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

August 4, 2022

Mr. Brian T. Moynihan
Chair of the Board and Chief Executive Officer
Bank of America Corporation
100 North Tryon Street
Charlotte, North Carolina 28255

Subject: Response to request for reconsideration of Bank of America Corporation's stress capital buffer requirement, pursuant to the Board's capital plan rules

Dear Mr. Moynihan:

This letter is in response to the request by Bank of America Corporation ("BAC") for reconsideration of the stress capital buffer requirement provided to BAC by the Board on June 23, 2022, and as subsequently adjusted by the firm. For the reasons stated below, the Board has affirmed the stress capital buffer requirement previously provided to BAC.

I. Background

The Board's capital plan rules[1] establish the Board's process for determining the stress capital buffer requirement applicable to a firm subject to the capital plan rules. Pursuant to those rules, 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 23, 2022, the Board provided BAC with notice that its stress capital buffer requirement associated with its 2022 annual capital plan submission would be 3.5 percent.[3] Following receipt of notice of its stress capital buffer requirement, the firm subsequently adjusted its planned capital

[1] 12 CFR 225.8; 12 CFR 238.170.

[2] 12 CFR 225.8(h)(1); 12 CFR 238.170(h)(1).

[3] See email regarding 2022 Stress Test Results (June 23, 2022).

distributions.[4] Based on the adjusted planned capital distributions, BAC would have a stress capital buffer requirement of 3.4 percent.

The capital plan rules permit a firm to request reconsideration of the stress capital buffer requirement within 15 calendar days of receiving notice of the requirement.[5] BAC requested reconsideration of its stress capital buffer requirement on July 8, 2022. The capital plan rules generally provide 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.[6]

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.[7] 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.[8] A stress capital buffer requirement that becomes effective will remain effective until superseded.[9]

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 horizon[10] as a percentage of risk-weighted assets.[11] The stress capital

[4] 12 CFR 225.8(h)(2)(ii).

[5] 12 CFR 225.8(h)(2)(i) and (i)(2); 12 CFR 238.170(h)(2)(i) and (i)(2).

[6] 12 CFR 225.8(i)(5); 12 CFR 238.170(i)(5).

[7] 12 CFR 225.8(h)(4)(i); 12 CFR 238.170(h)(4)(i).

[8] 12 CFR 225.8(h)(4)(ii)(A); 12 CFR 238.170(h)(4)(ii)(A).

[9] 12 CFR 225.8(h)(4)(ii)(B); 12 CFR 238.170(h)(4)(ii)(B).

[10] 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.

[11] 12 CFR 225.8(f)(2); 12 CFR 238.170(f)(2).

buffer requirement provided to BAC on June 23, 2022, was calculated based on 2022 supervisory stress test results released by the Board.[12]

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, the Board first finalized the Policy Statement on the Scenario Design Framework ("Scenario Policy Statement") in 2013.[13]

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.[14]

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.

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[12] See Board of Governors of the Federal Reserve System, *2022 Federal Reserve Stress Test Results* (June 2022), available at https://www.federalreserve.gov/publications/files/2022-dfast-results-20220623.pdf.

[13] The Board updated the 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. See 12 CFR part 252, Appendix A. 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 B. As described in the Stress Testing Policy Statement, highly 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 part 252, Appendix B, at 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.

[14] 12 CFR part 252, Appendix B, at 1.

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.[15]

III. Discussion

As required by the Board's capital plan rules, BAC's request for reconsideration of its stress capital buffer requirement included a detailed explanation of why it contends that reconsideration should be granted.[16]

To ensure that review of BAC'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 BAC in support of reconsideration of its stress capital buffer requirement.[17] With respect to each of the issues

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

[16] See 12 CFR 225.8(i)(3)(i).

[17] This group is composed of staff members from across the Federal Reserve System who are subject-matter experts and are not involved in supervisory modeling. 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, *2022 Supervisory*

raised in the request of BAC, the experts considered whether the request pointed to 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.[18]

In its request, BAC argues that (1) the Federal Reserve's modeled noninterest expenses are inconsistent with the firm's performance and relative to peer entities; and (2) noninterest expenses and operational losses are overstated due to the models' dependence on total assets. With respect to each of these arguments, the Board has assessed BAC's stress test results and the Federal Reserve's models for errors. Through this assessment, the Board did not identify any errors in BAC's stress test results and has determined that the models operated as intended, within the bounds of the Board's published policies.

1. *Modeled Noninterest Expense Consistency*

BAC asserts that the Federal Reserve's projections for BAC's noninterest expenses are inconsistent with the firm's performance and relative to peer entities. The Board investigated the firm's assertion and determined that the pre-provision net revenue ("PPNR") models are working as intended to produce the projections. The BAC PPNR noninterest expense results are consistent with historical values of the firm's expense components, primarily for the categories of "compensation" and "all other." The PPNR models were used consistently with the approach described in the 2022 Supervisory Stress Test Methodology and with the Board's published policies; in particular, the models produced results that are consistent and comparable across firms. The concerns raised by BAC do not reflect errors or issues with the modeling approach that would warrant reconsideration.

2. *Noninterest Expenses and Operational Losses Dependence on Total Assets*

BAC also asserts that the increase in its noninterest expense projections is due to an overly simplistic dependence of the Federal Reserve's models for expenses and operational losses—which are included in noninterest expenses—on firms' total assets. The Board determined that this treatment is consistent with the Supervisory Stress Test Methodology Disclosure, which explains that asset size is a key driver of projected losses in the PPNR and

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Stress Test Methodology at 5–6 (March 2022), available at https://www.federalreserve.gov/publications/files/2022-march-supervisory-stress-test-methodology.pdf.

[18] See supra note 12.

Operational Risk models.[19] Total assets was chosen as a key driver in the models based on observed loss patterns over a long historical period, and this approach provides consistency and stability within the model.

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 BAC on June 23, 2022. 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 BAC in the request for reconsideration, the Board has directed Federal Reserve staff to explore possible refinements to the models used to produce the disclosed noninterest expense projections to better reflect the composition of firms' total assets. 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 final stress capital buffer requirement for BAC is 3.4 percent. The Board hereby confirms that the planned capital distributions BAC submitted as part of its 2022 capital plan submitted on or before April 5, incorporating any adjustments made pursuant to 12 CFR 225.8(h)(2)(ii), are final. BAC's final stress capital buffer requirement and final planned capital distributions are effective October 1, 2022.

Please contact Julie Anthony at (202) 475-6682 with any questions.

Sincerely yours,

Margaret M Shanks

Margaret McCloskey Shanks
Deputy Secretary of the Board

cc: Natalie Depasquale, Vice President
Federal Reserve Bank of Richmond

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[19] See Board of Governors of the Federal Reserve System, *2022 Supervisory Stress Test Methodology* at 17, 22 (March 2022), available at https://www.federalreserve.gov/publications/files/2022-march-supervisory-stress-test-methodology.pdf.