United States Government Accountability Office

Report to Congressional Requesters

March 2025

BANK CAPITAL REFORMS

U.S. Agencies' Participation in the Development of the International Basel Committee Standards

GAO-25-107995

GAO Highlights

Highlights of GAO-25-107995, a report to congressional requesters

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Why GAO Did This Study

The Basel Committee released initial Basel III standards in 2010, followed by additional reforms that resulted in final Basel III standards in 2017 and 2019. These updated standards, which have not yet been implemented in the U.S., revised methods for estimating a bank's risks, which affect its regulatory capital requirements.

GAO was asked to review U.S members' actions during the final Basel III negotiations. This report examines (1) how the Basel Committee organized the work to develop the standards, (2) information and analyses U.S. members considered to inform their positions, and (3) U.S. members' priorities for reform and actions taken to further those priorities. This is the public version of a sensitive report GAO issued in December 2024. Information on U.S. members' actions during the development of the standards and their positions on reforms has been omitted.

GAO analyzed U.S. members' internal sensitive documents related to the development of the standards. These included internal briefing notes, talking points, analyses, and other documents prepared for the negotiations during 2011–2019. GAO also analyzed Basel Committee consultative documents, quantitative impact studies, other publicly released documents, and the final Basel III standards. GAO interviewed officials from the four U.S. members responsible for the final Basel III negotiations and Basel Committee Secretariat staff (who support the work of the Committee and its component groups).

For more information, contact Michael Clements at clementsm@gao.gov.

What GAO Found

Capital plays a critical role in ensuring bank safety and soundness. The Basel Committee on Banking Supervision, an international body of bank supervisors, sets nonbinding minimum regulatory capital standards for large banks. The committee relies on its members to implement the standards in their jurisdictions. The U.S. members of the Basel Committee are the Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency.

Standard-development process. The Basel Committee process for developing the standards involved multiple rounds of analyses, discussion, and review. Each final standard underwent at least one round of public comments and quantitative studies assessed potential impacts on banks' regulatory capital. Decisions were made by consensus, with groups negotiating and agreeing on the scope of work, alternatives to analyze, actions to take or not take, and standards to propose and finalize. Staff from all U.S. members participated in these groups. GAO found collaboration among U.S. members throughout this process generally reflected best practices for interagency collaboration (such as leveraging information and including relevant participants).

External comments and impact analyses. U.S. members informed their positions by reviewing public comments on proposals, meeting with industry representatives, contributing to and using quantitative impact studies, and conducting their own analyses. These activities helped provide insight into the potential impacts of proposed reforms and identify alternative approaches. GAO found that the information U.S. members collected and analyses they conducted generally reflected key elements for regulatory analysis (such as consideration of alternatives and evaluation of benefits and costs).

U.S. members' negotiating priorities. U.S. members had two overarching reform priorities for the final Basel III standards. One was to better align certain regulatory standards for non-U.S. banks with their parallel U.S. requirements to promote a more level playing field. U.S. members also shared the Committee's priority to address weaknesses in the Basel framework—they sought to improve and balance the simplicity, comparability, and risk sensitivity of bank capital standards. For example, previous standards allowed banks more leeway in the way they modeled the risks of their assets (to help determine how much regulatory capital to hold to offset the risks). The Committee, including U.S. members, prioritized reforms that constrained banks' use of internal models to help increase the comparability of risk-weighted assets across banks. GAO's analysis of U.S. documents showed that U.S. members participated actively in the working groups that developed the standards to further their reform priorities.

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Abbreviations

FDIC	Federal Deposit Insurance Corporation
Federal Reserve	Board of Governors of the Federal Reserve System and Federal Reserve Bank of New York
FRB	Board of Governors of the Federal Reserve System
FRBNY	Federal Reserve Bank of New York
GHOS	Group of Central Bank Governors and Heads of Supervision
G-SIB	global systemically important bank
OCC	Office of the Comptroller of the Currency
PDG	Policy Development Group
RWA	risk-weighted asset

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W.
Washington, DC 20548

March 26, 2025

The Honorable French Hill
Chairman
Committee on Financial Services
House of Representatives

The Honorable Andy Barr
Chairman
Subcommittee on Financial Institutions
Committee on Financial Services
House of Representatives

Bank capital plays a critical role in ensuring the safety and soundness of U.S. banks. It serves as a buffer to absorb losses, protect depositors, and promote confidence in the banking system. Capital provides reassurances to depositors, creditors, and counterparties that unanticipated losses or decreased earnings will not impair banks' ability to safeguard savings, repay creditors, or meet other obligations. As demonstrated during the 2007–2009 financial crisis, banks with insufficient capital may pose a threat to financial stability, particularly in times of economic turmoil. However, increasing capital requirements could raise banks' funding costs, because capital is a more expensive source of funding than debt. These higher funding costs could then be passed onto households and businesses.

To promote global financial stability, U.S. and banking regulators worldwide negotiate and develop minimum capital standards for banks through the Basel Committee on Banking Supervision. The Basel Committee was established in 1974 by the central bank governors of the Group of Ten and is headquartered at the Bank for International Settlements in Basel, Switzerland.[1] The U.S. members on the Basel Committee include three federal banking regulators—the Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency

[1]The Group of Ten comprises 11 countries (Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom, United States and, later, Switzerland). According to the Bank for International Settlements, it provides a forum for international cooperation among central banks and supervisory authorities on economic, monetary, and financial matters.

(OCC).[2] The fourth U.S. member is the Federal Reserve Bank of New York, which is involved in the Board's international engagement due to its role in the financial system and expertise in international financial matters.[3] Throughout this report (unless otherwise noted), we use Federal Reserve to collectively refer to the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York.

Basel standards are nonbinding, but members are expected to apply generally consistent requirements to internationally active banks in their respective jurisdictions. Historically, U.S. members have issued regulations that generally align domestic capital requirements with Basel standards, according to the U.S. members.[4] In 2010, the Basel Committee agreed on a framework aimed at strengthening capital and liquidity requirements, known as Basel III.[5] In 2017 and 2019, the Committee issued additional changes, aimed at improving the comparability of banks' regulatory capital requirements. We refer to this set of changes as the final Basel III standards.[6]

[2]For this report, we refer to the Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency as the federal banking regulators or banking regulators, unless otherwise noted.

[3]According to agency officials, the Federal Reserve Bank of New York participates in supervising the largest internationally active banks, processes international payments, conducts foreign exchange transactions, and carries out other financial market operations. In addition, it houses substantial expertise in domestic and international financial markets and cross-border banking activities.

[4]For example, see Federal Deposit Insurance Corporation, Board of Governors of the Federal Reserve System, and Office of the Comptroller of the Currency, *Regulatory Capital Rule: Large Banking Organizations and Banking Organizations With Significant Trading Activity*, 88 Fed. Reg. 64028, 64028 (Sept. 18, 2023). However, U.S. members have issued regulations that deviate from Basel standards—for example, to reflect specific characteristics of U.S. markets or align with U.S. generally accepted accounting principles, practices of U.S. banking organizations, and U.S. law and policy objectives, according to U.S. federal banking agency officials.

[5]Bank for International Settlements, Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Basel, Switzerland: December 2010, revised June 2011).

[6]Bank for International Settlements, Basel Committee on Banking Supervision, *Basel III: Finalising Post-Crisis Reforms* (Basel, Switzerland: December 2017); and *Minimum Capital Requirements for Market Risk* (Basel, Switzerland: January 2019, revised February 2019). The final Basel III standards are colloquially known as the Basel III endgame.

U.S. federal banking regulators proposed regulations to implement many of the final Basel III standards in September 2023.[7] As of March 3, 2025, the rulemaking had not been finalized. Banking regulators estimated that the proposed regulations would increase capital requirements for most U.S. banking organizations with at least $100 billion in assets.[8]

You asked us to review U.S. federal banking regulators' participation in the development of the final Basel III standards. Specifically, this report examines (1) how the Basel Committee organized the work to develop the final Basel III standards, including the participation of U.S. members; (2) the information U.S. members gathered and the analysis they performed to inform their positions; and (3) U.S. members' priorities for reform and actions taken to further those priorities. In addition, the report describes the development—including the role of U.S. members—of selected components of the final standards and selected components of a proposed standard that were not included in the final standards (see app. I).

This report is a public version of a sensitive report we issued on December 12, 2024.[9] The sensitive report's second objective, third objective, appendix I, and appendix III included some statements on U.S. agencies' actions or positions on reforms that the agencies determined

[7]*Regulatory Capital Rule: Large Banking Organizations and Banking Organizations With Significant Trading Activity*, 88 Fed. Reg. 64028 (Sept. 18, 2023).

[8]U.S. banking regulators define "banking organizations" to include "national banks, state member banks, state nonmember banks, federal savings associations, state savings associations, top-tier bank holding companies domiciled in the United States not subject to the Board's Small Bank Holding Company and Savings and Loan Holding Company Policy Statement (12 C.F.R. pt. 225, app. C), U.S. intermediate holding companies of foreign banking organizations, and top-tier savings and loan holding companies domiciled in the United States, except for certain savings and loan holding companies that are substantially engaged in insurance underwriting or commercial activities and savings and loan holding companies that are subject to the Small Bank Holding Company and Savings and Loan Holding Company Policy Statement." *Regulatory Capital Rule: Large Banking Organizations and Banking Organizations With Significant Trading Activity*, 88 Fed. Reg. 64028, 64030 (Sept. 18, 2023).

[9]GAO, *International Banking Standards: U.S. Agencies' Participation in the Development of the Final Basel III Reforms,* GAO-25-107259SU (Washington, D.C.: Dec. 12, 2024).

were controlled unclassified information.[10] Consequently, we omitted the following types of statements from this report:

- The second objective omitted statements related to U.S. members' specific actions or positions on reforms in response to external input or analyses during the development of the standards.
- The third objective omitted statements describing U.S. members' positions on specific reforms and actions taken by U.S. members to further their reform priorities during the development of the standards.[11]
- Appendix I omitted certain statements on U.S. members' role in the development of selected components of proposed or final standards.
- Appendix III omitted statements that described U.S. members' actions or positions on reforms related to leading practices for development of high-quality and evidence-based analysis.

Although the information provided in this report is more limited, it generally addresses the same objectives and uses the same methodology as the sensitive report.

To address the objectives, we analyzed U.S. member and Basel Committee documentation of the negotiation of the final Basel III standards from January 2011 (directly after the issuance of the initial Basel III standards) to January 2019 (when the final standards were issued). Our analysis encompassed the standards for credit, market, and operational risk; the leverage ratio; and the output floor (discussed later in this report).[12]

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[10]Generally, controlled unclassified information is information created or possessed by the government, or by an entity for or on behalf of the government, that requires or permits safeguarding and dissemination controls pursuant to law, regulation, or government-wide policy. 32 C.F.R. § 2002.4(h). Officials from the Federal Reserve, FDIC, and OCC determined that certain information in GAO-25-107259SU was controlled unclassified information.

[11]The sensitive report examined U.S. members' actions to help ensure that the final Basel III standards aligned with U.S. members' priorities.

[12]The final Basel III standards also included a revised standard for calculating credit valuation adjustment risk, which we do not discuss separately in this report. The market risk reforms revised the capital requirement for credit valuation adjustment risk—the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction. As of the end of 2021, U.S. banks held relatively little credit valuation adjustment risk compared to the other types of risk, according to a law firm. See Davis Polk & Wardwell, LLP, "U.S. Basel III Endgame Proposed Rule" (Sept. 14, 2023).

To understand U.S. member participation in the Basel Committee, the information and analyses used to inform their positions, and how U.S. members' actions helped further their reform priorities, we analyzed nearly 600 internal sensitive agency documents from U.S. members (Federal Reserve, FDIC, and OCC) dated from January 2011 to January 2019. These documents included briefing notes and talking points prepared for agency leadership and Basel Committee representatives, as well as emails and presentations about the negotiations. We examined information on U.S. members' negotiating priorities, positions, and actions for each standard. We also examined how these positions evolved over time and the information and analyses used to inform them.

Furthermore, we collected and analyzed information on interagency communication during the negotiations and compared our findings against our leading practices for interagency collaboration.[13]

To address these objectives, we also analyzed documents publicly available on the Basel Committee website. These documents included consultative documents, quantitative impact studies (of potential effects on banks' capital), discussion papers, and press releases. We identified these documents by searching the Basel Committee's website for materials related to the final Basel III standards and dated from January 2011 to January 2019.[14] We focused on the types of information the Basel Committee considered in developing the standards and when information on the process was publicly released. We also analyzed the Basel framework and its full set of standards (including the final Basel III

[13]GAO, *Government Performance Management: Leading Practices to Enhance Interagency Collaboration and Address Crosscutting Challenges*, GAO-23-105520 (Washington, D.C.: May 24, 2023). To develop a collaboration framework and leading practices, we reviewed prior GAO reports and scholarly and peer-reviewed literature related to collaboration. We also gathered the views of senior agency officials and subject matter specialists. Leading practices include defining common outcomes, ensuring accountability, and leveraging resources and information.

[14]To identify quantitative impact studies related to the final Basel III standards, we reviewed two types of Basel Committee publications. First, we reviewed Basel III monitoring reports issued from 2011 to January 2019. These studies, which regularly monitor and assess the impact of Basel standards, sometimes included prospective quantitative impact studies analyzing the potential effects of proposed standards on banks' capital. Second, we reviewed all consultative documents related to the final Basel III standards, which the Committee issued to communicate and request public comments on proposed standards. These documents referenced quantitative impact studies conducted during the development of the standards.

standards issued in 2017 and 2019).[15] Nonpublic Basel Committee documents were not available to us. Basel Committee discussions and related information are governed by confidentiality expectations, according to U.S. officials and the Basel Committee Secretariat.[16]

In addition, we compiled and analyzed information on public comments received by the Basel Committee in response to the final Basel III consultative documents published from 2011 to January 2019.[17] For each comment, we identified the author and jurisdiction of origin. We calculated the number of comments received on each consultative document and the share of comments received from U.S.-based organizations.[18]

To assess U.S. members' actions to develop the final Basel III reforms, we compared the results of our analysis of internal U.S. member documents and the Basel Committee's publicly available documents against the Office of Management and Budget's key elements of regulatory analysis.[19] These elements (such as examining alternative approaches and conducting cost-benefit analyses) guide certain U.S. regulatory agencies to develop high-quality and evidence-based regulatory analysis.

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[15]We accessed the standards through the Basel Committee's website at https://www.bis.org/basel_framework/index.htm?m=97.

[16]Throughout this report, we refer to employees of the federal banking regulators as officials. This does not include members of the Federal Reserve Board of Governors or the FDIC Board of Directors. For this report, we considered the actions taken by employees of the federal banking regulators (officials) to be the actions of their agencies.

[17]According to Basel Secretariat officials, the Basel Committee publishes comments received on its website, unless the author requests otherwise. We analyzed comments in response to consultative documents on the final Basel III standards, which comprise reforms to credit risk, operational risk, market risk and to the leverage ratio and output floor. We did not analyze other comments received during this period.

[18]For our analysis, we counted comment letters with multiple authors or international groups as U.S. comment letters if they had at least one U.S.-based author or member.

[19]See Office of Management and Budget, *Circular A-4: Regulatory Analysis* (Washington, D.C.: Sept. 17, 2003). The Basel Committee, an international body, is not required to abide by practices in Circular A-4 (which addresses certain U.S. agencies' regulatory actions). The development of standards at the Basel Committee is not a regulatory action within the scope of the circular by its terms. We did not identify any leading practices for international standard-setting bodies pertaining to the analysis component of standard-setting. The banking regulators are not required to follow Circular A-4. However, we determined that the elements of Circular A-4 serve as examples of leading practices applicable in this context.

For our objectives, we also interviewed officials of the Federal Reserve, FDIC, and OCC. Discussion topics included the organization and function of the Basel Committee, negotiating process, U.S. members' internal procedures, goals for the reforms, analyses conducted, and interagency coordination. These officials included current and past U.S. member representatives to various Basel Committee groups.[20] In addition, we interviewed Basel Secretariat staff and the current Basel Committee Secretary General about the roles of key Basel Committee groups, the process and timing for developing the final Basel III standards, and the types of information that informed the process.

The performance audit upon which this report is based was conducted from January 2024 to December 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We subsequently worked with the agencies from December 2024 to March 2025 to prepare this public version of the original sensitive report. This public version also was prepared in accordance with those standards.

Background

U.S. Banking Regulators

The U.S. banking regulators that are Basel Committee members—Federal Reserve, FDIC, and OCC—supervise banking organizations for their safety and soundness. Their responsibilities include issuing regulations to establish capital, liquidity, and other requirements for the institutions they supervise, with the goal of promoting the health of the banking system. See table 1 for information on the types of banking organizations these regulators supervise.

[20]The final Basel III negotiations occurred during 2011–2019. Some of the U.S. agency officials who participated in the negotiations no longer were employees of the U.S. member agencies. Where possible, we relied on internal agency documents from the period. We interviewed U.S. agency officials who were directly involved with the negotiations or currently participate in the Basel Committee and had knowledge of the events during the period.

Table 1: U.S. Members of the Basel Committee on Banking Supervision and the Banking Organizations They Supervise

Member	Supervised entities
Board of Governors of the Federal Reserve System	Bank holding companies, domestic financial holding companies, state-chartered banks that are members of the Federal Reserve System, savings and loan holding companies, the U.S. operations of foreign banking organizations, and other entities.
Federal Reserve Bank of New York	Banking organizations subject to supervision by the Board of Governors of the Federal Reserve System and located in the Second Federal Reserve District (New York State, northern New Jersey, southwestern Connecticut, Puerto Rico, and the U.S. Virgin Islands).
Federal Deposit Insurance Corporation	Federally insured state-chartered banks and savings associations that are not members of the Federal Reserve System.
Office of the Comptroller of the Currency	National banks, federally chartered savings associations, and federal branches and agencies of foreign banks.

Source: GAO. | GAO-25-107995

According to the banking regulators, they have authority to take actions that are reasonable and appropriate to effectuate their statutory responsibilities, including participating in the Basel Committee and other international organizations. The representational authorities derive from statutes.[21]

U.S. Regulatory Capital Requirements

The U.S. regulatory capital framework, as prescribed in regulation, includes several minimum ratios of regulatory capital to assets that banking organizations (referred to as banks, unless otherwise noted) must meet or exceed. A banks' assets—such as cash, loans made to individuals or institutions, and securities—can pose various risks, including credit, market, and credit valuation adjustment risks.[22] Banks also face operational risk from events including processing errors, internal and external fraud, legal claims, and business disruptions. Certain ratios account for these risks (**risk-weighted assets**) and help regulators determine whether banks hold sufficient capital in relation to those risks.

[21]See 12 U.S.C. § 5373(c) (applicable to the Federal Reserve Board); Section 305(b)(2) of the Federal Deposit Insurance Corporation Improvement Act of 1991, Pub. L. No. 102-242 (codified at 12 U.S.C. § 1828 note) (applicable to all federal banking agencies); 12 U.S.C. § 3901 (applicable to all federal banking agencies); 12 U.S.C. §§ 3907(b)(3)(C) (applicable to all federal banking agencies); 3911 (applicable to FDIC); and 22 U.S.C. § 9522 note (applicable to all federal banking agencies), according to U.S. banking regulators.

[22]Credit risk is the potential for loss resulting from the failure of a borrower or counterparty to perform on an obligation. Market risk is the potential for loss resulting from movements in market prices, including interest rates, commodity prices, stock prices, and foreign exchange rates. Credit valuation adjustment risk is the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction.

U.S. regulations require that most U.S. banks calculate their risk-weighted assets using **standardized approaches**, which assign different risk weights to various asset types. The risk weights reflect regulatory judgment about the riskiness of an asset type or exposure.

U.S. regulations also require internationally active U.S. banking organizations (internationally active banks)—to use advanced or **internal model approaches** to calculate risk-weighted assets.[23] These more technical, complex procedures set in regulation aim to be more risk-sensitive than standardized approaches.[24] Internationally active banks must meet or exceed the minimum regulatory capital ratios calculated under both the standardized and advanced approaches.

Internationally active banks compute risk-weighted assets for credit, market, operational, and credit valuation adjustment risks.[25] Generally, the on-balance sheet amount of each asset is multiplied by its assigned

[23]Historically, U.S. regulators have applied capital standards consistent with the Basel framework to banks eligible for the advanced approaches (or internal model) for calculating capital requirements, according to U.S. banking regulators. We refer to advanced approaches banks as large internationally active banking organizations or internationally active banks, unless otherwise noted. A banking organization is subject to the advanced approaches framework if it has assets of at least $700 billion, $75 billion or more in cross-jurisdictional activity, or is designated as a U.S. global systemically important bank. Board of Governors of the Federal Reserve System, *Prudential Standards for Large Bank Holding Companies, Savings and Loan Holding Companies, and Foreign Banking Organizations*, 84 Fed. Reg. 59032 (Nov. 1, 2019). According to the Basel Committee, global systemically important banks are banking organizations whose distress or disorderly failure would cause significant disruption to the wider financial system and economy due to their size, complexity, and interconnectedness. The Federal Reserve established criteria for identifying a global systemically important bank in 2015. Board of Governors of the Federal Reserve System, *Regulatory Capital Rules: Implementation of Risk-Based Capital Surcharges for Global Systematically Important Bank Holding Companies*, 80 Fed. Reg. 49082 (Aug. 14, 2015).

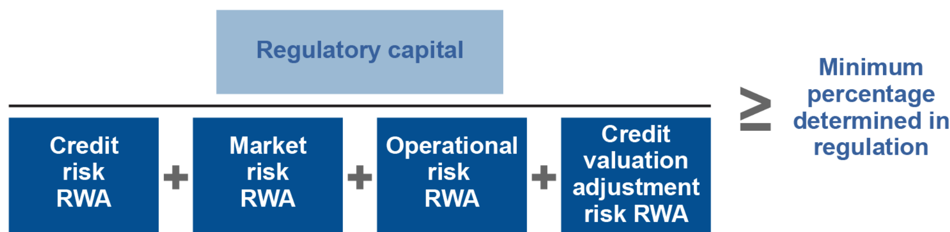
[24]Internal model approaches rely on a bank's choice of modeling assumptions and supporting data, with certain elements of the approaches and limits on assumptions set in regulation. For example, under the internal model approach for credit risk banks use parameters from their internal systems (within specified regulatory limits) as inputs into a regulator-developed formula for calculating risk-based capital ratios.

[25]Not all banks must calculate risk-weighted assets in all categories. For example, as of November 30, 2024, only internationally active banks subject to internal model approaches must calculate credit valuation adjustment risk and operational risk. Banks also are subject to market risk capital requirements if they have $1 billion or more in trading assets and liabilities or if trading assets and trading liabilities compose 10 percent or more of total assets. 12 C.F.R. § 3.201(b)(1) (OCC); 12 C.F.R. § 217.201(b)(1) (Federal Reserve Board); and 12 C.F.R. § 324.201(b)(1) (FDIC).

risk weight.[26] The adjusted amounts for all assets in a risk category are then summed. Risk-weighted assets for all categories then are added to compute the total risk-weighted assets.

The sum of the calculations for each of the four risk categories constitutes total risk-weighted assets for an internationally active bank. In turn, the total risk-weighted assets become the denominator of the banks' **risk-based capital ratios** (see fig. 1).[27]

Figure 1: Illustrative Example of a Risk-Based Capital Ratio for an Internationally Active Bank



RWA = Risk-weighted assets

Source: GAO. | GAO-25-107995

Note: U.S. banking organizations, including internationally active banks, are subject to multiple minimum risk-based capital ratios. The ratios differ in the type of regulatory capital required (numerator). All risk-based ratios share the same calculation of risk-weighted assets, but not all banks must calculate risk-weighted assets in all categories of risk. Credit risk is the potential for loss resulting from the failure of a borrower or counterparty to perform on an obligation. Market risk is the potential for loss resulting from movements in market prices, including interest rates, commodity prices, stock prices, and foreign exchange rates. Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. Credit valuation adjustment risk is the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction.

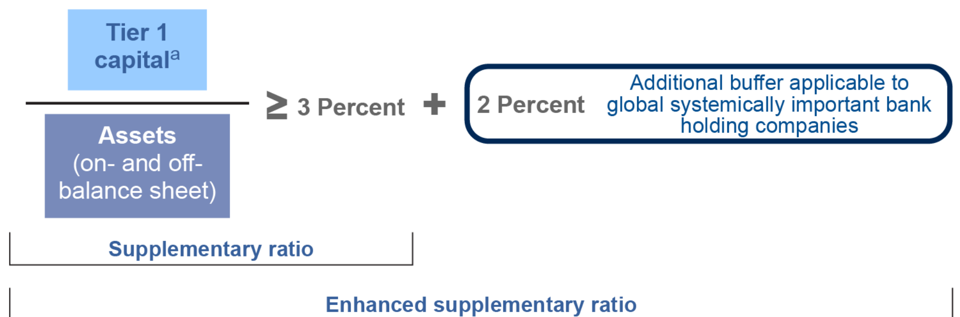
All banks must comply with an additional minimum ratio, known as the leverage ratio, which is based on total assets irrespective of their risk. The leverage ratio is often described as a "backstop" to risk-weighted regulatory capital and is intended to help prevent excessive leverage (borrowing of funding). Additionally, U.S. internationally active banks and

[26]A risk weight represents the percentage of the asset's total value that counts toward the denominator of the capital ratio. As a result, banking regulators require banks to hold less capital to cover exposures to safer assets and more capital to cover riskier exposures.

[27]Although banks may face additional risks, credit, market, credit valuation adjustment, and operational risks are the main risks that banks must consider for regulatory capital purposes. U.S. capital rules require banks to maintain capital that is commensurate with the level and nature of all risks to which they are exposed. Banks also must have a process for assessing their overall capital adequacy in relation to their risk profile, as well as a comprehensive strategy for maintaining an appropriate level of capital.

certain other banks are subject to the **supplementary leverage ratio**, which takes into account additional exposures.[28] Global systemically important bank holding companies are also subject to an **enhanced supplementary leverage ratio**, which adds an additional buffer to the supplementary leverage ratio (see fig. 2).[29]

Figure 2: Supplementary Leverage Ratio Requirements for Internationally Active Bank Holding Companies



Source: GAO. | GAO-25-107995

Note: The supplementary leverage ratio applies to all internationally active banks (advanced or internal model approaches banking organizations) and Category III banking organizations (those with $250 billion or more in assets or $75 billion or more in nonbank assets, weighted short-term wholesale funding, or off-balance sheet exposures). Global systemically important bank holding companies must meet an enhanced supplementary leverage ratio of 5 percent (set at 2 percentage points higher than the supplementary leverage ratio of 3 percent). Although not shown here, depository institution subsidiaries of global systemically important bank holding companies or bank holding companies with consolidated assets over $700 billion or more than $10 trillion in assets under custody must meet an enhanced supplementary leverage ratio of 6 percent (3 percent on top of the 3 percent supplementary leverage ratio) to be deemed well-capitalized.

[a]Tier 1 capital is a type of regulatory capital defined as the sum of common equity tier 1 capital and additional tier 1 capital. 12 C.F.R. § 3.2; 12 C.F.R. § 217.2; 12 C.F.R. § 324.2. Common equity tier 1 capital generally consists of retained earnings (profits a bank earned but has not distributed to shareholders in the form of dividends or other distributions), accumulated other comprehensive income, and qualifying common stock, with deductions for items such as goodwill and deferred tax assets. Additional tier 1 capital generally consists of qualifying noncumulative perpetual preferred stock. See 12 C.F.R. § 3.20(b), (c); 12 C.F.R. § 3.22; 12 C.F.R. § 217.20(b), (c); 12 C.F.R. § 217.22; 12 C.F.R. § 324.20(b), (c); 12 C.F.R. § 324.22.

[28]U.S. regulations set a supplementary leverage ratio of 3 percent for all internationally active banks (advanced or internal model approaches banking organizations) and Category III banking organizations (those with $250 billion or more in assets or $75 billion or more in nonbank assets, weighted short-term wholesale funding, or off-balance sheet exposures). 12 C.F.R. § 3.10(a)(1)(v) (OCC); 12 C.F.R. § 217.10(a)(1)(v) (Federal Reserve Board); and 12 C.F.R. § 324.10(a)(1)(v) (FDIC).

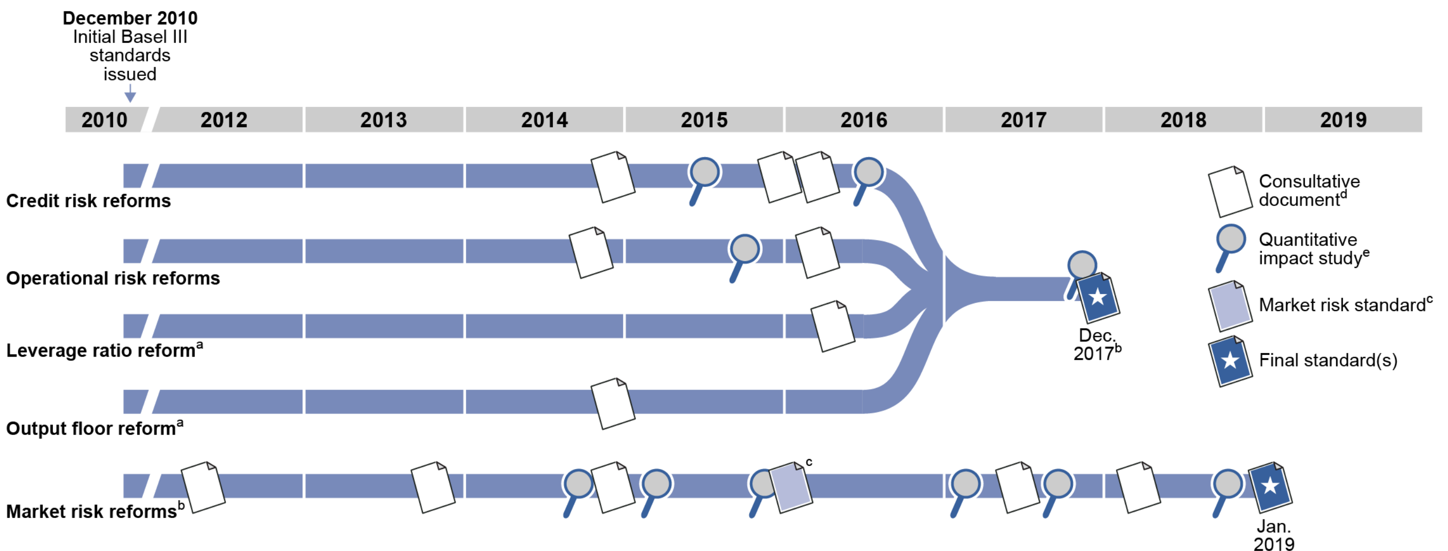
[29]In the United States, global systemically important banks generally are the largest and most complex banking organizations and are subject to the greatest number of requirements.

Basel Committee and Final Basel III Standards

As of March 13, 2025, the Basel Committee comprised 45 members from 28 jurisdictions, consisting of central banks and authorities with formal responsibility for the supervision of banks. The Basel Committee sets minimum regulatory standards and supervisory guidelines to strengthen the regulation, supervision, and practices of banks worldwide with the purpose of enhancing financial stability. The standards have no legal force but are developed and issued by members with the expectation that individual jurisdictions will implement them.

The development of the final Basel III standards generally began after the initial Basel III standards were issued in December 2010 and concluded in January 2019 (see fig. 3). To inform the development of these standards, the Basel Committee solicited external comments on proposed standards through public consultative documents. It also conducted quantitative impact studies to help estimate the effect of proposed reforms on banks' capital.

Figure 3: Timeline of Final Basel III Reforms



Source: GAO analysis of Basel Committee on Banking Supervision documents; GAO (icons). | GAO-25-107995

Notes: Credit risk is the potential for loss resulting from the failure of a borrower or counterparty to perform on an obligation. Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. Market risk is the potential for loss resulting from movements in market prices, including interest rates, commodity prices, stock prices, and foreign exchange rates.

[a]A leverage ratio sets an overall minimum capital standard based on a bank's assets (irrespective of their risk). Generally, an output floor sets an overall minimum capital standard based on a bank's risk-weighted assets.

[b]The market risk reforms also revised the capital requirement for credit valuation adjustment risk—a form of market risk that captures the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction. The 2017 standards also included a revised standard for calculating credit valuation adjustment risk, but we do not discuss that standard separately in this report.

[c]In January 2016, the Basel Committee finalized a standard for market risk. However, the Committee continued work and issued a revised standard in January 2019.

[d]The Basel Committee generally issues consultative documents to communicate and request public comments on proposed standards.

[e]The Basel Committee generally conducts quantitative impact studies to assess the impact of proposed standards on selected banks.

The Basel Committee communicated the need for further reforms to the initial Basel III standards in a 2013 report.[30] The report noted that use of bank internal models promoted risk sensitivity in the Basel framework but also led to complexity and reduced comparability among large banks' calculations of risk-weighted assets.[31] The Committee corroborated these findings through its own empirical analyses.[32] Furthermore, the Committee stated the need to address such shortcomings to foster the credibility of the framework.

As a result, the 2017 final Basel standards sought to improve and balance the simplicity, comparability, and risk sensitivity of capital standards for internationally active banks. These reforms included changes to banks' methods for measuring credit and operational risk-weighted assets. They also introduced a new leverage ratio buffer for the largest banks and replaced an existing capital floor (output floor).[33]

[30]Bank for International Settlements, Basel Committee on Banking Supervision, *Discussion paper: The regulatory framework: balancing risk sensitivity, simplicity and comparability* (Basel, Switzerland: July 2013).

[31]According to the 2013 report, complexity associated with the use of internal models, significant choice in the modelling of risk parameters, and national discretion in implementing Basel standards have contributed to material variations in risk-weighted assets across banks. These variations make it difficult to compare banks against their peers.

[32]Bank for International Settlements, Basel Committee on Banking Supervision, *Regulatory Consistency Assessment Programme (RCAP) Analysis of Risk-Weighted Assets for Market Risk* (Basel, Switzerland: January 2013, revised February 2013); *Regulatory Consistency Assessment Programme (RCAP) Analysis of Risk-Weighted Assets for Credit Risk in the Banking Book* (Basel, Switzerland: July 2013); and *Regulatory Consistency Assessment Programme (RCAP) Analysis of Risk-Weighted Assets for Credit Risk in the Banking Book* (Basel, Switzerland: April 2016).

[33]*Basel III: Finalising Post-Crisis Reforms* (Basel, Switzerland: December 2017). See appendix II for a summary description of the 2017 and 2019 final Basel III reforms.

Specifically, the changes made to the standards aimed to achieve several broad priorities for the 2017 reforms:

- Enhance the robustness and risk sensitivity of **standardized approaches** for credit and operational risk.
- Constrain use of **internal model approaches** by limiting inputs used for calculating credit risk under this approach and removing the use of this approach in the calculation of operational risk.[34]
- Introduce a **leverage ratio buffer** for global systemically important banks (to add a capital cushion to their existing Basel leverage ratio standard and to serve as a backstop to the risk-based requirements).
- Replace the existing Basel output floor with a more robust risk-sensitive **output floor** that sets an aggregate minimum capital floor for banks based on their risk-weighted asset calculations under the revised standardized approaches.[35] Specifically, calculations of risk-weighted assets generated by a bank's internal models cannot, in aggregate, fall below 72.5 percent of the risk-weighted assets computed using standardized approaches.

The Basel Committee published its revised standards for minimum capital requirements for market risk in 2016 and updated them in 2019.[36] The global financial crisis showed that the framework's capital requirements for trading activities were insufficient to absorb losses. The Committee made revisions to the market risk framework in 2009, but it recognized that these changes did not fully address the framework's shortcomings. As a result, the Committee initiated a fundamental review of the trading

[34]The Basel Committee refers to the credit risk approach that allows for the use of bank internal models as the credit risk internal ratings-based approach. For this report, we use internal model approaches.

[35]The final Basel III reforms replaced the Basel II floor, which was introduced in 2006 and based on Basel I capital requirements. The Basel Committee stated the Basel II floor had been inconsistently implemented across jurisdictions. Additionally, many banks and jurisdictions no longer used the Basel I standards on which the floor was based.

[36]*Minimum Capital Requirements for Market Risk* (Basel, Switzerland: January 2019, revised February 2019).

book to address weaknesses in risk measurement under both internal model and standardized approaches.[37]

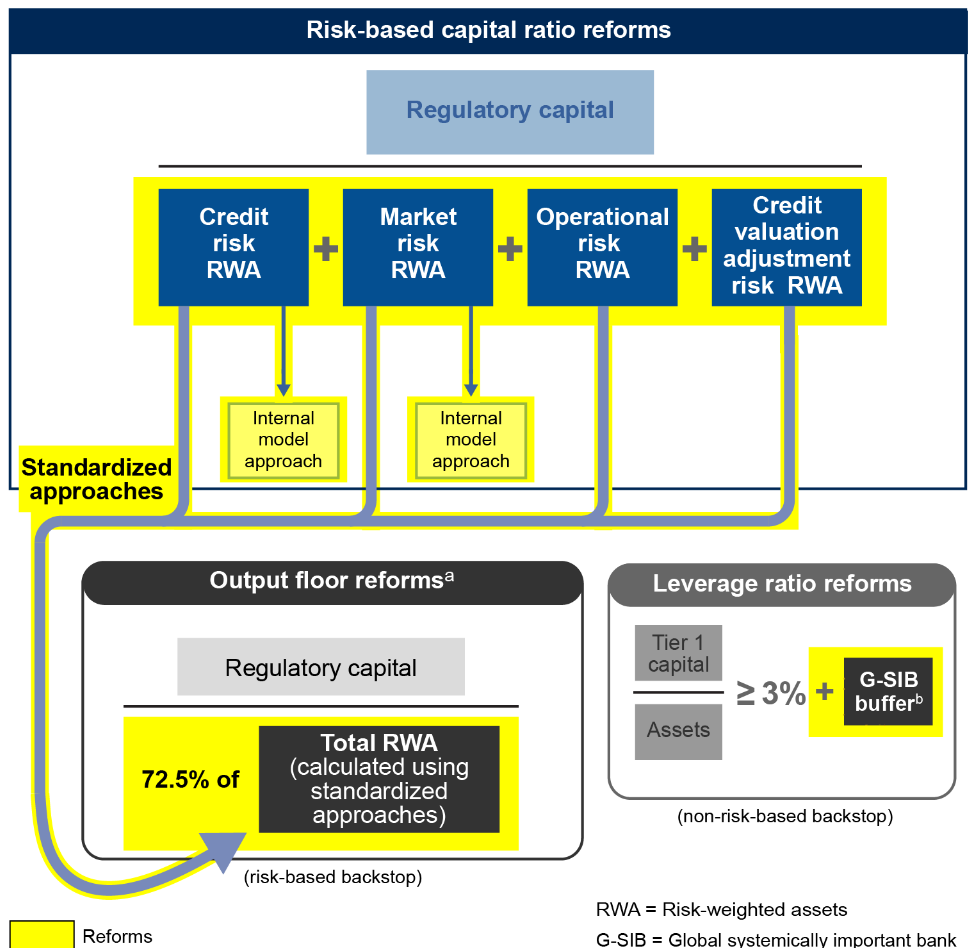
The revised standards intended to achieve the following broad priorities for the 2019 market risk reforms:

- Revisions to the internal model approach to better address risks observed during the global financial crisis and reinforce supervisory approval processes for the use of internal models.
- A new, more risk-sensitive standardized approach designed and calibrated to serve as a credible fallback to the internal model approach.
- Stricter criteria for the assignment of financial instruments to the trading book.
- A simplified standardized approach for use by banks that have small or noncomplex trading portfolios.

Figure 4 provides a high-level summary of the final Basel III reforms, which can be categorized into three main areas: (1) reforms to the denominators of the risk-based capital ratios, including the approaches for calculating credit, market, and operational risk-weighted assets; (2) the introduction of a new leverage ratio buffer for global systemically important banks; and (3) a revised output floor based on calculations of risk-weighted assets using the Basel III standardized approaches.

[37]A bank's trading book contains positions that a bank holds for short-term resale or with the intent of benefiting from actual or expected price movements, to lock in arbitrage profits, or to hedge covered positions. A bank's trading book is subject to market risk standards. All other financial instruments are said to be in the bank's banking book and are subject to credit risk standards.

Figure 4: Overview of Final Basel III Reforms to the Basel Framework



Source: GAO analysis of Basel Committee on Banking Supervision documents. | GAO-25-107995

Notes: The framework includes multiple capital ratios that may differ in the type of regulatory capital required (numerator). For example, tier 1 capital is a type of regulatory capital that includes retained earnings (profits a bank earned but has not paid out to shareholders in the form of dividends or other distributions), accumulated other comprehensive income, and qualifying common stock or shares.

Credit risk is the potential for loss resulting from the failure of a borrower or counterparty to perform on an obligation. Market risk is the potential for loss resulting from movements in market prices, including interest rates, commodity prices, stock prices, and foreign exchange rates. Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. Credit valuation adjustment risk is a form of market risk that captures the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction. We do not discuss the credit valuation adjustment risk standard separately in this report.

[a]Per the revised output floor standard, calculations of risk-weighted assets generated by a bank's internal models cannot, in aggregate, fall below 72.5 percent of the risk-weighted assets computed using standardized approaches.

[b]According to the Basel Committee, global systemically important banks are banking organizations whose distress or disorderly failure would cause significant disruption to the wider financial system and economy due to their size, complexity, and interconnectedness.

Basel Members Worked in Groups to Develop Standards Using an Iterative, Consensus-Driven Process

Members' Senior Officials Oversaw the Basel Committee Groups That Developed the Standards

To develop the final Basel III standards, the Basel Committee relied on key groups at various levels within the Committee structure. In addition, the Group of Central Bank Governors and Heads of Supervision (GHOS), which consists of the heads of supervision and central bank governors from the 28 member jurisdictions, oversaw the Committee's efforts, including by providing guidance and endorsing the final standards.[38]

The Basel Secretariat, which consists of permanent and temporary staff from member jurisdictions, provided administrative support for the Committee's efforts. The Basel Secretariat supports Basel Committee groups by ensuring timely information flow to all members, facilitating coordination across groups, and maintaining Basel Committee records. The Secretariat is led by a Secretary General who is appointed by the Chair of the Parent Basel Committee.[39]

As shown in figure 5, the key Basel Committee groups responsible for developing the final Basel III standards are as follows:

- The **Parent Basel Committee** established the strategic priorities for the final Basel III reforms and reported to GHOS. Based on our analysis of U.S. member documents, this group, which is the highest decision-making body in the Basel Committee, developed reform

[38]GHOS typically met once or twice a year during 2011–2019. The U.S. representatives to this group were the Vice Chair for Supervision and the Chair of the Board of Governors of the Federal Reserve System, the President of the Federal Reserve Bank of New York, the Chairman of FDIC, and the Comptroller of the Currency.

[39]From 2011 to 2019, Federal Reserve staff periodically were assigned to the Basel Committee Secretariat to work on the final Basel III standards, according to U.S. agency officials.

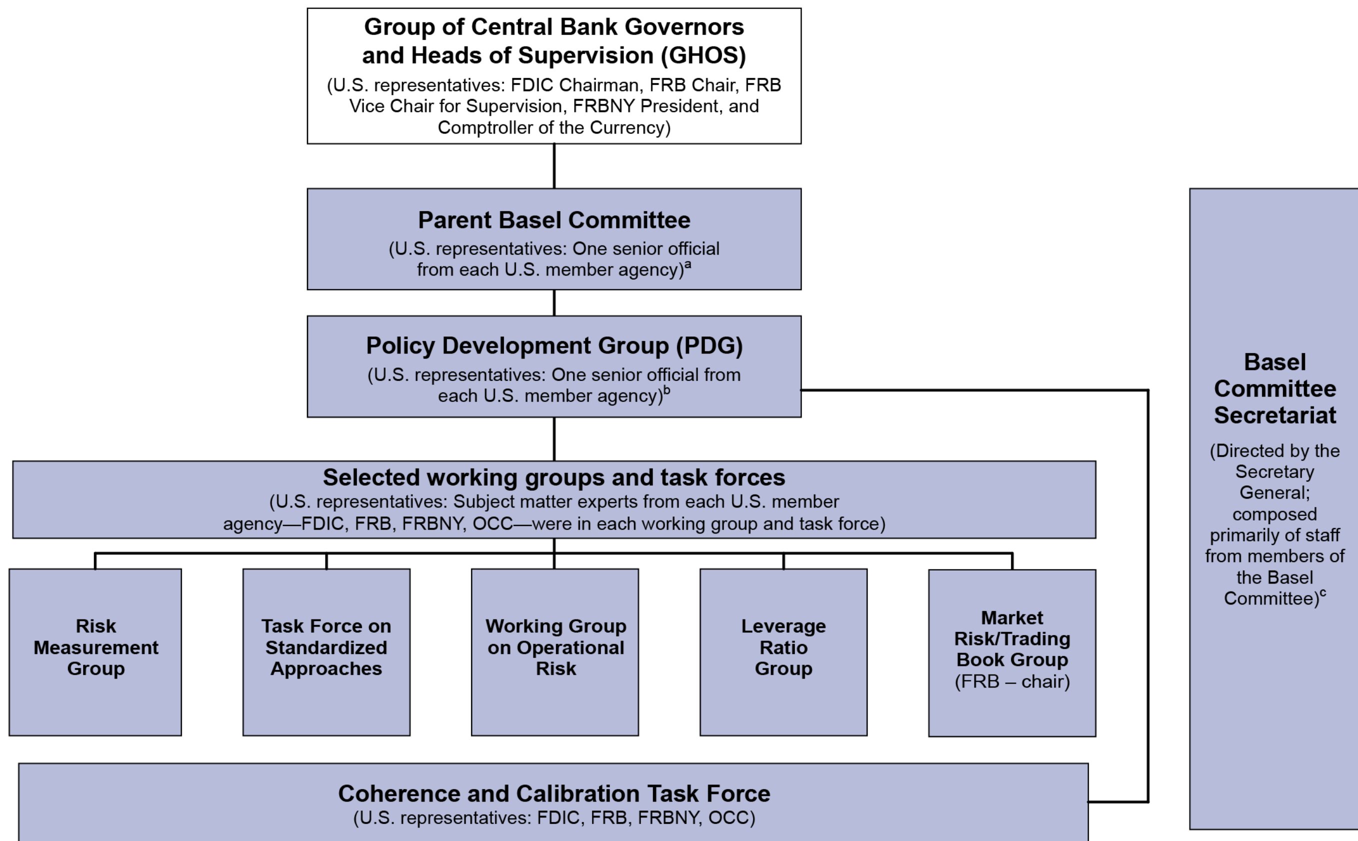
priorities to guide the other groups responsible for developing the standards and monitored their progress. It was also responsible for finalizing the standards and transmitting them to GHOS for consideration and endorsement. Four senior officials from U.S. members (one from each U.S. Basel Committee member) served on the Parent Basel Committee.[40]

- The **Policy Development Group (PDG)** managed the development of the final Basel III standards in accordance with the Parent Basel Committee's strategic priorities and reported to the Parent Basel Committee, according to U.S. officials. According to our review of internal agency documents and U.S. and Basel Secretariat officials, PDG delegated and managed the development work for each reform. The Basel Secretary General served as PDG chair during the development of the final Basel III standards. Four senior officials from U.S. members (one from each U.S. Basel Committee member) participated in the PDG.[41]
- **Working groups and task forces** developed the technical aspects of the standards under PDG guidance. Task forces generally were temporary and focused on narrow topics within a broader reform area or a specific issue affecting multiple reforms. These groups generally were staffed with subject matter experts—such as policy analysts, technical experts, and financial analysts specializing in capital risk—from the Basel members, including U.S. members. Our analysis of U.S. agency documents found that officials from each U.S. member participated in the major working groups and task forces primarily tasked with completing the work for each reform. In one case, an official from a U.S. member led the group.

[40]The U.S. representatives to the Parent Basel Committee were the Board of Governors of the Federal Reserve System's Director of the Division of Supervision and Regulation (2012–2014, 2017–present) and Deputy Director of the Division of Supervision and Regulation (2014–2017); Federal Reserve Bank of New York's Head of the Supervisory Policy and Strategy function (2010–2013) and Head of the Supervision Group (2013–present); an FDIC senior executive designated by the Chairman (2012–present); and OCC's Comptroller (prior to 2012) and Deputy Comptroller (2012–present).

[41]The U.S. PDG representatives were a senior advisor (2010–present) from the Board of Governors of the Federal Reserve System; the Head of the Supervision Group (2010–2013), Head of the Enterprise Risk Supervision function in the Supervision Group (2013–2017), and Head of the Supervisory Policy and Strategy function of the Supervisory Group (2017–2021) from the Federal Reserve Bank of New York; a Deputy Director (2012–2015) and an Associate Director (2015–2020) from FDIC; and a Director of Capital Policy from OCC.

Figure 5: Basel Committee on Banking Supervision and U.S. Member Participation During the Development of Final Basel III Standards



FDIC = Federal Deposit Insurance Corporation
FRB = Board of Governors of the Federal Reserve System
FRBNY = Federal Reserve Bank of New York
OCC = Office of the Comptroller of the Currency

Source: GAO analysis of internal documents from FRB, FRBNY, FDIC, and OCC and Basel Committee on Banking Supervision documents. | GAO-25-107995

[a]Senior officials who participated in the Parent Basel Committee included directors, deputies, or heads of departments or equivalent positions from each member agency.

[b]Senior officials who participated in the PDG included deputy directors, associate directors, senior advisors, and heads of departments.

[c]Per the Basel Committee's charter, staff from jurisdictions that are members of the Basel Committee, including from the United States, worked at the Basel Committee Secretariat on a temporary basis.

Groups met regularly to work on the final Basel III standards, according to our analysis of U.S. agency documents and interviews with U.S. officials. The PDG and Parent Basel Committee each met at least once a quarter, typically in successive months. Working groups and task force members

also met at least quarterly and maintained regular contact between meetings to develop the proposals and prepare materials for consideration by the PDG and Parent Basel Committee.

U.S. Member Participation

U.S. members participated actively at all levels of the Basel Committee structure. According to U.S. officials, each U.S. member identified officials, including subject matter experts, to work on the final Basel III standards. This work was part of officials' regular duties. Representatives to GHOS and senior officials representing U.S. members in the Parent Basel Committee helped determine negotiating priorities, according to our analysis of U.S. agency documents.

Subject matter experts from each U.S. member completed the technical work necessary to develop reform proposals in line with those priorities. They did so primarily by participating in PDG, working groups, and task forces that completed the technical work on the Basel standards. Generally, these experts briefed their agencies' representatives to the Parent Basel Committee and PDG about the key issues and considerations for developing negotiating positions ahead of quarterly meetings. We found that U.S. officials in working groups frequently communicated about ongoing work with PDG and Parent Basel Committee representatives and sought review and clarity about how to address challenges as they arose.

U.S. officials told us that U.S. members' GHOS representatives played a key role in directing negotiations for the final Basel III standards. Our analysis of U.S. member documents found that agency officials regularly shared information about the progress of the final Basel III standard negotiations with GHOS representatives. Officials working on the negotiations also consulted with their respective GHOS representatives on material issues, according to U.S. officials. These included proposals expected to have a sizeable impact on U.S. banks or the financial system or those expected to be controversial.

U.S. Member Collaboration

We found that U.S. members developed shared reform priorities and worked together to further those priorities during the final Basel III standard negotiations. PDG and Parent Basel Committee representatives from each agency met multiple times a year throughout the development period to share updates on ongoing work and align negotiating strategies. In addition, agencies coordinated efforts to analyze bank data and shared their findings. Furthermore, we identified cases in which U.S. members jointly advocated for specific positions, including by sending a joint letter to the Parent Basel Committee or PDG. According to U.S. officials,

working group staff also maintained frequent contact throughout the development period.

We determined that the actions taken by U.S. members during the development of the final Basel III reforms generally reflected leading practices for interagency collaboration that GAO identified in prior work.[42] For example, U.S. agency documents indicated that U.S. members jointly identified and promoted U.S. priorities, shared and leveraged information among member agencies, and included relevant senior and expert participants in interagency communications.

Basel Groups Used an Iterative Process to Develop Standards and Reach Consensus

The process to develop the final Basel III standards was iterative, involving multiple rounds of analyses, discussion, and review. According to our analysis of U.S. agency documents and interviews with U.S. officials and the Basel Secretariat, the process for developing the final Basel III reforms followed a three-stage approach:

1. The Parent Basel Committee established priorities and the PDG established working groups.
2. Groups considered jurisdictions' positions, conducted quantitative analyses, and received external input to develop reform proposals.
3. The Parent Basel Committee finalized the 2017 final Basel III standards and the 2019 final Basel III standards with GHOS endorsement. This endorsement was the final step needed for publication subject to revisions that GHOS might request.

Establishment of work plans and working groups. The Parent Basel Committee developed high-level work plans that specified priorities for reform. According to U.S. officials, these work plans set parameters for specific reforms, generally grounded in the broad priorities of the final

[42]See GAO-23-105520. For example, U.S. members had methods to ensure accountability, bridge organizational cultures, and clarify roles and responsibilities. The leading collaboration practices also include the development of written guidance and agreements. During the negotiation of the final Basel III standards, U.S. members did not have formal agreements governing the exchange of information. Rather, when data were exchanged, the Federal Reserve advised the other U.S. members about the confidential nature and permitted use of that information. In 2022, OCC and FDIC signed agreements with the Federal Reserve governing the exchange of Basel-related data. We determined that one leading collaboration practice—identifying and sustaining leadership—was not relevant to U.S. members' participation at the Basel Committee. Specifically, no individual U.S. member was identified as the lead entity responsible for U.S. negotiations. As recognized members of the Basel Committee, each U.S. member participated actively in the Committee's groups and at the most senior level in GHOS.

Basel III reform effort.[43] For example, an initial work plan on credit risk reform directed members to create standards that constrained the use of internal models. According to U.S. agency documents, the Parent Basel Committee typically revised work plans annually. These work plans were sometimes developed with input from PDG and working groups, according to U.S. officials. As previously described, the PDG established working groups and task forces to help develop the reforms in accordance with the work plans. The iterative nature of the Basel standard-development process helped ensure work plans reflected priorities and progress for each reform.

Development of reform proposals and consideration of inputs. During the multiyear process of developing and finalizing a standard, the Basel Committee primarily used information from three main sources to create, review, and refine proposals:

- **Member jurisdictions' positions and technical input.** To execute work plans, working groups and task forces worked together to develop initial reform proposals. According to U.S. and Basel Secretariat officials, these proposals were technical in nature and reflected the interests of member jurisdictions, including idiosyncrasies of specific market structures. As members of the groups that developed the reforms, U.S. officials provided proposals and input aligned with U.S. priorities.
- **Assessments of quantitative impacts.** Basel members used quantitative impact studies to analyze the potential effects of proposed standards on banks' capital requirements.[44] To conduct the studies, Basel Committee members collected data from banks within their jurisdiction using a standardized template, and banks submitted the completed template on a voluntary basis. The data collected included information on eligible capital; the composition of exposures for credit, market, and operational risk components; and other data relevant to the analysis of potential impacts of a particular reform.

  The Federal Reserve was responsible for gathering the data for the United States. Federal Reserve officials stated that they sent the anonymized data to Basel Committee teams, which consisted of staff

[43]Broad priorities included enhancing the robustness and risk sensitivity of standardized approaches, enhancing leverage ratio requirements for global systemically important banks, and creating a robust and risk-sensitive output floor.

[44]The next section of this report analyzes in more detail how U.S. members used quantitative impact studies to inform their positions.

from Basel Committee members. These data analysis teams then applied various actual and proposed risk weights to the exposures to determine risk-weighted assets under the considered scenarios. The impact assessments allowed Basel members to compare banks' current capital positions to their projected capital positions under the proposed reforms.

- **Public comments and other external inputs.** External input was primarily gathered through comments on public consultative documents, which contained information about the proposed standards and results from relevant quantitative impact studies for public review.[45] Members of the public could submit comments on these documents.[46] Working groups and task forces reviewed and summarized the comment letters, informed the PDG of the nature of the comments, and provided the PDG with their views and proposals for further changes, if warranted. In addition, Basel Secretariat officials told us that the PDG and some subgroups held outreach meetings with representatives from large industry groups and other external stakeholders to seek their views on the reforms. Officials from U.S. agencies attended some of these meetings, according to U.S. officials.

Basel Committee members analyzed this information through an iterative process that typically started at the working group level and progressed up the organization. Our analysis of U.S. agency documents found that lower-level groups provided status updates and reported alternatives under consideration to higher-level groups for their discussion. According to U.S. officials, if working group members could not agree on a proposal, they either would propose options for PDG consideration or request additional guidance. The PDG would then further develop and refine the proposal before sending it to the Parent Basel Committee and, as warranted, GHOS for review. Officials stated that during the review process, the PDG, Parent Basel Committee, or GHOS could return the proposal to a lower level in the Basel structure for further work.

Finalization and endorsement of the final standard. Once the Parent Basel Committee determined the proposed changes sufficiently incorporated jurisdictions' positions, external comments, and quantitative

[45]The next section of this report analyzes in more detail how U.S. members used external comments to inform their positions.

[46]Officials from the Basel Secretariat told us that all comments received on consultative documents are publicly available on the Basel Committee website unless the author asks the Basel Committee not to publish the comment.

impact studies, it finalized the standards. The Parent Basel Committee often required multiple rounds of consultative documents, reviews of public comments, and quantitative impact studies before finalizing a standard. All final Basel III standards were endorsed by GHOS, in accordance with the Basel Committee charter.

Decision-making by consensus. The Basel Committee makes decisions through a consensus-based process operative at all levels of the organization. U.S. and Basel Secretariat officials explained that the final Basel III standards were achieved through broad agreement among members, rather than through majority agreement or a simple vote. This consensus-based approach was used consistently throughout the organization and for all types of decisions, from agreeing on reform options to finalizing and endorsing standards.[47]

U.S. officials told us that the Basel Committee's organizational structure—with each group providing direction to and reviewing the work of the group below—helped build consensus in most reform areas.

However, in cases in which members could not reach consensus at the Parent Basel Committee or GHOS levels, the Basel Committee could allow for "national discretion." Such discretion allows jurisdictions to choose from agreed-upon alternative approaches. For example, the final credit risk standard included an option for jurisdictions to use an alternative to external credit ratings to calculate risk weights, because U.S. law prohibits the use of external credit ratings for bank capital regulatory requirements. In at least one case (the treatment of sovereign debt), the Basel Committee and GHOS determined they could not reach consensus and made no changes to the existing standards.[48]

[47]For example, U.S. member officials told us that members may agree to publish a document without necessarily supporting all the document's proposals. Agreement at that time indicated that it was acceptable to gather public comments on proposals or analyze their impacts.

[48]See Bank for International Settlements, Basel Committee on Banking Supervision, *Discussion paper: The regulatory treatment of sovereign exposures* (Basel, Switzerland: December 2017).

U.S. Members Considered External Input and Analyses of Potential Effects on U.S. Banks to Inform Their Positions

External Input Informed U.S. Members' Development of Reforms

U.S. members considered external input, including public comments received on consultative documents, direct feedback from industry stakeholders, and Basel Committee-sponsored industry outreach. This external input helped them develop reform approaches and positions on reform proposals throughout the development process.

Our sensitive report provided some additional information on U.S. members' specific actions or positions on reforms in response to external input during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Public comments on consultative documents. From 2011 to 2019, the Basel Committee published 13 consultative documents related to the final Basel III standards, seeking public comment on each reform area through at least one consultative document.[49] Across these 13 documents, the Committee received approximately 750 comment letters, averaging about 57 letters per document.

U.S. comment letters accounted for about 18 percent of total comment letters.[50] The number of U.S. comment letters varied by reform area, ranging from eight letters on the output floor to 47 letters on the standardized approach for credit risk. U.S. commenters made up from about 13 percent (on operational risk) to 38 percent (on the leverage ratio) of total letters submitted for each reform area.

[49]The reform areas that we identified were credit risk, operational risk, market risk, leverage ratio, and output floor. See appendix II for more detailed information on the reform areas.

[50]For our analysis, we counted comment letters with multiple authors or international groups as U.S. comment letters if they had at least one U.S.-based author or member.

U.S. officials told us public comments on consultative documents were a key source of information to develop the reforms.[51] Specifically, comments provided insights on alternative approaches or methodologies to consider, the adequacy of risk-assessment measures, and potential implementation challenges with proposed reforms.

According to U.S. agency officials, public comments often led them to reconsider initial proposals. One example is the development of reforms to the credit risk standardized approach. Documents we reviewed showed that U.S. members analyzed comments to consider and refine alternative methods for measuring credit risk that did not rely on external credit ratings. As previously stated, U.S. members are prohibited by U.S. law from relying on external credit ratings in their regulations, including regulations pertaining to capital requirements.

In addition, the Basel Committee revised its initial 2014 proposal in response to public comments. In 2014, the Committee's proposed approach removed references to external credit ratings. However, based largely on public comments, the Committee reintroduced the use of external credit ratings in its subsequent proposal and, ultimately, the final standard.[52] U.S. agency officials stated that they considered the comments and understood the utility of external credit ratings for jurisdictions that could use them.

Federal Reserve officials stated that they also were actively involved in addressing industry concerns over implementation challenges associated with a 2013 proposed standard for market risk.[53] Specifically, in 2014 the Basel Committee proposed an alternative approach for calculating market risk under the standardized approach—the sensitivities-based approach—that ultimately was incorporated into the final standard. Federal Reserve officials stated that U.S. industry participants had identified it as a less burdensome method than the one proposed in 2013,

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[51]Generally, working group members reviewed comment letters and proposed changes to incorporate commenters' views and ideas, as appropriate.

[52]See Bank for International Settlements, Basel Committee on Banking Supervision, *Consultative Document, Standards: Revisions to the Standardised Approach for credit risk* (Basel, Switzerland: December 2014); and *Second consultative Document, Standards: Revisions to the Standardised Approach for credit risk* (Basel, Switzerland: December 2015).

[53]As noted earlier, we collectively refer to the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York as the Federal Reserve, unless otherwise noted.

because U.S. banks already were using similar methods in their stress tests of financial condition.[54]

Direct input from industry stakeholders. U.S. members also considered external input received through meetings with U.S. industry groups or banks. In particular, the Federal Reserve initiated meetings with U.S. global systemically important banks to obtain their views on proposed reforms, encourage them to submit comment letters, and request supporting data or analysis.[55] Officials told us their outreach to banks generally occurred during the development or following publication of a consultative document, allowing banks to provide fully informed comment letters. Officials also said they reached out to banks when issues of significant concern arose or if the Basel Committee had not conducted its own outreach.

Specifically, documents show that Federal Reserve officials initiated five meetings with the largest U.S. banks from February 2015 to June 2016. The meetings discussed reforms to the leverage ratio and the standardized approach for credit risk, among other issues.

Officials from OCC and FDIC told us they did not conduct separate, proactive outreach to industry during the development of the reforms. However, OCC officials mentioned that they met with banks or industry groups that contacted them.[56] FDIC officials told us they encouraged interested parties, including banks and industry groups, to comment on consultative documents.

Moreover, the Basel Committee organized meetings with industry stakeholders, including some from the United States, according to U.S.

[54]A “sensitivity” is the change in the value of an instrument given a small movement in a risk factor that affects the instrument’s value. A stress test is a hypothetical exercise designed to assess the potential impact of economic, financial, or other scenarios on a company’s financial performance. Stress tests of banking organizations typically evaluate whether the organizations have sufficient capital to remain solvent under stressful economic conditions. The sensitivities-based method is conceptually similar to a stress test, as the capital requirement is based on the loss a bank estimates it would suffer under a defined stress scenario. This method relies on “sensitivities” as the primary input to a calculation.

[55]The Federal Reserve oversees bank holding companies. Global systemically important bank holding companies are the largest and most complex bank holding companies that would be affected by U.S. implementation of the final Basel III reforms.

[56]According to OCC officials, OCC officials held more than 20 meetings with supervised banks or industry associations between 2016 and 2019 to discuss final Basel III reforms.

and Basel Secretariat officials. Our analysis of U.S. member documents identified five such meetings in 2014–2016, which discussed industry comments on proposals and other relevant topics. For example, according to an OCC briefing document, the Working Group on Operational Risk met with industry representatives in May 2016 to discuss initial comments on a consultative document.

Analyses Helped U.S. Members Assess and Calibrate Proposals

U.S. members contributed to and considered analyses conducted by the Basel Committee, including quantitative impact studies, and supplemented this information with their own internal analyses. These analyses helped them determine potential impacts on banks' capital requirements and calibrate various components of the standards.

Our sensitive report provided some additional information on U.S. members' positions on reforms in response to analyses conducted during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Quantitative impact studies. The Basel Committee conducted various quantitative impact studies that generally assessed and described estimated impacts of proposed standards on banks' capital requirements across member jurisdictions. The Committee conducted at least one quantitative impact study to inform the development of each reform area. This included a cumulative quantitative impact study analyzing the coherence and calibration of all the reforms in the 2017 reform package.[57] Agency documents showed, and U.S. officials told us, that the results of these studies were a key source of information for developing policy positions during the standards' formulation.

These studies helped validate or assess alternatives and calibrate or refine proposals.[58] For example, the Basel Committee used a 2014 quantitative impact study to validate the proposed operational risk standardized approach, which aimed to simplify the framework for

[57]During the development of the final Basel III standards, the Basel Committee published Basel III monitoring reports, which included quantitative impact studies, on a semi-annual basis. According to Basel Secretariat officials, the Committee has been conducting such studies since 2011 and conducts quantitative impacts studies on specific topics outside of the regularly published studies, as needed.

[58]The Basel Committee also conducted various analyses to identify Basel framework deficiencies and justify the need for the final Basel III reforms. See appendix III for more information.

operational risk by creating a single, risk-sensitive standardized approach.

Documents also showed that U.S. members and the Basel Committee used quantitative impact studies to calibrate or refine proposals. For example, they used quantitative impact study results to make decisions on the calibration of the output floor. Multiple briefing documents show OCC citing quantitative impact study results related to various proposed output floor levels and their effect on capital requirements. Additionally, in developing the market risk standardized approach, the Basel Committee assessed a proposed approach in a 2015 quantitative impact study. The Committee found that its proposal resulted in market risk capital charges that were close to nine times higher for the standardized approach than the internally modelled approaches and chose to readjust their proposal.[59]

Internal analyses by U.S. members. U.S. members also conducted internal analyses on the potential impact of final Basel III reforms on U.S. banks. As the agency leading the collection of U.S. quantitative impact study data, the Federal Reserve conducted internal analyses using these and other data. These analyses helped U.S. members understand the potential effects of proposals on U.S. banks and informed U.S. negotiating positions.

For example, according to our analysis of U.S. agency documents, in 2014 the Federal Reserve conducted an impact analysis comparing the capital requirements of the standardized approach and advanced measurement approach for operational risk among several large U.S. banks.

From 2018 to 2019, the Federal Reserve also conducted a series of four internal analyses to analyze the collective effect of final Basel III reforms and help U.S. members make data-driven decisions to finalize the standards. These analyses highlighted the effect that proposed Basel III reforms could have on U.S. banks' binding regulatory capital constraints and total risk-weighted assets for U.S. bank holding companies. According to Federal Reserve officials, they shared key findings and discussed their analyses with OCC and FDIC.

[59]See Bank for International Settlements, Basel Committee on Banking Supervision, *Fundamental review of the trading book - interim impact analysis* (Basel, Switzerland: November 2015).

Our analysis of U.S. agency documents showed that FDIC and OCC also conducted some internal analyses to inform their positions and assess potential impacts on U.S. banks. For example, in December 2015 FDIC conducted an impact analysis of a proposed standardized approach for operational risk on U.S. bank capital requirements.

We determined that the actions taken by the U.S. members during the development of the final Basel III reforms generally reflected leading practices in the Office of Management and Budget's Circular A-4. This circular guides certain U.S. regulatory agencies in the development of high-quality and evidence-based regulatory analysis.[60] For example:

- U.S. members **helped identify the need for reform** in internal briefing documents and consultative documents that outlined deficiencies and identified Basel Committee and U.S. priorities for the reforms.
- U.S. members **considered multiple alternatives** in Basel Committee working groups, including for calibrating indicators, applying standards, and estimating risk. To refine alternatives, they presented alternatives to higher-level groups in the Committee and in consultative documents.
- U.S. members **evaluated costs and benefits** of proposals through quantitative impact studies and public comment reviews. Quantitative impact studies helped U.S. members analyze the effect of proposed standards on banks' capital, and public comments helped U.S. members identify and analyze potential implementation costs of the proposed standards.

Our analysis indicated that U.S. members' actions were in alignment with the Office of Management and Budget's leading practices. See appendix III for a more detailed evaluation of U.S. members' actions against leading practices.

[60]As previously noted, neither the Basel Committee nor the U.S. banking regulators are required to abide by practices set out in Circular A-4. We did not identify any leading practices for international standard-setting bodies pertaining to the analysis component of standard-setting. But we determined elements of Circular A-4 could serve as examples of leading practices (for the development of high-quality and evidence-based analysis) and are applicable in this context. See Office of Management and Budget, *Circular A-4: Regulatory Analysis* (Washington, D.C.: Sept. 17, 2003).

U.S. Members Actively Participated in the Development of the Final Basel III Reforms to Further Their Reform Priorities

U.S. members had two overarching reform priorities for the final Basel III standards: to address weaknesses that they identified in the Basel framework (primarily by improving the comparability of banks' risk-weighted ratios), and to bring certain Basel standards closer to U.S. requirements to promote a more level playing field.[61] As previously mentioned, the final Basel III standards included reforms to the internal model and standardized approaches for calculating risk-weighted assets, leverage ratio, and output floor.[62] Our analysis of U.S. documents showed that U.S. members participated actively in the various working groups that developed the standards to further their reform priorities.

Our sensitive report provided information on U.S. members' positions on specific reforms and actions taken by U.S. members to further their reform priorities during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Credit Risk Internal Model and Standardized Approaches

Credit Risk Internal Model Approach

To achieve their goal of improving comparability, U.S. members prioritized the adoption of material constraints on the use of bank internal models for credit risk.

The final standard for the credit risk internal model approach placed constraints on banks' use of internal models and incorporated two key changes. First, it removed the option to use one of two available internal

[61]As previously mentioned, the Basel Committee, including U.S. members, identified that bank internal models helped promote risk sensitivity in the Basel Framework, but also led to complexity and reduced comparability in large banks' calculations of risk-weighted assets. Consequently, one of the Basel Committee's broad goals for the final Basel III reforms was to constrain the internal model approach for credit risk to improve comparability of risk-weighted assets across banks.

[62]*Basel III: Finalising Post-Crisis Reforms* (Basel, Switzerland: December 2017); and *Minimum Capital Requirements for Market Risk* (Basel, Switzerland: January 2019, revised February 2019). The final Basel III standards also included a revised standard for calculating credit valuation adjustment risk, which we do not discuss separately in this report. The market risk reforms revised the capital requirement for credit valuation adjustment risk—the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction. As of the end of 2021, U.S. banks held relatively little credit valuation adjustment risk compared to the other types of risk, according to a law firm. See Davis Polk & Wardwell, LLP, "U.S. Basel III Endgame Proposed Rule" (Sept. 14, 2023). See appendix II for a description of the final Basel III reforms.

model approaches for credit exposures to financial institutions and large corporations. It also eliminated the use of internal models for equity exposures. Second, where internal models were retained, the standard applied minimum levels to certain parameters (such as probability of default and loss given default) to prevent banks from underestimating expected losses.[63]

Our analysis of U.S. agency documents showed that U.S. members played an active role in the development of this standard. We found that the Risk Measurement Group and the Coherence and Calibration Task Force were the groups that primarily developed the reforms to the credit risk internal model approach. Subject matter experts from all U.S. members participated in the working groups that developed the standard.[64]

Our sensitive report provided information on U.S. agencies' positions on reforms to the credit risk internal model approach and actions taken by U.S. members to further their priorities for such reforms during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Credit Risk Standardized Approach

For the credit risk standardized approach, U.S. members prioritized including an option for U.S. banks that did not rely on the use of external credit ratings.

To help promote a level playing field, U.S. members also sought to ensure that this option did not place U.S. banks at a material disadvantage compared to their international counterparts. As discussed previously, U.S. law prohibits U.S. regulators from referring to external

[63]"Probability of default" and "loss given default" are metrics that help institutions calculate expected losses to a given exposure, such as a bond or loan. Probability of default represents the percentage of the exposure that is expected to default. Loss given default estimates the portion of the exposure amount that likely will not be recovered in the event of default.

[64]For example, negotiations included setting limits on probability of default and loss given default metrics used to calculate risk. Higher limits place more constraints on a bank's estimation of credit risk-weighted assets. Higher values for these metrics result in higher expected losses—which, all else being equal, result in higher estimated risk-weighted assets.

credit ratings in their regulations, including bank capital rules.[65] U.S. agency officials stated that the United States was one of few Basel jurisdictions that did not rely on external credit ratings by law or by choice.[66] Thus, U.S. agency officials told us they bore primary responsibility for ensuring a workable standard that met this unique requirement without disadvantaging U.S. banks. Specifically, they sought an option that was equivalent in effect to the approach likely to be implemented by other jurisdictions that could rely on external credit ratings.

Where applicable, the final standard for a credit risk standardized approach offered two options for calculating credit risk. The first option used external credit ratings and directed banks to conduct sufficient due diligence when using such ratings.[67] The second option used alternatives to external credit ratings, known as risk drivers, to accommodate U.S. legal prohibitions.[68]

Our analysis of U.S. agency documents found that U.S. members played an active role in the development of the credit risk standardized approach. We found that the Task Force on Standardized Approaches was the group that primarily developed the reforms to the credit risk

[65]Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. No. 111-203, 124 Stat. 1376, 1887 (codified at 15 U.S.C. § 78o-7 note) requires federal agencies, to the extent applicable, to remove from their regulations references to credit ratings and substitute a standard of creditworthiness.

[66]U.S. agency officials identified one other such jurisdiction.

[67]The Basel Committee's first consultative document did not rely on external credit ratings. The option to use external credit ratings was introduced in a subsequent 2015 consultative document and retained in the final standard. See *Consultative Document, Standards: Revisions to the Standardised Approach for credit risk* (Basel, Switzerland: December 2014); and *Second consultative Document, Standards: Revisions to the Standardised Approach for credit risk* (Basel, Switzerland: December 2015).

[68]The Basel Committee's goal was to improve the standardized approach in part by increasing its risk sensitivity and reducing its reliance on external credit ratings. The latter was in line with commitments made by the Financial Stability Board in 2010 to reduce reliance on external ratings in rules and regulations.

standardized approach. Subject matter experts from all U.S. members participated in the working group that developed the standard.[69]

Our sensitive report provided information on U.S. agencies' positions on reforms to the credit risk standardized approach and actions taken by U.S. members to further their priorities for such reforms during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Market Risk Internal Model and Standardized Approaches

To address certain weaknesses in the Basel framework, U.S. members and the Basel Committee sought to overhaul market risk standards by conducting a fundamental review of the trading book.[70]

The final market risk standard consisted of revisions to the internal model approach that aimed to address risks observed during the global financial crisis and reinforce supervisory approval processes for the use of internal models.[71] It also included a revised standardized approach designed to be more risk-sensitive and designed and calibrated to serve as a credible fallback to the internal model approach. Additionally, the standard established stricter criteria for assigning financial instruments to the trading book. It also included a simplified standardized approach for use by banks that have small or noncomplex trading portfolios.

Our analysis of U.S. agency documents found that U.S. members played an active role in developing the market risk reforms. We found that the Market Risk Group, also referred to as the Trading Book Group, was the

[69]For example, negotiations included development of alternative measures of credit risk (risk drivers) and methodologies that did not rely on the use of external credit ratings, calibration of risk weights to reflect asset risk, and development of comparable options for the treatment of risk for jurisdictions that used external credit ratings and those that did not.

[70]A bank's trading book contains positions that a bank holds for short-term resale or with the intent of benefiting from actual or expected price movements, to lock in arbitrage profits, or to hedge covered positions. A bank's trading book is subject to market risk standards. All other financial instruments are said to be in the bank's banking book and are subject to credit risk standards.

[71]As stated earlier, the Basel Committee concluded that the global financial crisis showed that the framework's capital requirements for trading activities were insufficient to absorb losses. In 2009, the Basel Committee revised the market risk framework but recognized that the revisions did not fully address its shortcomings. As a result, the committee initiated a fundamental review of the trading book that sought to address shortcomings and weaknesses in risk measurement under both internal models and standardized approaches.

group that primarily developed the market risk reforms. The Federal Reserve co-chaired this working group, and representatives from all U.S. members participating in the group's task forces.[72] Federal Reserve officials told us that they provided core technical expertise for developing the standards.

Our sensitive report provided information on U.S. agencies' positions on market risk reforms and actions taken by U.S. members to further their priorities for such reforms during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Operational Risk Internal Model and Standardized Approaches

To achieve their goal of improving comparability, U.S. members sought to eliminate the internal model approach for operational risk. In turn, they also sought to develop a more risk-sensitive standardized approach.[73]

The final Basel III reforms for operational risk capital eliminated the internal model approach. The reforms also replaced three standardized approaches with a single risk-sensitive standardized approach. This new approach to determine operational risk capital requirements was based on a new measure of bank gross income and used the bank's historical operational risk losses.[74]

Our analysis of U.S. agency documents found that U.S. members played an active role in the development of the standardized approach for operational risk. We found that the Working Group on Operational Risk was the group that primarily developed the operational risk reforms.

[72]For example, negotiations included revisions to the model approval process by granting approval at a bank's trading desk level, rather than at the bank-wide level, and enhancing validation tests that a trading desk's model had to pass to be eligible to use internal models.

[73]U.S. regulations require only internationally active banks to comply with minimum capital standards for operational risk, and these banks may only use an internal model approach to do so.

[74]The Basel Committee eliminated the internal model approach to improve comparability of risk-weighted assets. The Committee concluded that the previous set of approaches for operational risk resulted in capital requirements that proved insufficient to cover operational risk losses incurred by some banks during the global financial crisis. The Committee also concluded that the nature of operational risk losses, which include those from events such as misconduct and inadequate systems and controls, highlighted the difficulty associated with using internal models to estimate capital requirements for operational risk. The Committee also sought to enhance the robustness and risk sensitivity of the standardized approach.

Subject matter experts from all U.S. members participated in the working group that developed the reform.[75]

Our sensitive report provided information on U.S. agencies' positions on operational risk reforms and actions taken by U.S. members to further their priorities for such reforms during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Leverage Ratio

In part to level the playing field for U.S. banks, U.S. members prioritized establishing a new leverage ratio buffer for global systemically important banks that was similar to the existing requirement for certain U.S. banks.[76]

The final standard makes the combined leverage ratio standard for these large internationally active banks more stringent by adding a capital buffer on top of the existing minimum leverage ratio. Introduced in 2010, the leverage ratio requirement set a minimum requirement of capital over assets to act as a non-risk-based backstop to the risk-based capital standards and limit excessive leverage.[77] The final standard added a

[75]For example, Federal Reserve officials reviewed and revised the new methodology, led the design of a quantitative impact study template to more effectively test the methodology, and helped calibrate the methodology.

[76]The U.S. supplementary leverage ratio requirement for internationally active banks (or advanced approaches banks) was similar to the initial (2010) Basel III leverage ratio standard. However, unlike the U.S. requirement for global systemically important bank holding companies and their U.S. insured depository institution subsidiaries (called the enhanced supplementary leverage ratio), the initial Basel standard did not include an additional buffer applicable to those banks.

[77]Under the initial (2010) Basel III leverage ratio standard, a bank's tier 1 capital had to be at least 3 percent of its on- and off-balance sheet exposures. Tier 1 capital consists primarily of retained earnings (profits a bank earned but has not paid to shareholders in the form of dividends or other distributions), income, qualifying common stock, with deductions for items such as goodwill and deferred tax assets, and qualifying noncumulative perpetual preferred stock.

capital buffer on top of this ratio for global systemically important banks commensurate with their systemic footprint.[78]

Our analysis of U.S. agency documents found that U.S. members played an active role in the development of the leverage ratio standard. We found that the Leverage Ratio Group and the Coherence and Calibration Task Force were the groups that primarily developed the reforms to the leverage ratio standard. Subject matter experts from all U.S. members participated in the working groups that developed the standard.[79]

Our sensitive report provided information on U.S. agencies' positions on leverage ratio reforms and actions taken by U.S. members to further their priorities for such reforms during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Output Floor

To achieve their goals for improving comparability and promoting a level playing field, U.S. members actively participated in the development of reforms to the Basel framework's output floor. A stronger output floor could help bring the expectations of non-U.S. banks more in line with U.S. requirements. This was particularly important because, in accordance with section 171(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (known as the Collins Amendment), all U.S. banks are subject to the same capital floor. In turn, banks must calculate risk-based

[78]The leverage ratio buffer for these banks must be met with tier 1 capital and is set at 50 percent of the global systemically important bank's risk-weighted, higher loss-absorbency requirements. For example, a bank subject to a 2 percent risk-weighted, higher loss-absorbency requirement would be subject to a 1 percent leverage ratio buffer requirement, and a total leverage ratio requirement of 4 percent (3 percent from the leverage ratio requirement plus 1 percent from the new buffer requirement). The Basel Committee's higher loss-absorbency requirement is a capital buffer that requires global systemically important banks to hold additional capital depending on their systemic footprint. Systemic footprint is measured through indicators of size, interconnectedness, lack of readily available substitutes or financial institution infrastructure for the services they provide, cross-jurisdictional activity, and complexity.

[79]Negotiations focused on the type of reform and the mechanism for calculating the ratio. For example, in the 2016 consultative document, the Basel Committee asked for input on the type of buffer: a flat buffer, which would be a specific percent of the bank's capital on top of the Basel III leverage ratio, or a variable buffer based on systemic risk measures. The Committee ultimately adopted a variable buffer in the final standard.

capital requirements using standardized approaches.[80] This means that U.S. internationally active banks, which use advanced approaches, must comply fully with risk-based capital requirements calculated using standardized approaches.

According to the final Basel III output floor standard, calculations of risk-weighted assets generated by banks' internal models cannot, in aggregate, fall below 72.5 percent of the risk-weighted assets computed by standardized approaches. This additional aggregate risk-based calculation in the Basel framework is based on the newly reformed standardized approaches.

Our analysis of U.S. agency documents found that U.S. members played an active role in the development of the output floor standard. U.S. members described lengthy negotiations, and Basel Secretariat officials stated that output floor negotiations delayed the finalization of the 2017 reforms by a year. Our analysis of U.S. agency documents found that negotiations on the output floor started in earnest in 2015 with the creation of the Coherence and Calibration Task Force. The task force was charged with assessing the interaction, coherence, and calibration of all standards in the Basel framework, including the output floor. All U.S. PDG members participated in the task force and supported reforms aligned with U.S. priorities.[81]

Our sensitive report provided information on U.S. agencies' positions on output floor reforms and actions taken by U.S. members to further their priorities for such reforms during the development of the final Basel III standards. U.S. agencies determined that these statements were

[80]To comply with the Collins Amendment and implementing regulations, all U.S. banks (including advanced approaches banks, which are the U.S. internationally active banks) must calculate their minimum capital ratio requirements using generally applicable requirements (standardized approaches). Accordingly, advanced approach banks must hold sufficient capital to meet the requirements under both calculations (standard and advanced approach), which may constrain the capital advantage to be gained from the use of advanced approaches.

[81]U.S. members were involved in discussions about the need for a floor and the design and calibration of the floor. The March 2016 consultative document on reforms to the credit risk internal model approach stated that the Basel Committee was considering an aggregate output floor with a measure of risk-weighted assets in the range of 60–90 percent of risk-weighted asset calculations under standardized approaches. Ultimately, the final floor was calibrated at 72.5 percent of the risk-weighted assets computed by the standardized approaches.

controlled unclassified information; thus, those statements are omitted in this report.

Agency Comments

We provided a draft of the sensitive and public versions of this report to the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York (Federal Reserve), FDIC, and OCC for review and comment. The Federal Reserve, FDIC, and OCC provided technical comments, which we incorporated as appropriate. In addition, the Basel Committee Secretariat provided technical comments on the public version of this report, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, Chair of the Board of Governors of the Federal Reserve System, Acting Chairman of the Federal Deposit Insurance Corporation, Acting Comptroller of the Currency, and other interested parties. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-8678 or clementsm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Michael E. Clements
Director, Financial Markets and Community Investment

Appendix I: Overview of Selected Components of the Final Basel III Standards and a Proposed Standard

This appendix presents information on selected components of the final frameworks for credit, operational, and market risk in the Basel III standards. It also describes their development, including the role of U.S. members. Specifically, we address the

1. requirements for corporate exposures to qualify as "investment-grade" under the credit risk framework when external credit ratings are not used;[1]
2. calibration of the multipliers and dampener for calculating the minimum operational risk capital requirements under the operational risk framework; and
3. calibration of factors and minimum thresholds for the profit and loss attribution tests under the market risk framework.

We also describe U.S. members' role in developing a proposed standard for operational risk capital requirements for high-fee income banks, which was not included in the final Basel III standards.

This report is a public version of a sensitive report we issued in December 2024.[2] Appendix I of the sensitive report included some statements that the U.S. agencies identified as controlled unclassified information. The statements generally described U.S. members' actions or positions on reforms related to U.S. members' role in the development of the selected final or proposed standards discussed in this appendix. We omitted those statements in this report.

Determination of Risk Weights for Corporate Exposures When External Credit Ratings Are Not Used

Final Basel III standard. Under the final Basel III credit risk framework, banks in jurisdictions that do not or cannot use external credit ratings for regulatory purposes, such as the United States, generally assign a default

[1]An external credit rating is an assessment of the creditworthiness of an obligor or in relation to specific securities or money market instruments. Credit ratings are intended to measure the likelihood of default of an issue or issuer and are intended to reflect credit risk. In the United States, rating agencies develop ratings using publicly available information, market and economic data, and nonpublic information from the issuer.

[2]GAO, *International Banking Standards: U.S. Agencies' Participation in the Development of the Final Basel III Reforms,* GAO-25-107259SU (Washington, D.C.: Dec. 12, 2024).

credit risk weight of 100 percent to corporate exposures (certain loans and other assets of the bank).[3]

However, a lower risk weight of 65 percent can be applied if the exposure qualifies as “investment-grade” by meeting two criteria: (1) the bank determines the corporation has adequate capacity to meet its financial obligations and (2) the corporation, or its parent company, has securities outstanding on a publicly traded exchange.[4]

Purpose of the standard. An effective credit risk framework allows banks to absorb losses when borrowers or other counterparties fail to meet their financial obligations, such as by defaulting on a loan. This is achieved by assigning risk weights to exposures that reflect their perceived level of risk. This risk-sensitive approach requires banks to hold more capital against higher-risk exposures, such as a loan with a greater probability of default.

Development of the standard. In a 2015 consultative document, the Basel Committee proposed a two-pronged test for corporate entities to qualify for the reduced risk weight.[5] The proposal included the same criteria as the final standards, but with a 75-percent risk weight (rather than the 65-percent weight adopted in the final standard) for investment-grade corporate exposures. According to the Basel Committee, these criteria effectively balanced simplicity and risk sensitivity, and promoted comparability across banks and jurisdictions—the goals for the final Basel III standards. To gather external input, the Committee solicited public

[3]For the purposes of calculating capital requirements, the standard defines exposures to corporates to include loans, bonds, receivables, and other debt instruments to incorporated entities, associations, partnerships, proprietorships, trusts, funds, and other entities with similar characteristics, except those which qualify for one of the other exposure classes.

[4]Specifically, according to the final Basel III standards, an investment-grade corporate has adequate capacity to meet its financial commitments in a timely manner and its ability to do so is assessed to be robust against adverse changes in the economic cycle and business conditions. When making this determination, the bank should assess the corporate entity against the Basel investment-grade definition, taking into account the complexity of its business model, performance against industry and peers, and risks posed by the entity’s operating environment.

[5]Bank for International Settlements, Basel Committee on Banking Supervision, *Second consultative Document, Standards: Revisions to the Standardised Approach for credit risk* (Basel, Switzerland: December 2015).

comments, receiving 121 comment letters, 20 of which came from U.S. commenters.[6]

Following the proposal, the Committee found that the 65-percent weight was more comparable to the approach used in other jurisdictions that could rely on external credit ratings, according to Federal Reserve officials.[7]

In 2017, the Group of Central Bank Governors and Heads of Supervision endorsed the final standard for corporate exposures as part of the final Basel III standards.[8]

U.S. member agencies' role. As noted previously, U.S. agency officials told us they played a key role in developing an alternative approach to use of external credit ratings, in part because the United States prohibits the use of external ratings for bank capital regulation.[9] Each U.S. member was represented on the task force responsible for developing the standard.

Our sensitive report provided information on U.S. agencies' positions on the treatment of corporate exposures in the credit risk standardized approach and related actions taken by U.S. members during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

[6]For our analysis, we counted comment letters with multiple authors or international groups as U.S. comment letters if they had at least one U.S.-based author or member.

[7]Throughout this report, unless otherwise noted, we use Federal Reserve to collectively refer to the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York.

[8]The Group of Central Bank Governors and Heads of Supervision, which consists of the heads of supervision and central bank governors from the 28 member jurisdictions, oversaw the Basel Committee's efforts, providing guidance and endorsing the final standards. The U.S. representatives were the Chair of the Board of Governors of the Federal Reserve, President of the Federal Reserve Bank of New York, Chairman of the Federal Deposit Insurance Corporation, and Comptroller of the Currency.

[9]Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376, 1887 (codified at 15 U.S.C. § 78o-7 note) requires federal agencies, to the extent applicable, to remove from their regulations references to credit ratings and substitute a standard of creditworthiness.

Calibration of the Minimum Operational Risk Capital Standard

Final Basel III standard. Under the operational risk framework, banks must use a standardized approach to calculate their minimum capital requirements for operational risk. This refers to the minimum regulatory capital a bank must hold to guard against losses arising from its internal operations or external events. The operational risk capital requirement takes into account the bank's gross income, expenses, and internal operational losses.

The standard uses specific risk measures—multipliers or dampeners—to calculate a bank's minimum operational risk capital requirements, as follows:

- Banks must multiply a monetary proxy of their income and expense data by a marginal coefficient of 12 percent, 15 percent, or 18 percent. The result of this calculation is known as the **business indicator component**. Greater measures of bank income and expenses result in banks using a higher marginal coefficient.
- Banks with a measure of bank income of the equivalent of 1 billion euros or more are required to calculate their average annual losses caused by operational risk events (over a 10-year period) and multiply the monetary value of those losses by 15.[10] This is known as the **loss component**. Banks are to include all operational loss events with a value equivalent to 20,000 euros or more in the loss component.[11]
- Banks must multiply the ratio of the loss component to the business indicator component by a 0.8 exponent as part of the calculation of the **internal loss multiplier**.[12]
- Operational risk capital requirements are calculated by multiplying the business indicator component and the internal loss multiplier. Risk-weighted assets for operational risk are equal to 12.5 times the operational risk capital requirements.

[10]At national discretion, regulators may require banks with a measure of income equivalent to less than 1 billion euros to include internal loss data in calculating the operational risk capital requirement.

[11]At national discretion, jurisdictions can set the threshold at the equivalent of 100,000 euros for banks with a measure of income greater than 1 billion euros (or an equivalent).

[12]At national discretion, regulators can require all banks in their jurisdiction to set the value for the internal loss multiplier equal to 1.

Purpose of the standard. An effective operational risk capital framework allows banks to absorb unexpected losses resulting from inadequate or failed internal processes, people, systems, or external events. For example, a bank may face losses from events such as processing errors, internal and external fraud, legal claims, and business disruptions.

The framework employs specific risk measures to calculate operational risk capital requirements. These measures are intended to adjust the calculation based on the risks associated with certain values. A multiplier is applied to the business indicator component, which increases as the bank's income increases. This reflects Basel Committee analysis that showed that operational risk grows disproportionally with activity levels.

A multiplier is also applied to operational risk losses exceeding the equivalent of 20,000 euros, reflecting the assumption that banks with such losses are more likely to experience them again.

Development of the standard. The final standard, adopted in 2017, followed years of work. This included at least two quantitative impact studies and two consultative documents issued for public comment in 2014 and 2016, according to our review of publicly available Basel Committee documents.[13]

The Committee adopted simplified versions of some of the proposed measures. Specifically, the final business indicator component was simplified by reducing the number of marginal coefficients from five (ranging from 11 percent to 29 percent) to three (from 12 percent to 18 percent).[14] Similarly, the final loss component was simplified by adopting

[13]Bank for International Settlements, Basel Committee on Banking Supervision, *Consultative Document: Standardised Measurement Approach for operational risk* (Basel, Switzerland: March 2016); and *Consultative Document: Operational risk—Revisions to the simpler approaches* (Basel, Switzerland: October 2014).

[14]The five marginal coefficients for calculating the business indicator component in the 2016 proposal were 11, 15, 19, 23, and 29 percent (higher measures of income required multiplying by a larger coefficient). According to the consultative document, the coefficients were determined based a qualitative impact study conducted by the Basel Committee in 2015.

a single multiplier (15) instead of requiring use of one of three multipliers (7, 14, or 19), based on the size of the specific loss event.[15]

The final standard also reduced the overall operational risk capital requirements compared to the 2016 proposal by lowering the maximum marginal coefficient for calculating the business indicator component from 29 percent to 18 percent, according to Federal Reserve officials.

The exponent in the internal loss multiplier was included in the final standard, although it was not part of the 2016 consultative document.

U.S. member agencies' role. As members of the working group developing the standard, all the U.S. members played a role in calibrating the risk measures. They considered the quantitative impact studies and public comments on the consultative documents. In particular, FDIC officials told us they considered the effects of various risk measures on both U.S. and non-U.S. banks based on the impact studies and aimed to develop a strong framework that could be implemented across jurisdictions.

Our sensitive report provided information on U.S. agencies' positions on the calibration of the operational risk standardized approach and related actions taken by U.S. members during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Development of the Profit and Loss Attribution Test Metrics

Final Basel III standard. The final Basel III standard uses two mechanisms—internal models and a standardized approach—to calculate the capital a bank should hold to absorb losses from market risks. For those banks that are subject to the market risk framework, the standard allows banks' qualifying trading desks to use internal models (model their

[15]Specifically, the average total annual loss events with a value ranging from an equivalent of 20,000 euros to 10 million euros would be multiplied by seven; events ranging from more than 10 million euros to 100 million euros would be multiplied by 14; and events of more than 100 million euros would be multiplied by 19.

own risk) rather than the standardized approach to calculate capital requirements for market risk.[16]

To qualify for using internal models, banks must pass the profit and loss attribution test, which measures how well a bank's internal model captures the risks to the bank from its trading book.[17] This test compares the trading desk's simplified profit and losses over the prior 250 trading days with the profit and losses predicted by the internal risk-management model.[18] Trading desks must pass this test quarterly to use internal models.

The profit and loss attribution test uses two metrics to compare a trading desk's simplified and predicted profit and losses:

- The **correlation metric** measures how closely the two calculations move together or diverge.[19] A value of 1.0 indicates a perfectly positive correlation. To pass the metric without being required to hold

[16]In the United States, banks are subject to market risk capital requirements if they have $1 billion or more in trading assets and liabilities, or if trading assets plus trading liabilities account for 10 percent or more of total assets. If accurate, internal models, developed based on a bank's own risk modeling, can be an effective mechanism to calculate a bank's capital requirements. As part of the final Basel III standards, the Basel Committee published a list of assets that must be included in a bank's trading book (and therefore subject to market risk capital requirements) and those that must be included in a bank's banking book (and therefore subject to credit risk capital requirements). According to the Committee, a trading desk is a group of traders or trading accounts that implements a well-defined business strategy operating within a clear risk-management structure.

[17]In addition to the profit and loss attribution test, banks must provide a 1-year "back testing" report, which compares the worst expected loss on a portfolio to actual profit and loss over the prior 12 months. According to the Basel Committee, banking regulators also must explicitly approve a trading desk's use of internal models for determining market risk capital requirements. Approval conditions include maintaining sound risk-management systems and having a sufficient number of skilled staff.

[18]Simplified profit and loss excludes commissions, fees, and other elements unrelated to the value of assets or market changes that might affect a trading desk's profit and losses. The Basel Committee refers to this as a "hypothetical profit and loss calculation," but for clarity, we use "simplified profit and loss." The Committee also uses "risk-theoretical profit and loss" for the profit and loss predicted by the bank's internal risk-management models.

[19]The Basel framework specifies that the correlation metric should be assessed using the Spearman correlation metric.

additional regulatory capital (a capital add-on), a trading desk must score above 0.80.[20]

- The **distribution metric** assesses the probability that the results of the calculations of the simplified and predicted profit and losses come from the same statistical distribution.[21] To pass the metric without a capital add-on, a trading desk must score below 0.09.[22]

The final Basel III standard also included an option for assessing market risk capital requirements of trading desks that fall within a margin between pass and fail levels for the correlation and distribution metrics. This provision aims to mitigate the effects of automatic failure and immediate reversion to a standardized approach in such cases. Specifically, trading desks that do not fail either metric and score within a specific range of the passing score on one or both metrics can use internal models to determine their risk capital requirements.[23] However, to qualify for this option, banks must hold additional capital above the amount determined by the model (the capital add-on).

Purpose of the standard. The profit and loss attribution test is used to assess whether a bank's internal risk-management model accurately captures the risks that drive its trading desk's actual profit and losses. The test uses two metrics—correlation and distribution—to measure the extent to which a bank's model may be missing risks and to set limits on the divergence between a trading desk's actual profits and losses and those predicted by its internal risk-management models.

Development of the standard. Before 2019, the profit and loss attribution test used other metrics to assess the accuracy and reliability of

[20]Trading desks with a correlation metric score below 0.70 fail the metric and are ineligible to use internal models to calculate the desks' market risk capital requirements. Trading desks must score above a 0.80 to avoid a capital add-on. Desks with scores between 0.70 and 0.80 are required to hold additional capital.

[21]Under the final Basel III standards, the distribution metric is assessed using the Kolmogorov-Smirnov metric, which determines the probability that differences in results are due to random chance, known as the "p-value." A p-value of 0.264 or higher is required to pass the metric without a capital add-on.

[22]Trading desks with a distribution metric score above 0.12 fail the metric and are ineligible to use internal models. Trading desks with scores between 0.09 and 0.12 are subject to a capital add-on.

[23]Trading desks scoring between 0.70 and 0.80 on the correlation metric or between 0.10 and 0.12 on the distribution metric would fall within the range of a passing score with a capital add-on.

a bank's internal models.[24] The revisions were partly based on monitoring and industry feedback, which highlighted concerns that the metrics used in the 2016 standards did not fully identify deficiencies in banks' internal models.[25] A 2018 consultative document proposed using correlation and distribution metrics instead, along with thresholds for these metrics.

Furthermore, the 2018 consultative document noted that the addition of an option for trading desks that neither passed nor failed the metrics aimed to reduce potential volatility in capital requirements. This option would limit the automatic shift from internal models to a standardized approach when a trading desk failed one or more metrics.

The final Basel III standards set less stringent thresholds than those proposed in the 2018 consultative document. For example, the passing score for the correlation metric without a capital add-on was lowered from 0.825 to 0.80. The passing score for the distribution metric without a capital add-on was raised from 0.083 to 0.09.

U.S. member agencies' role. Each U.S. member participated in the Market Risk/Trading Book Group that developed the standards, and a Federal Reserve representative co-chaired the working group for several years. According to Federal Reserve officials, they played a key role in revising the profit and loss attribution test in the final Basel III standards.

Our sensitive report provided information on U.S. agencies' positions on market risk reforms and related actions taken by U.S. members during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Treatment of Banks with High Fee Income

Proposed standard. In 2016, the Basel Committee asked for comments on a proposal to modify the methodology for calculating minimum capital

[24]Specifically, the profit and loss attribution test in the 2016 market risk standards was based on two metrics. The first metric was the mean of the difference between the profit and loss predicted by the model and the simplified profit and loss (unexplained profit and loss) divided by the standard deviation of the simplified profit and loss. The second was the variance of the unexplained profit and loss divided by the variance of the simplified profit and loss.

[25]Bank for International Settlements, Basel Committee on Banking Supervision, *Consultative Document: Revisions to the minimum capital requirements for market risk* (Basel, Switzerland: March 2018).

requirements for operational risk for high-fee banks. High-fee banks are generally those that generate more than 50 percent of their measure of income (discussed earlier) from fees, such as fees from wealth management services.[26] Under the final Basel III standards, a bank determines its minimum capital requirement for operational risk by calculating its revenue and expenses, known as the business indicator.[27]

Under the proposed methodology, the business indicator calculation for high-fee banks was to include only a portion of banks' fee revenue and expenses, rather than all fee revenue and expenses (as required for non-high-fee banks). Specifically, high-fee banks would have only included the first 50 percent of their unadjusted fee income and 10 percent of any additional fee income above the 50 percent threshold.[28]

This modified methodology for high fee-banks was not included in the final Basel III standards.

Purpose of the proposed standard. As discussed earlier, an effective operational risk framework allows banks to absorb losses resulting from inadequate or failed internal processes, people, systems, or external events. In a 2014 consultative document, the Basel Committee stated that its goals for the business indicator calculation were to make it easy to calculate, reduce implementation burden, and limit regulatory arbitrage.[29]

According to the Basel Committee's 2016 consultative document, the proposed modification of the business indicator calculation for high-fee banks was intended to address concerns that the calculation would not accurately reflect the operational risk faced by these banks.[30]

[26]For this proposal, the measure of income was calculated using the Basel Committee's business indicator calculation, which is a measure of a bank's income and expenses. The percentage of net fee income was calculated using the unadjusted business indicator.

[27]The business indicator is one of several calculations banks use to determine their minimum operational risk capital requirement. The other components are the loss multiplier and internal loss multiplier, which are historical measures of a bank's operating losses.

[28]To prevent unintended capital reductions, the business indicator for high-fee banks could not be lower than the absolute value of the bank's net fee income.

[29]*Consultative Document: Operational Risk—Revisions to the simpler approaches* (October 2014).

[30]*Consultative Document: Standardised Measurement Approach for operational risk* (March 2016).

Development of the proposed standard. In a 2014 consultative document, the Basel Committee requested input on whether special steps should be taken for high-fee banks and received public comments suggesting such steps should be taken. In response the Committee proposed a modified business indicator methodology for high-fee banks in its subsequent 2016 consultative document. However, the Basel Committee ultimately removed the modified methodology from the final Basel III standards.

U.S. member agencies' role. Each U.S. member participated in the Working Group on Operational Risk, which was responsible for developing the minimum capital requirements for operational risks.

Our sensitive report provided information on U.S. agencies' positions on the treatment of high-fee banks in the operational risk standardized approach and related actions taken by U.S. members during the development of the final Basel III standards. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Appendix II: Final Basel III Standards of the Basel Committee on Banking Supervision

The Basel Committee on Banking Supervision issued final Basel III standards for credit risk, operational risk, leverage ratio, and the output floor in 2017.[1] The Committee issued final Basel III standards for market risk in 2016 and updated them in 2019.[2] See table 2 for a summary of the final Basel III standards.

Table 2: Summary of Final Basel III Standards

Standard	Year issued	Basel reform goals	Description of standard
Credit risk[a] – Standardized approach	2017	Improve the granularity and risk sensitivity of the credit risk standardized approach Reduce reliance on external credit ratings for measuring credit risk	Provided for a more detailed risk-weighting approach, particularly for residential and commercial real estate Required banks to conduct sufficient due diligence when using external ratings and provided a detailed standardized approach for jurisdictions that cannot or do not wish to rely on external credit ratings
Credit risk[a] – Internal ratings-based approach (or internal model approach)[b]	2017	Constrain banks' estimates of risk parameters in part to improve comparability of risk-weighted assets across banks	Removed the option to use one of two available internal model approaches for exposures to financial institutions and large corporates Eliminated the use of an internal model approach for equity exposures Where the internal model approach is retained, applied minimum levels to the probability of default and for other inputs
Operational risk[c] – Standardized approach	2017	Simplify framework and improve comparability of risk-weighted assets across banks Improve risk sensitivity of the standardized approach	Replaced the four previous approaches (which included internal model approaches) with a single standardized approach Combined a refined measure of gross income with a bank's own internal loss history
Leverage ratio	2017	Ensure the ratio acts as an appropriate backstop to the risk-based standards for the largest banks	Introduced a buffer to the leverage ratio that requires global systemically important banks to hold more capital (thus making the combined leverage ratio standard for these banks more stringent) and refined the measurement of the leverage ratio itself
Output floor	2017	Create a more robust, risk-sensitive capital output floor	Limited the amount of capital benefit a bank can obtain from its use of internal models relative to using the standardized approaches by setting an aggregate capital floor based on standardized approach calculations

[1]Bank for International Settlements, Basel Committee on Banking Supervision, *Basel III: Finalising Post-Crisis Reforms* (Basel, Switzerland: December 2017).

[2]Bank for International Settlements, Basel Committee on Banking Supervision, *Minimum Capital Requirements for Market Risk* (Basel, Switzerland: January 2019, revised February 2019).

Market risk[d] – Boundary between banking book and trading book[e]	2019	Improve consistency of implementation and reduce arbitrage opportunities between capital requirements for market risk in a bank's trading book and credit risk in a bank's banking book[f]	Revised the boundary between a bank's banking book and its trading book by adding specifications and enhancements for the assignment of instruments to the trading book and restrictions on moving them to the banking book
Market risk[d] – Standardized approach	2019	Revise the standardized approach for market risk to increase the risk sensitivity Develop a risk-sensitive approach for banks that does not require a modelled treatment for market risk	Developed risk-sensitive measures based on the losses a bank could suffer under a defined stress scenario; added standardized default risk requirements; and added a simple, conservative capital requirement for remaining risks Included a simplified alternative for small or noncomplex banks based on previous Basel standards
Market risk[d] – Internal model approach	2019	Revise the model approval process to ensure that internal models are used only where they estimate risk appropriately Better capture certain types of risks and incorporate liquidity risk	Revised the approval process for the use of the internal model approach Replaced existing risk metrics with new metrics calibrated to a period of significant market stress, revised the treatment of default risk, and prevented banks from modeling illiquid and certain other risks

Source: Basel Committee on Banking Supervision. | GAO-25-107995

[a]Credit risk is the potential for loss resulting from the failure of a borrower or counterparty to perform on an obligation.

[b]The Basel Committee refers to the credit risk approach that allows for the use of bank internal models as the credit risk internal ratings-based approach. For this report, we use internal model approach.

[c]Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events.

[d]Market risk is the potential for loss resulting from movements in market prices, including interest rates, commodity prices, stock prices, and foreign exchange rates. The market risk reforms revised the capital requirement for credit valuation adjustment risk—the potential for loss from the deterioration in the creditworthiness of a bank's counterparty to a derivative transaction. The 2017 standards also included a revised standard for calculating credit valuation adjustment risk, but we do not discuss that standard separately in this report.

[e]A bank's trading book contains positions that a bank holds for short-term resale or with the intent of benefiting from actual or expected price movements, to lock in arbitrage profits, or to hedge covered positions. A bank's trading book is subject to market risk standards. All other financial instruments are said to be in the bank's banking book and are subject to credit risk standards.

[f]A bank may engage in regulatory arbitrage if it is able to move instruments between the banking book and the trading book, so that the lower of the applicable capital requirements (credit risk and market risk, respectively) apply.

Appendix III: Evaluation of U.S. Member Actions During Final Basel III Reform Development

The actions of U.S. members of the Basel Committee on Banking Supervision during the development of the final Basel III reforms generally reflected leading practices in the Office of Management and Budget's Circular A-4.[1] The U.S. members include three banking regulators—the Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC). The fourth U.S. member is the Federal Reserve Bank of New York. We collectively refer to the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York as the Federal Reserve.

Circular A-4 provides guidance for certain U.S. regulatory agencies on developing high-quality and evidence-based regulatory analysis. Neither the Basel Committee nor its U.S. members are required to abide by the elements set out in Circular A-4. However, these elements serve as examples of leading practices (for development of high-quality and evidence-based analysis) that are applicable in this context.[2]

According to the circular, the key elements of a high-quality and evidence-based regulatory analysis are, as applicable,

- a statement of the need for the proposed action,
- an examination of alternative approaches, and
- an evaluation of the benefits and costs.[3]

As shown in table 3, we found that U.S. members' actions to develop the reforms, both in the Basel Committee structure and within their own agencies, generally aligned with the three leading practices.

[1]Office of Management and Budget, *Circular A-4: Regulatory Analysis* (Washington, D.C.: Sept. 17, 2003).

[2]The Basel Committee, an international standard-setting body, is not required to abide by practices set out in Circular A-4. The development of standards at the Basel Committee is not a regulatory action within the scope of the circular by its terms. We did not identify any leading practices for international standard-setting bodies pertaining to the analysis component of standard-setting. The banking regulators are not required to follow Circular A-4. However, we determined that the elements of Circular A-4 serve as examples of leading practices applicable in this context.

[3]During the development of the final Basel III reforms, Circular A-4 included "statement of need for proposed action" as a key element of regulatory analysis. In a November 2023 update to the circular, this element was revised to "identifying and evaluating the need for regulatory action." See Office of Management and Budget, *Circular A-4: Regulatory Analysis* (Washington, D.C.: Nov. 9, 2023).

Table 3: Actions of U.S. Members During Final Basel III Reform Development Aligned with Leading Practices of Office of Management and Budget Circular A-4

Practice	Description	Did U.S. member actions address the practice?
Identify the need for the proposed action	Explanation of the reason for the action or the problem the action is intended to solve.	✓
Examine alternative approaches	Consideration of multiple options for what action to take.	✓
Evaluate the benefits and costs	Consideration of likely outcomes of proposed actions.	✓

Sources: GAO analysis of federal agency documents and Office of Management and Budget Circular A-4. | GAO-25-107995

Notes: Office of Management and Budget, Circular A-4: Regulatory Analysis (Washington, D.C.: Sept. 17, 2003). The U.S. members on the Basel Committee on Banking Supervision were the Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and the Federal Reserve Bank of New York. The Basel Committee on Banking Supervision, an international body, is not required to abide by practices in Circular A-4. We did not identify any leading practices for international standard-setting bodies pertaining to the analysis component of standard-setting. The banking regulators also are not required to follow Circular A-4. However, we determined elements of Circular A-4 could serve as examples of leading practices for development of high-quality and evidence-based analysis and apply in this context.

This report is a public version of a sensitive report we issued in December 2024.[4] Appendix III of the sensitive report provided some additional information on U.S. members' specific actions or positions on reforms related to leading practices for the development of high-quality and evidence-based analysis. U.S. agencies determined that these statements were controlled unclassified information; thus, those statements are omitted in this report.

Statement of the need for proposed action. The Basel Committee and its U.S. members took multiple actions to identify and justify the need for reforms to the Basel capital framework. Specifically, in 2011–2013 the Committee conducted analysis to identify and understand the deficiencies in the framework that required attention. For example, in June 2012 the Task Force on Simplicity and Comparability began a review to simplify the framework and enhance comparability of its outcomes.

This effort led to a 2013 discussion paper, in which the Committee communicated the need for further reforms to the initial Basel III standards to address shortcomings in the Basel framework that became

[4]GAO, *International Banking Standards: U.S. Agencies' Participation in the Development of the Final Basel III Reforms,* GAO-25-107259SU (Washington, D.C.: Dec. 12, 2024).

apparent during the 2007–2009 global financial crisis.[5] The paper identified deficiencies and possible solutions to achieve their goal of improving and balancing the simplicity, comparability, and risk sensitivity of capital standards for internationally active banks. An FDIC official chaired the Task Force on Simplicity and Comparability, and the Federal Reserve helped conduct analysis to identify deficiencies in the Basel framework.

U.S. members agreed that the deficiencies identified warranted reforms to the Basel framework. Based on our analysis of U.S. agency documents, U.S. members had two overarching reform priorities for the final Basel III standards. One priority was to address identified weaknesses primarily by improving the comparability of banks' risk-weighted ratios. The other priority was to bring standards closer to U.S. requirements to promote a more level playing field.

From 2011 to 2019, the Basel Committee issued 13 consultative documents covering all reform areas. Each reform area included the rationale for proposed reforms. For example, the October 2014 consultative document on operational risk stated that existing standardized approaches for measuring operational risk were too simple and did not accurately estimate capital requirements for a wide spectrum of banks.[6]

Examination of alternative approaches. The Basel Committee and its U.S. members identified and considered alternative approaches for reforms through discussion and analysis in Basel Committee working groups, according to our analysis of U.S. member documents. The Committee used an iterative process for developing the standards, refining reform considerations through multiple revisions. Members took into consideration each jurisdiction's views, external comments from industry and stakeholders, and quantitative impact studies of potential effects.

This process allowed for the identification and consideration of alternative approaches for reforms. Our analysis of agency documents found that

[5]Bank for International Settlements, Basel Committee on Banking Supervision, *Discussion paper: The regulatory framework: balancing risk sensitivity, simplicity, and comparability* (Basel, Switzerland: July 2013).

[6]Bank for International Settlements, Basel Committee on Banking Supervision, *Consultative Document: Operational risk - Revisions to the simpler approaches* (Basel, Switzerland: October 2014).

working group members considered various alternatives, including for calibrating indicators, applying standards, and estimating risk. They presented these to higher-level groups like the Policy Development Group.[7]

The Basel Committee released consultative documents for public comment, outlining alternatives for various components of reform areas like risk-weighting approaches and definitions. For example, the May 2012 consultative document on market risk examined two alternatives for defining the boundary between the trading book and banking book that aimed to address existing weaknesses.[8]

Evaluation of the benefits and costs. The Basel Committee and its U.S. members evaluated benefits and costs (or pros and cons) of alternatives under consideration through quantitative impact studies, public comments, and discussion and analysis within Basel Committee working groups.

Quantitative impact studies helped U.S. members determine whether reform proposals were helpful in achieving the U.S. members' priorities (benefits).[9] For example, our analysis of agency documents shows that in October 2016, Basel Committee members (including OCC) reviewed quantitative impact study results on the effect that different output floor levels would have on aggregate capital requirements.[10] This informed U.S. members' positions on the appropriate level for the output floor. U.S. members also used studies to determine if reform proposals resulted in a capital burden for banks (costs) that they deemed as too high.

[7]Working groups (and task forces) developed the technical aspects of the final Basel III standards. They did so under the guidance of the Policy Development Group, which delegated and managed the development of the standards and reported to the Parent Basel Committee.

[8]A bank's trading book contains positions that a bank holds for short-term resale or with the intent of benefiting from actual or expected price movements, to lock in arbitrage profits, or to hedge covered positions. A bank's trading book is subject to market risk standards. All other financial instruments are said to be in the bank's banking book and are subject to credit risk standards.

[9]The Basel Committee's quantitative impact studies assessed the effects of proposed approaches across jurisdictions.

[10]The output floor limited the amount of capital benefit a bank can obtain from its use of internal models relative to standardized approaches by setting an aggregate capital floor based on standardized approach calculations.

Public comments also highlighted potential costs or challenges associated with proposed reforms. For example, industry commenters identified that the sensitivities-based approach was a less costly and burdensome alternative to the proposed cash-flow method in the standardized approach for market risk. Federal Reserve officials stated they took these comments into consideration to help identify an appropriate approach for the standard.[11]

[11]Comments from industry stakeholders stated that the cash-flow method would not be feasible to implement because some banks lacked the necessary data storage and systems. Bank for International Settlements, Basel Committee on Banking Supervision, *Consultative Document: Fundamental review of the trading book: outstanding issues* (Basel, Switzerland: December 2014).

Appendix IV: GAO Contact and Staff Acknowledgments

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Staff Acknowledgements

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