



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

August 23, 2024

David M. Solomon
Chairman and Chief Executive Officer
The Goldman Sachs Group, Inc.
200 West Street
New York, New York 10282

Subject: Response to request for reconsideration of The Goldman Sachs Group, Inc.'s preliminary stress capital buffer requirement, pursuant to the Board's capital plan rules

Dear Mr. Solomon:

This letter is in response to the request by The Goldman Sachs Group, Inc. ("Goldman Sachs") for reconsideration of the preliminary stress capital buffer ("SCB") requirement provided to Goldman Sachs by the Board on June 26, 2024. For the reasons stated below, the Board has modified the preliminary SCB requirement previously provided to Goldman Sachs from 6.4 percent to 6.2 percent. In addition, with respect to the request by Goldman Sachs for an informal hearing in connection with the request for reconsideration, the Board has not ordered an informal hearing.

I. Background

The Board's capital plan rules¹ establish the Board's process for determining the SCB 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 preliminary SCB requirement by June 30 of each year in which the firm submits an annual capital plan.² On June 26, the Board provided Goldman Sachs with notice of a preliminary SCB requirement for 2024 of 6.4 percent.³

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 2024 Stress Test Results (June 26, 2024).

The capital plan rules permit a firm to request reconsideration of its preliminary SCB requirement within 15 calendar days of receiving notice of the preliminary requirement.⁴ A request for reconsideration may include a request for an informal hearing on the firm's request for reconsideration.⁵

Goldman Sachs requested reconsideration of its preliminary SCB requirement on July 11, including a request for an informal hearing. 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 SCB 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 On August 2, Goldman Sachs requested that the Board suspend, until August 24, the time period for action by the Board under section 225.8(i)(5) of Regulation Y.⁷

In each year in which a firm submits an annual capital plan, the Board generally will provide the firm with a final SCB requirement, as well as confirmation of the firm's final planned capital distributions for that year, by August 31.⁸ Unless otherwise determined by the Board, the final planned capital distributions and final SCB requirement for a given year become effective October 1 of that year.⁹ An SCB requirement that becomes effective will remain effective until superseded.¹⁰

II. Stress Testing Framework

The SCB requirement is based, in part, on the results of a supervisory stress test conducted by the Board. Specifically, a firm's SCB 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 a supervisory stress test conducted by the Board 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

⁴ 12 CFR 225.8(h)(2)(i) and (i)(2); 12 CFR 238.170(h)(2)(i) and (i)(2).

⁵ 12 CFR 225.8(i)(3)(ii); 12 CFR 238.170(i)(3)(ii).

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

⁷ See email from Sean C. Thompson (Goldman Sachs) to Julie Anthony, dated August 2, 2024.

⁸ 12 CFR 225.8(h)(4)(i); 12 CFR 238.170(h)(4)(i).

⁹ 12 CFR 225.8(h)(4)(ii)(A); 12 CFR 238.170(h)(4)(ii)(A).

¹⁰ 12 CFR 225.8(h)(4)(ii)(B); 12 CFR 238.170(h)(4)(ii)(B).

horizon¹¹ as a percentage of risk-weighted assets.¹² The SCB requirement provided to Goldman Sachs on June 26 was calculated based on 2024 supervisory stress test results released by the Board.¹³

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 Scenario Policy Statement in 2013 and amended it in 2019.¹⁴

Consistent with the principles described in the Stress Testing Policy Statement,¹⁵ 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.¹⁶

¹¹ 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.

¹² 12 CFR 225.8(f)(2); 12 CFR 238.170(f)(2).

¹³ See Board of Governors of the Federal Reserve System, *2024 Supervisory Stress Test Results* (June 2024), available at <https://www.federalreserve.gov/publications/2024-june-dodd-frank-act-stress-test-results.htm>.

¹⁴ In 2019, the Board updated the Scenario Policy Statement, which included providing additional information regarding the path of home price variables to reduce uncertainty about the path of these variables in the severely adverse scenario. See 12 CFR part 252, Appendix A.

¹⁵ In 2019, the Board adopted the 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 capital 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.

¹⁶ 12 CFR part 252, Appendix B, at 1.

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.¹⁷

III. Discussion

As required by the Board's capital plan rules, Goldman Sachs' request for reconsideration of its preliminary SCB requirement included a detailed explanation of why it contends that reconsideration should be granted.¹⁸

To ensure that review of Goldman Sachs' 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 Goldman

¹⁷ 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.

¹⁸ See 12 CFR 225.8(i)(3)(i).

Sachs in favor of reconsideration of its preliminary SCB requirement.¹⁹ With respect to each of the issues raised in the request by Goldman Sachs, the experts considered all aspects of the request, including, among other things, whether the request pointed to any errors in the firm's stress test results (including whether the input data to the stress test was treated appropriately) 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.²⁰

As discussed above, Goldman Sachs' request for reconsideration included a request for an informal hearing. The Board has determined not to grant Goldman Sachs' request for an informal hearing regarding its request for reconsideration.²¹ The informal hearing process is intended to ensure that a firm is able to present its arguments to the Federal Reserve and to provide an opportunity for both the firm and the Federal Reserve to ask any questions regarding the request, including questions regarding disputed issues of material fact. Since the submission of Goldman Sachs' request, Federal Reserve staff has met with representatives from Goldman Sachs twice. The firm described its arguments for reconsideration in the meetings, and both the firm and Federal Reserve staff had the opportunity to ask questions orally and in written format. Federal Reserve staff also offered to hold additional meetings. In light of this process and because there are no outstanding disputed issues of material fact,²² the Board has not ordered an informal hearing regarding Goldman Sachs' request.

In its request, Goldman Sachs argued that (1) recent expenses associated with impairment of goodwill and other intangibles from business divestitures should not influence pre-provision net revenue ("PPNR") projections of noninterest expense; (2) recent expenses related to losses associated with the write-down of consolidated investment entities should not influence PPNR projections; (3) revenue components of the PPNR model should be less sensitive to the firm's

¹⁹ 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, *2024 Supervisory Stress Test Methodology* at 5–6 (March 2024), available at <https://www.federalreserve.gov/publications/files/2024-march-supervisory-stress-test-methodology.pdf>.

²⁰ See *supra* note 14.

²¹ See 12 CFR 225.8(i)(4)(i) (providing that the Board has sole discretion regarding whether to order an informal hearing).

²² See 12 CFR 225.8(i)(4).

performance in the most recent time periods; and (4) the Federal Reserve should modify its practice of modeling noninterest expenses based on total assets because increases in total assets are not a reliable predictor of changes in noninterest expense. With respect to Goldman Sachs' first two arguments, the Board determined that although the stress test models operated as intended, there was an inappropriate treatment applied to certain input data, warranting a modification to the firm's SCB requirement. However, with respect to Goldman Sachs' third and fourth arguments, the Board did not identify any errors in Goldman Sachs' stress test results and has determined that the models operated as intended, within the bounds of the Board's published policies.

1. Expenses Associated with the Impairment of Goodwill and Intangibles

Goldman Sachs asserted that recent expenses associated with impairment of goodwill and other intangibles from business divestitures should not influence PPNR projections of noninterest expense. Goldman Sachs reported impairment expenses associated with the firm's divestiture of its GreenSky platform in two separate lines within the Board's FR Y-9C (Consolidated Financial Statements for Holding Companies) reporting form. The Board determined that certain data reflecting these non-recurring expenses had been included in the input data for the operation of the stress test models. Because of the non-recurring nature of the impairments, the Board determined that it is appropriate to exclude these expenses as an input to the model and has adjusted the treatment and data inputs accordingly. The Board took this adjustment into account in modifying Goldman Sachs' preliminary SCB requirement.

2. Other Expenses Related to Consolidated Investment Entities

Goldman Sachs asserted that recent expenses related to losses associated with the write-down of consolidated investment entities should not influence PPNR projections. Goldman Sachs reported losses associated with the write-down of consolidated investment entities in a single line item within the FR Y-9C. The Board confirmed that data reflecting these expenses were included in the input data for the operation of the stress test models. Because of the non-recurring nature of these expenses, the Board determined that it is appropriate to make an adjustment to these expenses as an input to the model and has adjusted the treatment and data inputs accordingly. In addition, this approach would ensure consistency with the treatment of similar non-recurring expenses in the PPNR model. The Board took this adjustment into account in modifying Goldman Sachs' preliminary SCB requirement.

3. PPNR Model Over Sensitivity to Most Recent Periods

Goldman Sachs asserted that revenue components of the PPNR model should be less sensitive to the firm's performance in the most recent time periods. The Board's investigation

determined the calculation of these revenue components did not contain errors, and the PPNR model used in the stress test is consistent with published policies and with the public methodology disclosures. The model includes features that allow it to react to changes in the firm's business model based on firm-specific fixed effects and a trailing multi-year fixed effect to capture each firm's average performance in recent years. This structure allows the modeled components to converge over time toward the firm's recent average performance for the revenue category, while still allowing for variation in response to changes in macroeconomic conditions. Given these observed factors, the model functioned as intended. Therefore, the Board has not modified Goldman Sachs' preliminary SCB requirement based on this argument.

In connection with this argument, Goldman Sachs raised concerns about visibility into the trajectory of the projected stress losses during the nine-quarter stress testing planning horizon. The Board recognizes that providing firms with their nine-quarter CET1 projections would improve the transparency of the stress testing program. The Board has therefore directed Federal Reserve staff to disclose the nine-quarter CET1 projections when notifying each firm of its preliminary SCB requirement in the future.

4. Normalizing Noninterest Expense Based on Total Assets

Goldman Sachs' final assertion was that the Federal Reserve should modify its practice of modeling noninterest expenses based on total assets because increases in total assets are not a reliable predictor of changes in noninterest expense. The Board's investigation determined that there were no errors found in the application of the PPNR model's noninterest expense component. The model includes features that allow it to react to changes in the firm's business model; in this case, reflecting the relationship between changing levels of expense relative to changes in the levels of assets. At an aggregate level, noninterest expense has a positive relationship to total assets, supporting the reasonableness of the current approach of normalizing noninterest expense by total assets. Given these observed factors, the model functioned as intended in line with its intended design and use. Therefore, the Board has not modified Goldman Sachs' preliminary SCB requirement based on this argument.

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 modify the preliminary SCB requirement provided to Goldman Sachs on June 26 from 6.4 percent to 6.2 percent.²³ The Board notes that it is focused on continually

²³ The Board has authority to establish capital requirements for supervised firms as it deems necessary or appropriate. See, e.g., 12 U.S.C. §§ 3907(a)(2); 1467a(g)(1); 1844(b).

improving the stress testing framework, including the Board's supervisory models.²⁴ The Board has directed Federal Reserve staff to explore possible refinements to the PPNR model components to address possible weaknesses related to the PPNR model components referenced in this request. As noted, the Board also has directed Federal Reserve staff to disclose projected CET1 over the nine-quarter stress testing planning horizon when notifying each firm of its preliminary SCB requirement in the future and to develop a proposal to revise the Board's regulatory reporting forms to collect certain data related to expenses associated with business divestitures and the write-down of consolidated investment entities.

The preliminary SCB requirement for Goldman Sachs is 6.2 percent. By August 27, 2024, Goldman Sachs should notify the Board of any adjustments to its planned capital distributions for the fourth through seventh quarters of the planning horizon under the internal baseline scenario.²⁵ Unless otherwise determined by the Board, the firm will be provided with its final SCB requirement and confirmation of its final planned capital distributions by August 31, 2024.

Please contact Julie Anthony, Special Counsel, at 202-475-6682 with any questions.

Sincerely yours,

(Signed) Benjamin W. McDonough

Benjamin W. McDonough
Deputy Secretary of the Board

cc: Roy Cheruvelil, Institutional Supervision Program Director
Federal Reserve Bank of New York

²⁴ 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.

²⁵ See 12 CFR 225.8(h)(2)(ii).