CLIMATE-RELATED FINANCIAL RISKS

PART ONE: Developments, Trends & Direction of Travel

Point of View from Bill Coen, Vice Chair, and Dan McPheeters, Senior Manager

BACKGROUND

Environmental, Social, and Governance (ESG) considerations have gained considerable traction in the delivery and oversight of financial services and the related investment in and risk management of such services and products.

Large asset managers like BlackRock and emerging rating agency frameworks have contributed to ESG's evolution into an increasingly rigorous approach to identifying and investing in firms whose benefits transcend traditional corporate success measures. Institutions and regulators increasingly recognize that climate change and social instability present not only systemic risks to the global economy but once-in-a-generation opportunities for investment, innovation, and entrepreneurship.

Taken together, this increased focus on ESG-related concepts has prompted firms to begin defining for stakeholders the specific risks and opportunities arising in their businesses.

While each element of the ESG framework deserves attention, **this note will focus on a key Environmental metric – climate risk**. Specifically, we will:

- **Highlight the emerging global alignment around trends in the disclosure of climate risk** and considerations related to firms' development of risk management and disclosure strategies.
- **Review regulatory and supervisory practices** while acknowledging that this area continues to quickly evolve.
- **Cover evolving trends in how banks are incorporating climate considerations into risk management practices**. Disclosures around ESG activities, and in particular impacts related to climate risk, are expected to be critical factors in investing, reporting, and lending decisions in the coming years.

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OVERVIEW

Climate risk is a dynamic issue and plays an important role in how the global economy is applying ESG principles to real-world circumstances. Awareness of the financial impacts of climate change has gained traction in recent years.

Global institutions, both public and private, have become increasingly involved in this issue, including the United Nations, under the auspices of which the annual Climate Change Conference (i.e., COP26) is convened; the Task Force on Climate-related Financial Disclosures (TCFD);[1] the Network of Central Banks and Supervisors for Greening the Financial System (NGFS); and the Basel Committee on Banking Supervision's (BCBS) Task Force on Climate-related Financial Risks.

US authorities for their part are also active in this space. The Federal Reserve and the Department of Financial Services (DFS) of the State of New York have joined the international NGFS, which shares best practices and contributes to the development of environment and climate risk management in the financial sector. Moreover, earlier this year, the Office of the Comptroller of the Currency (OCC) signaled its views, illustrating the wide range of political sensitivities around the climate risk issue:

- January 2021: In his final action as Comptroller of the Currency, on 14 January 2021 Brian Brooks finalized the OCC's "Fair Access to Financial Capital" rule, which is aimed at preventing large banks (i.e., those with assets of more than $100 billion) from denying loan applications and refusing to provide services to certain industries and entire categories of customers without conducting "individual risk assessments." For example, a large bank would need to justify its denial of credit to, say, energy firms in the fossil-fuels market "based on consideration of quantitative, impartial, risk-based standards established by the bank." Subsequently, on 28 January, the agency announced that it was pausing publication of the rule to allow the next confirmed Comptroller of the Currency to review the final rule and the approximately 35,000 public comments the OCC received, as part of an orderly transition.[2]

- March 31, 2021: At a meeting of the Financial Stability Oversight Council (FSOC), then-Acting Comptroller Blake Paulson stated that OCC climate risk activities are being overseen by the agency's National Risk Committee as part of its monitoring of systemic and supervisory risks, and noted the OCC's participation in BCBS's Task Force on Climate-related Financial Risks and its cataloguing of ongoing member initiatives for sharing.[3]

In addition to being a critical element of the Environmental dimension of ESG, climate risk also has significant implications for the Governance dimension. Institutions must integrate climate risk considerations into their overall risk management framework. Therefore, their boards will need to fully understand the wide range of issues and how they pertain to the institution's specific activities in order to set strategy and oversee execution by management.

Boards will increasingly face detailed questions from supervisors and investors probing specific risks within business units and the extent to which the firm is managing them through established policies and risk management principles. How the board and the firm respond to these questions will play a significant role in determining the freedom of movement enjoyed by management to execute on its strategies.

[1] FINAL-2017-TCFD-Report-11052018.pdf (bbhub.io). [2] OCC Puts Hold on Fair Access Rule | OCC (treas.gov). For the text of the final rule, see Fair Access to Financial Services Final Rule, January 13, 2021 (treas.gov). [3] Acting Comptroller of the Currency Statement Regarding Climate Risk at the Financial Stability Oversight Council | OCC (treas.gov).

DEVELOPMENTS, TRENDS & DIRECTION OF TRAVEL

Observable trends are emerging in the international effort to increase transparency, mitigate risk, facilitate the transition to a low-carbon economy, and exploit related profitable business opportunities.

Central bankers and banking regulators typically view climate-related financial risks along three dimensions: Disclosure, Supervision and Regulation, and Risk Management.

DISCLOSURE

The disclosure discussion is punctuated by considerations related to data availability and quality. Regulators and other stakeholders seek a common and thorough data disclosure framework that creates transparency for market participants and allows comparison across issuers by investors. Bank shareholders and counterparties are keenly interested in appropriate disclosure as evidenced by BlackRock's strong stance in support of activist shareholder activity on ESG measures.[4]

A BRIEF REVIEW OF DISCLOSURE FRAMEWORK PROGRESS

Perhaps the most notable development related to disclosure is the significant and increasing support of the work conducted by the TCFD, which is comprised of more than 1,000 private businesses. It leverages concepts from the Climate Disclosure Standards Board,[5] providing one example of an alignment of a heretofore diffuse approach among a number of organizations – a trend we expect to continue.

The TCFD recommends, for instance, that firms include examples of potential events arising under different disclosure categories and how those events might create an impact. While not exhaustive, it provides a useful resource for businesses seeking to organize their analysis, disclosure, and strategy.

The largest US and global banks are among the supporters of TCFD. Some large banks – such as Goldman Sachs and US Bank – that originally aligned to other methodologies, have incorporated TCFD principles in their disclosures due to shareholder and other stakeholder feedback.

PHYSICAL RISKS:

Disruptions related to physical disasters that likely, but may not always, result from climate change. Physical risks fall into these categories:

- Acute: Event-driven, including increased severity of regular disasters such as storms and
- Chronic: Longer-term patterns in climate that might cause sea levels to rise or chronic heat waves.

TRANSITION RISKS:

Climate change manifesting in credit and market risk, as physical disasters and changed migration and economic trends alter the long-term outlook for certain businesses, clients, and collateral. Transition risks fall into these categories:

- Policy and Legal
- Technology
- Market
- Reputational

[4] Larry Fink CEO Letter | BlackRock. [5]Homepage | Climate Disclosure Standards Board (cdsb.net).

EVOLVING FINANCIAL REPORTING & DISCLOSURES

While many of the largest US banks have explicitly supported TCFD, methods of sharing information have varied, likely due to the relative maturity of different datasets and strategies. Approaches have included:

- **US Securities and Exchange Commission (SEC) disclosures**, which tend to focus on:
  - Discrete risks to buildings and systems from severe weather (i.e., physical risk); or
  - Transition issues related to the de-carboning of the economy and the potential for credit and market disruptions (i.e., transition risk);
- **Annual Reports to shareholders**, which can be incorporated by reference into SEC disclosures and weave ESG goals into an institution's business strategies; and
- **Independent ESG plans**, in which an institution will lay out its long-term ESG strategy in greater detail and address both risk mitigation and opportunistic strategies, along with defining goals in terms of stakeholder impact.

Financial reporting and disclosure is a quickly evolving space, particularly in the US. For example, in his March 2021 confirmation hearing, the then SEC Chair-elect Gary Gensler came out strongly in favor of enhancing disclosure of climate-related risks.[6]

The TCFD is far from the only approach. Some examples of alternative approaches include:

- **The Sustainability Accounting Standards Board (SASB) framework**[7], which was initially adopted by Goldman Sachs. Goldman Sachs continues to leverage SASB while also supporting TCFD.
- **The Carbon Disclosure Project (CDP)**. US Bank initially reported based on CDP disclosure. The bank has since adapted its framework to account for TCFD, though it continues its CDP reporting.[8]

LOOKING AHEAD: DISCLOSURES 2.0

As regulators make further progress on appropriate risk disclosures, the final consensus is likely to evolve from the current format. For instance, the International Financial Reporting Standards (IFRS) Foundation acknowledged in its September 2020 consultative paper the work conducted by the TCFD and noted that TCFD was a private-sector body not set up on a permanent basis.[9] This framing invites the formation of a more permanent, "official" group to build on what the TCFD accomplished.

There will be no shortage of participants in creating the next disclosure framework. Bodies from around the world are helping to share perspectives that may ultimately influence regulators' adaptations of global climate risk-related disclosure standards that take account of work conducted by the following:

- SASB
- TCFD
- FSB
- International Integrated Reporting Council
- World Economic Forum
- UN Global Reporting Initiative

We believe the establishment of a proposed International Sustainability Standards Board (ISSB), organized under the auspices of the IFRS Foundation, will be an indicator of where supervisors and regulators may align across jurisdictions. Key next steps include publishing a proposed constitutional amendment to create the ISSB, with the matter expected to be settled before the UN's COP26 in November 2021.

[6]Gensler Resp to QFRs 3-2-21.pdf (senate.gov), wherein Chair-elect Gensler endorsed collaboration with IOSCO and FSB. [7]SASB & Other ESG Frameworks - SASB [8]213005 2020 US Bank ESG Report 8.5x11. [9]Consultation Paper on Sustainability Reporting (ifrs.org).

SUPERVISION & REGULATION

The supervision and regulation dimension considers how official sector oversight bodies incorporate climate risk considerations in the evaluation of an institution's safety and soundness. These oversight bodies will be focused on how effectively the board of a financial institution establishes a strategy to address climate risk as well as the efficacy of an institution's ability to identify, measure, manage, and mitigate climate risks, particularly spillover and systemic risks. This may also be where regulators and institutions have an opportunity for significant dialogue and information sharing – for instance, in structuring and conducting climate-related stress tests.

SUPERVISION: ADDRESSING DATA AVAILABILITY & QUALITY

There are already several examples of how regulators and supervisors are approaching climate risk. In Japan, the Financial Services Agency has added climate risk to its supervisory agenda in support of the government's pledge "to reduce greenhouse gas emissions to net-zero by 2050."[10]

In the UK, the Bank of England (BOE)[11] plans to assess the impact of climate-related risk as part of its 2021 Biennial Exploratory Scenario. The approach seeks to understand the impact on a bank's balance sheet of certain climate scenarios and create a baseline of potential exposure. Additionally, the BOE will be looking for instances where responses among institutions diverge, such as expectations of insurance availability or coverage.

The BOE Prudential Regulatory Authority (PRA) also published a Supervisory Statement laying out its expectations for how covered institutions are expected to manage the risks arising from climate change, particularly as information becomes more widely available.[12] Of note, the statement sets out the PRA's distinct concerns related to the impact of climate change on the financial system:

- Far-reaching breadth and magnitude of the impact;
- Uncertain time horizon in which the impacts will manifest;
- Foreseeable nature of the disruptions occurring; and
- Dependency on short-term actions to affect disruption severity

The BCBS has also been active, with its Task Force on Climate-related Financial Risks holding a workshop in October 2020.[13] Takeaways from that workshop include:

- Acknowledged bank progress integrating concepts into risk and governance, but data availability and quality gaps remain significant.
- Scenario analysis is helpful, but exposes difficulty of estimating impact of severe, long-term scenarios and multitude of underlying assumptions that need to be considered.
- Transition and Physical risks may be the most mature in terms of analytical integrity – this aligns with their presence in SEC disclosures.
- Additional calls for international alignment on data structure and scenario assumptions – opportunity to clarify disclosures, but also risk of creating large correlations.

[10]Japan finance watchdog to oversee banks' climate change policies - Nikkei Asia; see also www.fsa.go.jp/common/conference/danwa/20210326.pdf. [11]Climate change | Bank of England. [12]SS319 (bankofengland.co.uk). [13]High-level summary: BCBS TFCR industry workshop on climate-related financial risks (bis.org).

REGULATORY OVERSIGHT: LIKELY AREAS OF EMPHASIS

A hotly debated topic is the extent to which regulators will adopt regulatory capital minimum requirements to address the externalities of financing activities that contribute to climate change.

We do not believe that adoption of a global regulatory minimum requirement is imminent but is certainly part of the BCBS workplan, which addressed the issue as part of its "Horizon scanning and mitigation of risks" theme.[14] Additionally, there has been a call from parties in the US for the Fed to adopt capital requirements that would advance the goal of "decarbonizing" the economy.[15] Lastly, we are of the view that securities regulators like the SEC will begin to enhance disclosure requirements, especially as considerations like materiality become better understood.[16]

While capital adequacy regulation may not be imminent, we expect already heightened supervisory attention to only increase. The TCFD emphasis on scenario planning offers a way for regulators to observe the effects of specific climate pathways on bank balance sheets and to comment on trends.[17] Supervisory inquiries are focusing on the following:

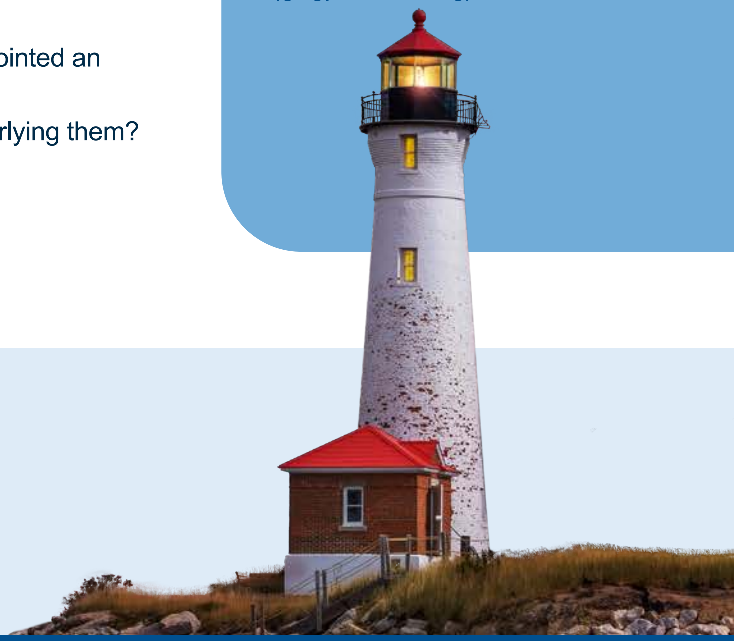
- Has the board of directors discussed climate risk or assigned a committee with oversight responsibility of the issue?
- Does the bank have a climate risk strategy and how does it reflect climate, business risk?
- How aligned are the firm's various business units' understanding of the strategy and underlying analysis/KPIs used to develop it?
- Has the institution conducted specific analysis related to asset-pricing, credit and business systems exposure, and loan loss provisioning?
- Does the firm have the necessary expertise? For example, has it appointed an executive in charge of climate?
- How rigorous are the firm's scenario plans and the assumptions underlying them?

FOCUS

Scope 1 emissions are those occurring from sources owned or controlled by the company.

Scope 2 emissions are created in the course of generating electricity to be consumed by the company.

Scope 3 emissions are indirectly created by the company, typically as a result of its supply chain. The three-scope approach to measuring and reporting GHG emissions was developed by the Greenhouse Gas Protocol, a partnership between the World Resources Institute and the World Business Council for Sustainable Development.
ghg-protocol-revised.pdf *(ghgprotocol.org)*



[14]Basel Committee work programme and strategic priorities for 2021/22 (bis.org). [15]E.g., Addressing Climate-Related Financial Risk Through Bank Capital Requirements - Center for American Progress. [16]The SEC recently solicited public input on its current climate change disclosure rules. SEC.gov | Public Input Welcomed on Climate Change Disclosures. [17]Such as the insurance availability and coverage issue noted above.

RISK MANAGEMENT

The risk management dimension is concerned with developing the tools and frameworks for responding to institutional or system-wide needs, and for individual institutions to execute on its strategy in a safe and sound manner. The BCBS work program presents one approach to moving from supervision to risk management.

EMERGING TRENDS ACROSS TOOLS & FRAMEWORKS

Emerging trends in the risk management space include:

- **Methodologies:** TCFD has strong support, including by many of the largest banks. Even some that do not explicitly support have aligned to the disclosure recommendations.
- **Metrics (e.g., for risk or for exposure):** Emissions and carbon footprint measures that are more advanced or informative than current financial or business impact measures.
- **Definitions:** It is notable that two recent BCBS papers align definitions on shared terms.[18]
- **Increased appreciation** of the absence of clarity on a global “taxonomy”. The EU has adopted a taxonomy though it remains to be seen whether this will gain global traction, especially in light of its level of prescriptiveness.
- **SEC disclosures** by some large banks hint at emerging refinement in defining and analyzing both physical and transition risks.

ALIGNING RISK MANAGEMENT WITH DISCLOSURE

The TCFD recommendations are helpful guides to organizing a risk management discussion. The recommendation is grouped into four thematic areas, one of which concerns the establishment of metrics and targets for the disclosure of material climate-related risks and opportunities.

Disclosures recommended under this pillar are:

- Metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.[19]
- The targets used by the organization to manage climate-related risks and opportunities and performance against targets.

In supplemental guidance, the TCFD elaborates on sector-specific recommendations across all four of its recommendations (i.e., Governance, Strategy, and Risk Management, in addition to Metrics and Targets).[20] For banks, it recommends focusing on:

- The climate-related risks and opportunities the organization has identified over the short, medium, and long term;
- The organization’s processes for identifying and assessing climate-related risks; and
- Metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

One should not be left with the impression that the official sector has been the sole driver of change in this area. To the contrary and to their credit, financial institutions themselves have been quite active as well. For one, many banks were participants in the TCFD work. Additionally, many large banks are accompanying their ESG strategies and public goals with the appointment of executives to oversee climate risk, often reporting directly to the Chief Risk Officer. Generally, this role carries a mandate to:

[18]Climate-related financial risks - measurement methodologies (bis.org); Climate-related risk drivers and their transmission channels (bis.org). [19]Scope 1 emissions are those occurring from sources owned or controlled by the company. Scope 2 are emissions created in the course of generating electricity to be consumed by the company. Scope 3 are emissions indirectly created by the company, typically as a result of its supply chain. The three-scope approach to measuring and reporting GHG emissions was developed by the Greenhouse Gas Protocol, a partnership between the World Resources Institute and the World Business Council for Sustainable Development. ghg-protocol-revised.pdf (ghgprotocol.org).
[20]FINAL-2017-TCFD-Report-11052018.pdf (bbhub.io).

- Share knowledge of climate risks across businesses and corporate units;
- Harmonize climate strategy and analysis across business units; and
- Report to the Board and its various committees on insights and progress. Business risks can be separated from reputational risks in terms of Board oversight but owned by common executive.

One observation is that at least one institution handles reputational risk separately from business/financial risks in Board oversight. This likely aligns with existing board structures and reflects the overlap of climate-risk strategies with community investment and engagement strategies. However, it highlights the imperative for coordination across the institution to ensure alignment across teams, particularly in prioritizing and establishing KPIs for business, investment, or engagement initiatives.

CONCLUSION

Climate risk has become one of the most closely-watched areas in global financial regulation, even featuring prominently in the June 5, 2021 G7 Finance Ministers and Central Bank Governors Communique.[21] Financial institutions will need to approach the issue as a strategic imperative, with alignment from the board on down. Our summarizing points are as follows:

OVERSIGHT AND TRANSPARENCY EFFORTS ARE MOVING QUICKLY

Globally-agreed minimum capital requirements are not imminent but heightened supervisory attention will only escalate, especially as regulators digest the initial climate stress tests. Advances have been made to move closer to global alignment in the form of an International Sustainability Standards Board. Large asset managers are likely to demand increased disclosures of climate risks and impacts. It will bear watching over the coming years how investor demands and regulatory trends align or diverge.

BANKS ARE FOCUSING ON RISK MANAGEMENT AND ALIGNING THE ORGANIZATION

Many banks are in early stages of establishing or enhancing climate risk management practices, including setting up dedicated officer roles, aligning corporate strategy, and measuring activity to enabling clear, consistent and relevant disclosures down the line. This work will be specific to each institution and reflect unique operating and risk perspectives, though the final product will likely follow the TCFD or some other well-understood framework.

NEXT STEPS

Supervisory guidance is likely the next milestone for regulators and the stress tests being run by BOE and ECB will undoubtedly play a large role in the evolution of those discussions. Institutions will be focused on continuing to align their organizations behind their ESG strategies as well as evaluating materiality for disclosure purposes. More broadly, the various global efforts should begin aligning and closing gaps as public and private institutions gain more information.

[21] G7 Finance Ministers & Central Bank Governors Communiqué | U.S. Department of the Treasury

BILL COEN

Bill Coen is Vice Chair at Reference Point with over 35 years of experience in risk management and financial institution regulation and supervision. In his role, Bill uses his deep subject matter expertise to bolster Reference Point's service offerings, help drive business development, and provide key strategic advice to global clients across risk and regulatory compliance domains. He has held prominent positions at the world's top institutions and regulatory bodies including the Federal Reserve Board and the Bank for International Settlements (BIS).

Prior to joining Reference Point, Bill served as Secretary General of the Basel Committee on Banking Supervision. As Secretary General, Bill directed the work of the Committee, managed its Secretariat, and chaired the Policy Development Group, which developed and recommended the "Basel III" post-crisis reforms. He also chaired both the Task Force on Corporate Governance and the Coherence and Calibration Task Force. Prior to his appointment as Secretary General, Bill served as Deputy Secretary General where his responsibilities focused on the Committee's response to the global financial crisis, including coordinating the various Basel III policy initiatives.

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SAMPLE OF ACCOMPLISHMENTS

- As **Secretary General of the Basel Committee on Banking Supervision**, Bill directed the work of the Committee, managed its Secretariat, and chaired the Policy Development Group and the Coherence and Calibration Task Force, both of which developed and recommended the "Basel III" post-crisis reforms. Bill led the effort to develop and define the BCBS's strategy, taking account of the varying jurisdictional views on banking supervisory and regulatory matters, with the ultimate objective of reaching consensus on global guidelines, standards and best practices. Bill also chaired the BCBS's Corporate Governance Task Force, which developed global guidelines on corporate governance principles for banks.

- As **Deputy Secretary General of the Basel Committee on Banking Supervision**, Bill assisted the Secretary General in directing the work of the BCBS and managing the Secretariat. Bill focused on the Committee's response to the global financial crisis, including coordinating the various Basel III policy initiatives.

- As **Content Manager for the Bank for International Settlement's FSI Connect** – a web-based information resource and learning tool available exclusively to central banks and supervisory authorities, Bill served as a Content Manager and was responsible for content development, marketing, sales and product launch around the topics of international financial regulatory standards and sound supervisory practices, including the latest prudential standards as well as key guidance on banking supervision.

- As an **Analyst at the Federal Reserve System Board of Governors**, Bill supported a number of initiatives related to banking policy, supervision and licensing as a staff member in the Division of Banking Supervision and Regulation.

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