Testing Policy Statement, material changes to the supervisory stress test models are phased in over two years to reduce year-over-year volatility stemming from updates to the supervisory models. The Stress Testing Policy Statement defines a model change as highly material if its use results in a change in the CET1 ratio of 50 basis points or more for one or more firms, relative to the model used in prior years' supervisory exercises. See 12 CFR 252, Appendix B 2.3. This approach contributes to the stability of the results of the supervisory stress test by ensuring that changes in model projections primarily reflect changes in underlying risk factors and scenarios, year over year. Third, the Board provided additional information about the models used in the supervisory stress test. See 84 Fed. Reg. 6784 (February 5, 2019). The Board is committed to continuing to provide additional information, including modeled loss rates by loan and borrower characteristics, about its stress test models, as it has done most recently for its corporate loan and credit card models.

Consistent with the principles described in the Stress Testing Policy Statement, the Federal Reserve designed the system of models so they would result in projections that are (1) from an independent supervisory perspective; (2) forward-looking; (3) consistent and comparable across covered companies; (4) generated from simple approaches, where appropriate; (5) robust and stable; (6) conservative; and (7) able to capture the effect of economic stress.¹²

The Federal Reserve's models rely on detailed portfolio data provided by firms but generally do not rely on models or estimates provided by firms, consistent with the modeling principle that emphasizes an independent perspective.

The Federal Reserve generally develops its models under an industry-level approach that is calibrated using data from many financial institutions. This approach reflects modeling principles that favor models resulting in consistent, comparable, and forward-looking projections. The Federal Reserve models the response of specific portfolios and instruments to variations in macroeconomic and financial scenario variables such that differences across firms are driven by differences in firm-specific input data, as opposed to differences in model parameters and specifications. As a result, two firms with the same portfolio receive the same results for that portfolio in the supervisory stress test, facilitating the comparability of results. In addition, the industry-level approach promotes a forward-looking stress test, as it results in models that do not assume that historical patterns will necessarily continue into the future for individual firms. These policies also help to ensure that consistent and comparable supervisory models are forward-looking, robust, and stable.¹³

¹² See 12 CFR part 252, Appendix A.

¹³ While the Federal Reserve limits the use of firm-specific fixed effects and the use of dummy variables indicating a loan vintage or specific year, it makes exceptions where appropriate. For example, the Federal Reserve may use firm-specific indicator variables, firm-provided estimates, or third-party models or data in instances in which it is not possible or appropriate to create a supervisory model for use in the stress test, including when supervisory data are insufficient to support an independently modeled estimate of losses or revenues. However, the Federal Reserve does not adjust supervisory projections for individual firms or implement firm-specific overlays in the supervisory stress test. This policy ensures that the supervisory stress test results are determined solely by supervisory models and firm-specific input data. The Federal Reserve has instituted a policy of not using additional input data submitted by one or more of the covered

III. Discussion

As required by the Board's capital plan rule, BFC's request for reconsideration of its stress capital buffer requirement included a detailed explanation of why it contends that reconsideration should be granted.¹⁴

To ensure that review of BFC's request would be conducted with an independent perspective, a group of experts within the Federal Reserve System, who are independent of the staff who developed the models, analyzed the arguments made by BFC in favor of reconsideration of its stress capital buffer requirement.¹⁵ With respect to each of the issues raised in the request of BFC, the experts considered whether the request identified any errors in the firm's stress test results and whether each stress test model identified in the firm's request is operating as intended, within the bounds of the Board's published policies. The information in this letter regarding the Board's stress testing policies and supervisory modeling practices was previously publicly disclosed, consistent with the Board's practice to increase the transparency of the stress testing program.¹⁶

In its request, BFC asserts that the Board's pre-provision net revenue ("PPNR") model (1) underestimated the firm's trading revenues and (2) overestimated the firm's non-interest expenses. With respect to each of these arguments, the Board has assessed BFC's stress test results and Federal Reserve models for errors. Through this assessment, the Board did not identify any errors in BFC's stress test results and has determined that the models operated as intended, within the bounds of the Board's published policies.

companies unless comparable data can be collected from all the firms that have material exposure in a given area.

¹⁴ See 12 CFR 225.8(j)(3)(i).

¹⁵ This group is composed of staff members not involved in supervisory modeling, supplemented by subject-matter experts from across the Federal Reserve System. This group's model validation process includes reviews of model performance; conceptual soundness; and the processes, procedures, and controls used in model development, implementation, and the production of results. See Board of Governors of the Federal Reserve System, *Dodd-Frank Act Stress Test 2020: Supervisory Stress Test Methodology* at 7 (March 2020), available at <https://www.federalreserve.gov/publications/files/2020-march-supervisory-stress-test-methodology.pdf>.

¹⁶ See *supra* note 11.

1. Trading Revenues

First, BFC argues that the supervisory model for trading revenue does not accurately capture the risk profile of its trading book, which changed significantly following the acquisition in 2018 of KGS-Alpha Capital Markets, L.P., and certain of its affiliates. In particular, BFC asserts that this portfolio consists of either U.S. Treasuries or U.S. agency-backed securities and that losses produced by the Federal Reserve's supervisory model under the "global market shock" ("GMS") (the trading and counterparty component of the stress tests) would more accurately reflect the risk profile of BFC's trading assets and related revenue than the model used for firms not subject to the global market shock.

The Board's PPNR models are primarily estimated using data from the FR Y-9C and FR Y-14Q regulatory reports and data on historical economic conditions. Each autoregressive model for PPNR, including the model for trading revenue, includes both individual fixed effects and a trailing multiyear fixed effect to capture each firm's average performance in recent years. Recent changes in a firm's business model or performance are reflected in the projections through both changes in the recent average PPNR ratios and changes in lagged revenue or expense ratios.

The Board has assessed its model for calculating trading revenues and did not identify any errors in BFC's stress test results. In addition, the Board has determined that the model operated as intended, within the Board's published policies. The Board notes that the supervisory trading revenue model for firms subject to the GMS, a PPNR model, is designed for firms that are subject to the GMS, which applies a set of instantaneous, hypothetical shocks to a large set of risk factors. The model was not designed to apply to a firm like BFC that was not subject to the GMS. The Board also notes that it phased in an enhancement to its PPNR models this year, consistent with its Stress Testing Policy Statement, which increased the importance of firm performance in more recent years and diminished the degree to which quarterly volatility in historical PPNR affects projections over the horizon. Accordingly, the Board has determined that it will follow its published principles for stress testing and not modify the existing results of its trading revenue model.

2. Non-Interest Expenses

With respect to non-interest expenses, the firm argues that the Federal Reserve's models overstate its expenses, in light of BFC's strategic priority to reduce expenses and improve efficiency. Similar to the model for trading revenues, the models for non-

interest expenses are based on pro-forma historical regulatory data drawn primarily from data submitted on firm regulatory reports. Recent changes in a firm's business model or performance are reflected in the projections through both changes in the recent average PPNR ratios and changes in lagged revenue or expense ratios.

The Board has assessed its models for calculating non-interest expenses and did not identify any errors in BFC's stress test results. In addition, the Board has determined that the model operated as intended, within the Board's published policies. The models are not designed to reflect a firm's future strategic direction of cost-management decisions. As noted above, the Board's recent enhancements to its PPNR models increase the importance of firm performance in more recent years. Accordingly, the Board has determined that it will follow its published principles for stress testing, and not modify the existing results of its non-interest expenses models.

IV. Conclusion

After consideration of the Board's stress testing policies and all relevant facts, including the information provided in the request, and consistent with the Board's regulations, the Board has determined to affirm the stress capital buffer requirement provided to BFC on June 25, 2020. The Board notes that it is focused on continuously improving the stress testing framework, including the Board's supervisory models. With regard to the arguments raised by BFC, the Board has directed Federal Reserve staff to explore potential improvements through the use of more recent data for purposes of PPNR model development and estimation. In evaluating any of its supervisory models, the Board follows the processes for development, implementation, and validation of its supervisory models as outlined in the Board's Stress Testing Policy Statement.

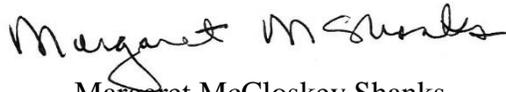
The Board notes that BFC made adjustments to its planned capital distribution after receiving notice of its stress capital buffer requirement, consistent with the Board's regulations.¹⁷ The final stress capital buffer requirement for BFC incorporates these adjustments, and is 6.0 percent. The Board hereby confirms that the final planned capital distributions BFC submitted as part of its 2020 capital plan submitted on April 5, incorporating any adjustments made pursuant to 12 CFR 225.8(h)(2), are final. BFC's final stress capital buffer requirement and final planned capital distributions are effective October 1, 2020. The Federal Reserve supports banking organizations that choose to use their capital buffers to lend and undertake other supportive actions in a safe and sound

¹⁷ 12 CFR 225.8(h)(2)(ii).

manner.¹⁸ When using their buffers, banking organizations may make capital distributions up to prescribed limits, which include automatic limitations in the capital framework, as well as any additional limitations determined by the Board.¹⁹

Please contact Hillel Kipnis at (202) 452-2924 with any questions.

Sincerely yours,



Margaret McCloskey Shanks
Deputy Secretary of the Board

cc: John Haworth, Assistant Vice President
Federal Reserve Bank of Chicago

¹⁸ See Interagency Statement on the Use of Capital and Liquidity Buffers (March 17, 2020), available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200317a.htm>.

¹⁹ A “capital buffer” refers to capital held above regulatory minimum requirements. Banking organizations with regulatory capital ratios that are below their capital buffer requirement face gradual restrictions on capital distributions and discretionary bonus payments. See 12 CFR 217.11(c). These restrictions encourage banking organizations to conserve capital within the organization as they lend to households and businesses and as their capital levels approach minimum regulatory capital requirements. Capital buffers were designed to provide banking organizations with the means to support the economy in adverse situations and to allow banking organizations to continue to serve households and businesses.