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How US Banks Are Addressing Climate Risk and Sustainability

Preparing for change

Financial institutions worldwide continue to navigate a year fraught with new and unique challenges. Banks and insurers have thus far maintained good stability thanks to significant efforts expended since the Great Recession to develop robust credit risk and capital planning practices. Although the cause of the latest downturn is novel, its economic manifestations are not new and the leading practice credit risk management tools have been effective at precluding major write-offs at most financial institutions. The pandemic's economic impacts are expected to subside in time—though when remains unclear.

Climate change poses longer-term risks to financial institutions and possibly higher volatility physical risks in the near term. For example, the transformation of key economic sectors and the disruption to ports and coastal areas from sea level rise may occur over decades. Other disruptions such as wildfires and tropical storms of increasing frequency and severity may have effects much sooner. Numerous groups, such as the Task Force on Climate-related Financial Disclosures (TCFD), have highlighted that even leading current financial risk analysis frameworks fail to account for these and other climate risks.

Moody's Analytics has identified a dearth of climate reporting and preparation at financial institutions, especially in the United States where banks are falling far behind their European, Asian, and Canadian counterparts. Major drivers of this lack of financial institution planning include nonexistent regulatory requirements and unclear market expectations. There is no widely accepted standard for reporting on a firm's climate vulnerability or any standard for how its lenders should recognize those risks. While auditors are starting to formulate a reporting framework, financial institutions should begin to understand their potential exposure, what they must do to prepare to assess and report, and how they compare to their peers in this area.

This report offers our observations on key stakeholder climate reporting expectations, financial institution climate reporting approaches, and recommendations on how these can be facilitated within the US banking sector.

Market observations

Reaching a reporting inflection point

Although individual events cannot be explicitly or completely attributed to climate change, climate scientists agree that rising global temperatures are contributing to more frequent and severe climate events. Investors are finding it difficult to ignore the increased disruptions in their daily lives due to these intense climate events and are turning more attention toward climate change. The 2020 global wildfire season was the fifth most costly in terms of fire damage, in which the United States experienced its greatest recorded loss to wildfires, 10.27 million acres.[1] The Atlantic hurricane season produced the most named storms on record and the most land falling US hurricanes, resulting in persistent flooding events along the Gulf Coast of the United States. These events continue to disrupt business operations from oil extraction to vineyards, ultimately affecting those businesses' investors and lenders.

Sustainability (the potential impact of the bank and its activity on the environment) has simultaneously emerged as another concern. One group of stakeholders, investors, has increased its focus on green and socially responsible fund investment. Assessments of environmental sustainability have become key investment criteria. Celent Wealth Management, part of the Oliver Wyman Group, estimates that global investment in ESG-directed institutional and retail assets will reach $53 trillion in 2021, up from $30 trillion in 2018, with the United States alone accounting for $20 trillion.[2]

Regulators have already begun formalizing reporting expectations in many jurisdictions outside the United States. New Zealand was the first government to require climate risk reporting based on the TCFD framework for all registered banks, insurers, credit unions, and asset managers with total assets of more than $1 billion, and all equity and debt issuers listed on the NZX. The United Kingdom, European Union, Canada, and Australia continue to finalize their own mandated climate risk reporting standards. Auditors have been anticipating this coming wave and are beginning to roll out their own standards and recommendations for consistent and comparable reporting.

In the United States, while regulators and auditors continue to organize themselves and investor motivations evolve, banks have an opportunity to begin preparing for the unavoidable future requirement to produce climate-related disclosures. That preparation may take the form of quantifying the bank's carbon footprint, understanding the bank's exposure to carbon taxes, or measuring the climate resiliency within its lending portfolios. Only with adequate preparation can banks respond constructively and thoroughly to the disclosure requirements that are sure to come.

Getting lapped by the competition

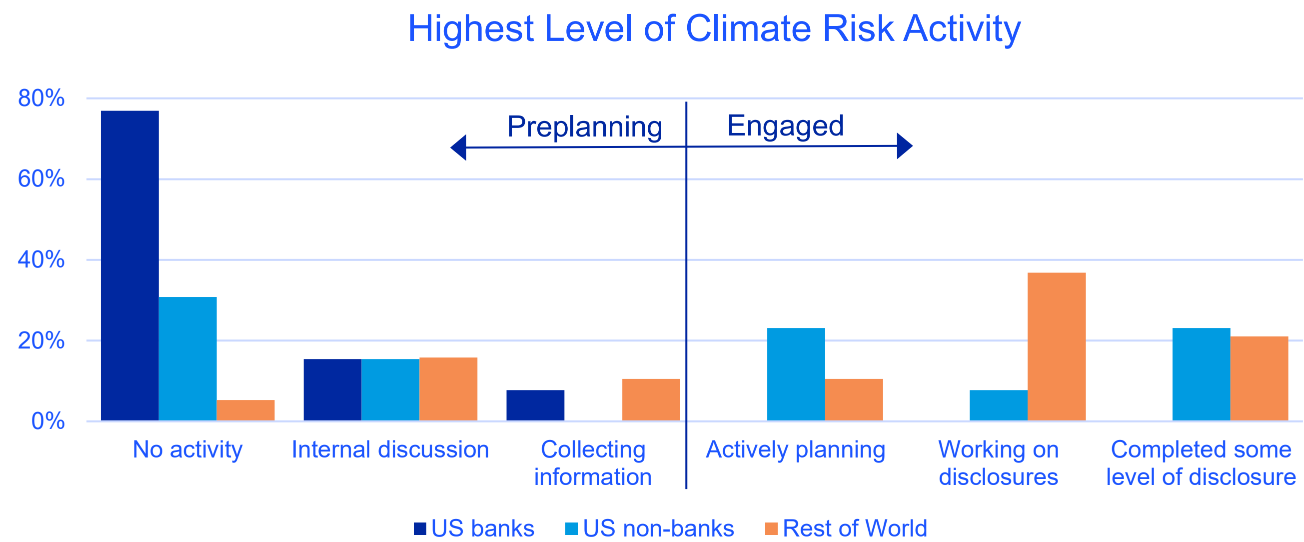
Many of the world's largest financial institutions ($100 billion-plus in assets) have taken initial steps to address the recommendations first made by the TCFD in 2017 and updated in 2019, by starting pilot programs or creating broad climate risk-assessment capabilities. Midmarket bank and insurer interest and activity in this area is less clear, but perhaps even more important given their extensive number. To learn more about the middle market's awareness and preparation, in late 2019, Moody's Analytics conducted several surveys of banks, insurers, and asset managers to identify the activities and challenges they were focusing on. Figure 1 presents the compiled responses from one of these surveys.

Figure 1 summarizes the survey results for institutions that hold less than $100 billion in assets, segmenting entities into US banks, other US non-bank financial institutions, and all financial institutions whose primary business footprint is outside the United States. Most firms outside of the United States fall on the "engaged" side of the spectrum, either actively planning, working on, or having completed some level of climate-related disclosure. US non-bank financial institutions are more evenly spread across the spectrum, demonstrating greater progress than US banks that are significantly behind their global peers. More than three quarters

[1] Masters, Jeff. "Reviewing the horrid global 2020 wildfire season." Yale Climate Connections: Eye on the Storm. January 4, 2021.
[2] Trout, William. "ESG in portfolio management: from data to deployment." Celent: Reports & Insights. September 9, 2020.

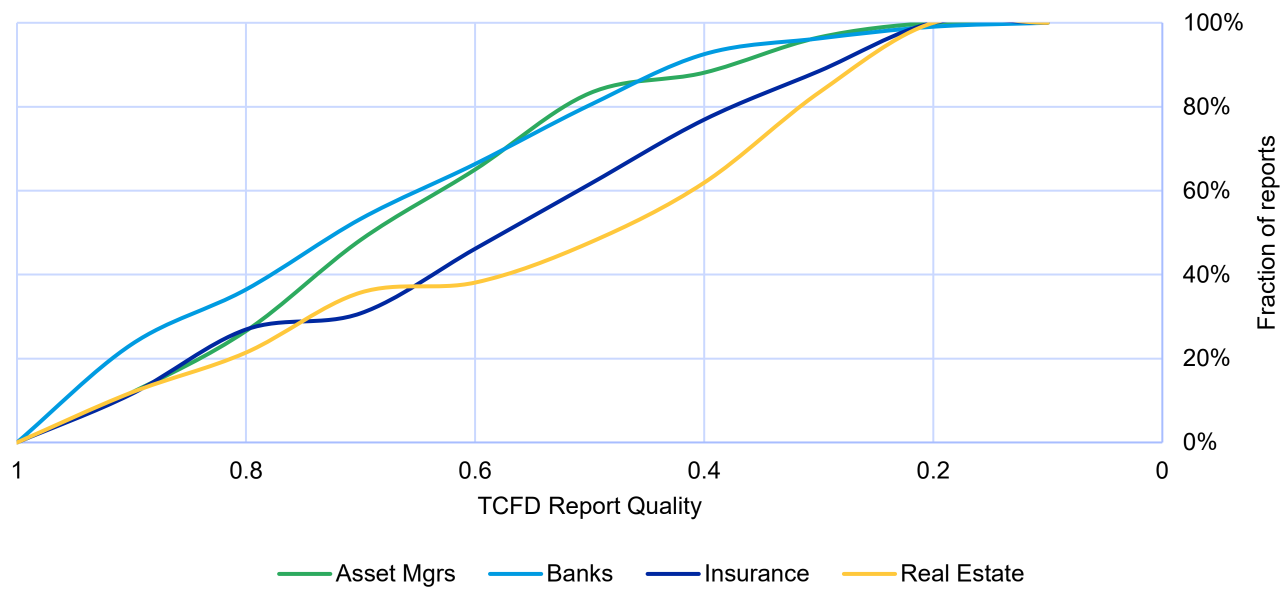
of the bank respondents reported no climate-related disclosure activity at the time of the survey. This is a particularly stark result compared to global climate disclosure preparation activity.

Figure 1 Highest level of climate risk activity (United States only)



In a separate survey, Moody's Analytics scoured firm-prepared TCFD specific documents to evaluate the quality of those climate risk disclosures, where quality was measured relative to a set of benchmark TCFD reports. Some preliminary results are shown in Figure 2, where we observe that in the United States, firms in all sectors were capable of making relatively high-quality filings that addressed all of the key TCFD categories. That said, a greater percentage of the banks' and asset managers' filings were higher quality than those of insurers and real estate firms. This latter observation may indicate differences in the availability of data for different asset types, or in the required analytics.

Figure 2 Distribution of US TCFD report quality by sector



Approaches to climate risk analytics and reporting

Sitting on the sidelines

As observed in this study, many financial services firms in the United States are remaining on the sidelines. They continue to wait for regulatory requirements and guidance to prescribe a path forward, creating a competitive disadvantage. They will take longer to ramp up their climate risk evaluation efforts than their peers who have already begun preparing. Possible results include the likelihood of missing potential capital inflows from investors who are seeking transparency in this area and the continuing latent exposure to unquantified climate-related risks in their portfolios. When climate disclosures are finally mandated, the currently inactive firms will be flying blind while forced to make fundamental choices about providing ESG and climate risk information. They will be making discoveries while releasing information publicly without the opportunity to first address difficult data issues and adverse climate findings.

Building strong foundations

A few North American banks are actively engaged in preparing and producing climate disclosures now, as are many more in Europe and Asia where regulatory pressure is much greater. The ability to evaluate the institutions' climate exposure and climate risk impacts much earlier gives those firms more time to understand how their firm is positioned and performing. Strategically, it enables them to choose when they want to disclose key metrics and other information. Having some performance information early—or even just understanding where to look to collect climate information ahead of regulatory requirements—gives leadership more time to manage those risks and, typically, to do so at a reduced cost. Early preparation allows institutions to more thoughtfully assess their risks and integrate climate risk management into lending decisions and other risk mitigation practices. Furthermore, a clear understanding of where a bank is placed within its peer group can strongly inform the strategic planning and timing of future analyses, potential disclosures, and new business opportunities.

First movers

What can a US bank really do before establishing requirements for climate risk-related activity or reporting? Taking action prior to any actual requirements entails some uncertainty regarding how useful the early stage activity will ultimately be. But it also frees the bank to explore its exposures and disclosure alternatives. Any activity will also help build internal organizational structures and processes, establish a planning workflow, engage leaders and stakeholders, and set the stage for an effective and efficient internal process when mandates begin to materialize. Together, these actions create a first mover advantage within the bank's peer group and begin positioning the bank with regard to its regulators, customers, employees, and the community at large.

US banks can look to recent history in Europe, the United Kingdom, Australia, Japan, and other regions where more active regulators have published climate risk-related mandates or recommendations for the financial services sectors. There, the most effective early actions of institutions have focused on exploring the use of emerging climate risk metrics, scenarios, reporting structures, and their own climate-related exposures and opportunities.

Benchmarking

Benchmarking against industry or geographic peers offers a no-regret first step for clients with no activity while simultaneously acting as an important diagnostic for engaged clients. This process is intended to reveal shortfalls in industry and regional practices and enable prioritization of future activity. It can also highlight any gaps in the ability to report under various international organizations' voluntary reporting standards.

In many cases, performing benchmarking at a slightly deeper level also identifies any misalignment within a bank's policies and procedures or across its strategic priorities. This helps ensure that forthcoming climate reporting is comprehensive and that any climate initiatives are reflected consistently throughout the organization.

Portfolio climate physical risk evaluations

Physical climate risk assessment and scoring are critical components of any broad effort to evaluate climate effects on the value of financial assets. Several data sources and methodologies are emerging to support assessing these impacts on physical assets, specific corporations, municipals, and sovereigns. Most of these frameworks segment the sources of climate hazards into 6 to 12 categories that may span both chronic risks (such as long-term temperature risk or water shortages) and acute physical risks (such as flooding or wildfires).

In the earlier stages of understanding physical climate risk impacts, scorecards are sometimes used to aggregate scores of numerous underlying risks or to aggregate across the hazards mentioned above. Scorecard use is well understood in most bank credit environments and physical climate risk scores can be managed, aggregated, and understood similarly.

One of the early challenges in working with physical risk evaluation is associating business impacts with each hazard type and level. Some banks have used qualitative assessments initially to begin identifying portfolios or loans that may be more at risk than others. More rigorous techniques involving calibration or quantitative modeling can then be applied to achieve the greatest impact and get the maximum amount of available data.

As a bank progresses, it should begin to embed physical climate risk assessments into its credit practices through standalone scorecards or additional factors within already established scorecards. Climate risk assessments should transparently highlight areas of concentration and exposure. A typical starting point is for risk practitioners to identify which businesses' performance will deteriorate most under a severe scenario compared to current performance or a more benign climate. This can be accomplished through an "overlay" to existing scorecard or models. More sophisticated risk practitioners can merge a middle-market probability of default produced by a quantitative credit model with portfolio-relevant climate risk metrics to achieve a climate-adjusted probability of default for a given borrower. Risk practitioners in favor of broader or more integrated approaches are building in-house climate-adjusted probability of default models and working with vended models.

ESG assessments

ESG awareness has grown dramatically in the past two decades,[3] and a variety of frameworks for evaluating firm or investment performance have been developed. Within those, transition risk has emerged as a consideration that deals with the risk to a particular business from the evolution toward a low-carbon economy. Transition risk is commonly assessed and managed together with physical climate risk because both are driven by the prospect of climate change.

Banks in the United States may be looking at many aspects of ESG, but few have begun to evaluate the transition risks embedded in their loan and investment portfolios. Leading banks in other regions (Europe and APAC) have made early progress in this area and are benefiting from that head start by beginning the process of exploring portfolio reallocations that can address problematic industry concentrations or unusually at-risk borrowers.

Privately executing these analyses puts the power in a bank's hands to make informed, internal decisions. Banks can act on the insights to mitigate any shortcomings and make meaningful changes to the organization regarding how it operates and how it affects the environment. Furthermore, banks can also use the results for voluntary reporting purposes while taking advantage of the methodologies and recommendations for future exercises.

Take the next step

While US banks and regulations are behind their global counterparts, the earlier US banks begin or improve upon climate risk assessment programs, the more long-term benefit they will reap. Investors are moving dollars to climate-positive firms and regulators are being pushed to establish climate risk standards to ensure greater transparency in ESG markets. Banks still have the opportunity to get in front of the green wave and lay the foundation for a sound climate risk practice and a rigorous climate disclosure, without any surprises.

[3] https://www.morningstar.com/features/esg-investing-history updated through June 2020.

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