Principles for Climate-Related Financial Risk Management for Large Banks

Introduction

The Office of the Comptroller of the Currency (OCC) has identified the effects of climate change and the transition to a low carbon economy as presenting emerging risks to banks[1] and the financial system.[2] Banks are likely to be affected by both the physical risks and transition risks associated with climate change (referred to in these draft principles as climate-related financial risks). Physical risks refer to the harm to people and property arising from acute, climate-related events, such as hurricanes, wildfires, floods, and heatwaves, and chronic shifts in climate, including higher average temperatures, changes in precipitation patterns, sea level rise, and ocean acidification. Transition risks refer to stresses to certain banks or sectors arising from the shifts in policy, consumer and business sentiment, or technologies associated with the changes necessary to limit climate change.

Weaknesses in how banks identify, measure, monitor, and control the potential physical and transition risks associated with a changing climate could adversely affect a bank's safety and soundness, as well as the overall financial system. Adverse effects could include potentially disproportionate impact on the financially vulnerable, including low- to moderate-income (LMI) and other disadvantaged households and communities.[3] Many banks are considering these risks and would benefit from additional guidance as they develop capabilities, deploy resources, and make necessary investments to address climate-related financial risks.

These draft principles provide a high-level framework for the safe and sound management of exposures to climate-related financial risks, consistent with the existing risk management framework described in existing OCC rules and guidance. The principles are intended to support efforts by banks to focus on key aspects of climate risk management. The principles will help bank management make progress toward answering key questions on exposures and incorporating climate-related financial risks into banks' risk management frameworks.

Although all banks, regardless of size, may have material exposures to climate-related financial risks, these draft principles are targeted at the largest banks, those with over $100 billion in total

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[1] In this issuance, the term "bank" refers collectively to national banks, Federal savings associations, and Federal branches or agencies of foreign banking organizations.

[2] See e.g. Semiannual Risk Perspective at pp. 2-4 (Fall 2021), available at https://www.occ.treas.gov/publications-and-resources/publications/semiannual-risk-perspective/files/pub-semiannual-risk-perspective-fall-2021.pdf. For additional background, see generally *Report on Climate-Related Financial Risk*, Financial Stability Oversight Council (Oct. 21, 2021) (FSOC Climate Report).

[3] For further information, see Staff Reports, Federal Reserve Bank of New York, *Understanding the Linkages between Climate Change and Inequality in the United States*, No. 991 (November 2021), *available at* https://www.newyorkfed.org/research/staff_reports/sr991.html.

consolidated assets. The OCC is inviting public feedback on the principles for 60 days, until February 14, 2022. The OCC plans to elaborate on these principles in subsequent guidance that would distinguish roles and responsibilities of boards of directors (boards) and management, incorporate the feedback received on the principles, and consider lessons learned and best practices from the industry and other jurisdictions. In keeping with the OCC's risk-based approach to supervision, the OCC intends to appropriately tailor any resulting supervisory expectations to reflect differences in banks' circumstances such as complexity of operations and business models.

General Principles

Governance. An effective risk governance framework is essential to a bank's safe and sound operation. A bank's board and management should demonstrate an appropriate understanding of climate-related financial risk exposures and their impact on risk appetite to facilitate oversight. Sound governance includes reviewing information necessary to oversee the bank, allocating appropriate resources, assigning climate-related financial risk responsibilities throughout the organization (i.e., committees, reporting lines, and roles), and clearly communicating to staff regarding climate-related impacts to the bank's risk profile. Responsibility and accountability may be integrated within existing organizational structures or by establishing new structures for climate-related financial risks. Where dedicated units are established, the board and management should clearly define these units' responsibilities and interaction with existing governance structures.

The board should have adequate understanding and knowledge to assess the potential impact of climate-related risks on the bank and to address and oversee these risks within the bank's strategy and risk appetite, including an understanding of the potential ways in which these risks could evolve over various time horizons and scenarios. Relevant time horizons may include those that extend beyond the bank's typical strategic planning horizon. The board should actively oversee the bank's risk-taking activities and hold management accountable for adhering to the risk governance framework. Management is responsible for executing the bank's overall strategic plan. This responsibility includes effectively managing all risks, including climate-related financial risks, and their effects on the bank's financial condition. Management should also hold staff accountable for controlling risks within established lines of authority and responsibility. Additionally, management is responsible for regularly reporting to the board on the level and nature of risks to the bank, including climate-related financial risks.

Policies, Procedures, and Limits. Management should incorporate climate-related risks into policies, procedures, and limits to provide detailed guidance on the bank's approach to these risks in line with the strategy and risk appetite set by the board. Policies, procedures, and limits should be modified when necessary to reflect the distinctive characteristics of climate-related risks and changes to the bank's activities.

Strategic Planning. The board and management should consider material climate-related financial risk exposures when setting the bank's overall business strategy, risk appetite, and financial, capital, and operational plans. As part of forward-looking strategic planning, the board and management should address the potential impact of climate-related financial risk exposures on the bank's financial condition, operations (including geographic locations), and business

objectives over various time horizons. The board and management should also consider climate-related financial risk impacts on stakeholders' expectations, the bank's reputation, and LMI and other disadvantaged households and communities, including physical harm or access to bank products and services. The OCC recognizes that the incorporation of material climate-related financial risks into various planning processes is iterative as measurement methodologies, models, and data for analyzing these risks continue to evolve and mature over time.

Any climate-related strategies, including any relevant corporate social responsibility objectives, should align with and support the bank's broader strategy, risk appetite, and risk management framework. In addition, where banks engage in public communication of their climate-related strategies, boards and management should ensure that any public statements about their banks' climate-related strategies and commitments are consistent with their internal strategies and risk appetite statements.

Risk Management. Climate-related financial risks typically impact banks through a range of traditional risk types. Management should oversee the development and implementation of processes to identify, measure, monitor, and control climate-related financial risk exposures within the bank's existing risk management framework. A bank should employ a comprehensive process to identify emerging and material risks stemming from the bank's business activities and associated exposures. The risk identification process should include input from stakeholders across the organization with relevant expertise (e.g., business units, independent risk management, and legal). Risk identification includes assessment of climate-related financial risks across a range of plausible scenarios and under various time horizons.

As part of sound risk management, banks should develop processes to measure and monitor material climate-related financial risks and to inform management about the materiality of those risks. Material climate-related financial risk exposures should be clearly defined, aligned with the bank's risk appetite, and supported by appropriate metrics (e.g., risk limits and key risk indicators) and escalation processes. Boards and management should also incorporate climate-related risks into their internal control frameworks, including internal audit.

Tools and approaches for measuring and monitoring exposure to climate-related risks include, among others, exposure analysis, heat maps, climate risk dashboards, and scenario analysis. These tools can be leveraged to assess a bank's exposure to both physical and transition risks in both the shorter and longer term. Outputs should inform the risk identification process and the short- and long-term financial risks to a bank's business model from climate change.

Data, Risk Measurement, and Reporting. Sound climate risk management depends on the availability of relevant, accurate, and timely data. Management should incorporate climate-related financial risk information into the bank's internal reporting, monitoring, and escalation processes to facilitate timely and sound decision-making across the bank. Effective risk data aggregation and reporting capabilities allow management to capture and report material and emerging climate-related financial risk exposures, segmented or stratified by physical and transition risks, based upon the complexity and types of exposures. Data, risk measurement, modeling methodologies, and reporting continue to evolve at a rapid pace; management should monitor these developments and incorporate them into their climate risk management as warranted.

Scenario Analysis. Climate-related scenario analysis is emerging as an important approach for identifying, measuring, and managing climate-related risks. For the purposes of this guidance, climate-related scenario analysis refers to exercises used to conduct a forward-looking assessment of the potential impact on a bank of changes in the economy, financial system, or the distribution of physical hazards resulting from climate-related risks. These exercises differ from traditional stress testing exercises that typically assess the potential impacts of transitory shocks to near-term economic and financial conditions. An effective climate-related scenario analysis framework provides a comprehensive and forward-looking perspective that banks can apply alongside existing risk management practices to evaluate the resiliency of a bank's strategy and risk management to the structural changes arising from climate-related risks.

Management should develop and implement climate-related scenario analysis frameworks in a manner commensurate to the bank's size, complexity, business activity, and risk profile. These frameworks should include clearly defined objectives that reflect the bank's overall climate risk management strategies. These objectives could include, for example, exploring the impacts of climate-related risks on the bank's strategy and business model, identifying and measuring vulnerability to relevant climate-related risk factors including physical and transition risks, and estimating climate-related exposures and potential losses across a range of plausible scenarios. In the near term, a climate-related scenario analysis framework can also assist the bank in identifying data and methodological limitations and uncertainty in climate risk management and informing the adequacy of its climate risk management framework.

Climate-related scenario analyses should be subject to oversight, validation, and quality control standards that would be commensurate to their risk. Climate-related scenario analysis results should be clearly and regularly communicated to all relevant individuals within the bank, including an appropriate level of information necessary to effectively convey the assumptions, limitations, and uncertainty of results.

Management of Risk Areas

A risk assessment process is part of a sound risk governance framework, and it allows boards and management to identify emerging risks and to develop and implement appropriate strategies to mitigate those risks. Boards and management should consider and incorporate climate-related financial risks when identifying and mitigating all types of risk. These risk assessment principles describe how climate-related financial risks can be addressed in various risk categories. The OCC will elaborate on these risk assessment principles in subsequent guidance.

Credit Risk. The board and management should consider climate-related financial risks as part of the underwriting and ongoing monitoring of portfolios. Effective credit risk management practices could include monitoring climate-related credit risks through sectoral, geographic, and single-name concentration analyses, including credit risk concentrations stemming from physical and transition risks. As part of concentration risk analysis, management should assess potential changes in correlations across exposures or asset classes. The board and management should determine credit risk appetite and lending limits related to these risks.

Liquidity Risk. Consistent with sound oversight and liquidity risk management, the board and management should assess whether climate-related financial risks could affect liquidity buffers and, if so, incorporate those risks into their liquidity risk management and liquidity buffers.

Other Financial Risk. Management should monitor interest rate risk and other model inputs for greater volatility or less predictability due to climate-related financial risks. Where appropriate, management should include corresponding measures of conservatism in their risk measurements and controls. The board and management should monitor how climate-related financial risks affect the bank's exposure to risk related to changing prices. While market participants are still researching how to measure climate price risk, the board and management should use the best measurement methodologies reasonably available to them and refine them over time.

Operational Risk. The board and management should consider how climate-related financial risk exposures may adversely impact a bank's operations, control environment, and operational resilience. Sound operational risk management includes incorporating an assessment across all business lines and operations, including third-party operations, and considering climate-related impacts on business continuity and the evolving legal and regulatory landscape.

Legal/Compliance Risk. The board and management should consider how climate-related financial risks and risk mitigation measures affect the legal and regulatory landscape in which the bank operates. This consideration includes possible changes to legal requirements for, or underwriting considerations related to, flood or disaster-related insurance. It also includes possible fair lending concerns if the bank's risk mitigation measures disproportionately affect communities or households on a prohibited basis such as race or ethnicity.

Other Nonfinancial Risk. Consistent with sound oversight, the board and management should monitor how the execution of strategic decisions and the operating environment affect the bank's financial condition and operational resilience as discussed in the strategic planning section. The board and management should also consider the extent to which the bank's activities may increase the risk of negative financial impact from reputational damage, liability, or litigation, and implement adequate measures to account for these risks where material.

Request for Feedback

The OCC welcomes feedback on all aspects of these draft principles, including on the following questions. Among other uses, the OCC would consider responses in connection with developing any future guidance on climate-related financial risks. Refer to OCC Bulletin 2021-62 for instructions on submitting feedback.

Applicability

1. Are there additional categories of banks (i.e., based on asset size, location, business model) to which these principles should apply?

Tailoring

2. How could future guidance assist a bank in developing its climate-related financial risk management practices commensurate to its size, complexity, risk profile, and scope of operations?

General

3. What challenges do banks face in incorporating these principles into their risk management systems? How should the OCC further engage with banks to understand those challenges?

Current Risk Management Practices

4. What specific tools or strategies have banks used to successfully incorporate climate-related financial risks into their risk management frameworks?

5. How do banks determine when climate-related financial risks are material and warrant greater than routine attention by the board and management?

6. What time horizon do banks consider relevant when identifying and assessing the materiality of climate-related financial risks?

7. What, if any, specific products, practices, and strategies–for example, insurance or derivatives contracts or other capital market instruments–do banks use to hedge, transfer, or mitigate climate-related financial risks?

8. What, if any, climate-related financial products or services–for example, "green bonds," derivatives, dedicated investment funds, or other instruments that take climate-related considerations into account–do banks offer to clients and customers?[4] What risks, if any, do these products or services pose?

9. How do banks currently consider the impacts of climate-related financial risk mitigation strategies and financial products on households and communities, specifically LMI and other disadvantaged communities?

Data, Disclosures, and Reporting

10. What, if any, specific climate-related data, metrics, tools, and models from borrowers and other counterparties do banks need to identify, measure, monitor, and control their own climate-related financial risks? How do banks currently obtain this information? What gaps and other concerns are there with respect to these data, metrics, tools, or models?

11. How could existing regulatory reporting requirements be augmented to better capture banks' exposure to climate-related financial risks?

[4] "Green bonds" refer to fixed-income securities, the proceeds of which are earmarked for environmentally beneficial investment.

Scenario Analysis

12. Scenario analysis is an important component of climate risk management that requires assumptions about plausible future states of the world. How do banks use climate scenario models, analysis, or tools and what challenges do they face?

13. What factors are most salient for the OCC to consider when designing and executing scenario analysis exercises?