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Climate risk - Regulatory response gathers pace

It is widely accepted that climate change and how we respond to it has significant consequences, both for the global economy and for society in general. While banks and other financial institutions are increasingly dealing with the effect of both physical and transition climate-related risks on all aspects of their operations, regulators must concern themselves not only with the impact of these risks on individual institutions but also on broader financial stability. A recent report by the Financial Stability Board (FSB) sets out the agenda for regulators and the emerging new regime for financial institutions.

The battle against climate-related risks is made more difficult by the disparate and fragmented nature of approaches to mitigate these risks. Regulatory authorities worldwide have until now struggled to coordinate their approaches, which is hardly surprising given the lack of consensus on definitions and the opacity of information in the field. Moreover, individual regulatory authorities have different mandates and varying supervisory goals.

But regulatory authorities are stepping up to the challenge. Late last year the Financial Stability Board (FSB) issued its final report – *Supervisory and Regulatory Approaches to Climate-related Risks* – with the aim to assist supervisory and regulatory authorities in their efforts to "monitor, manage, and mitigate risks arising from climate change and to promote consistent approaches across sectors and jurisdictions."



Climate change and systemic financial risk

While concentrating on cross-sectoral and system-wide aspects of climate-related financial risks, the report formally recognizes the systemic risk that climate change is likely to pose to the financial sector, and recommends potential macroprudential tools to complement microprudential instruments.

The report focuses on three areas:

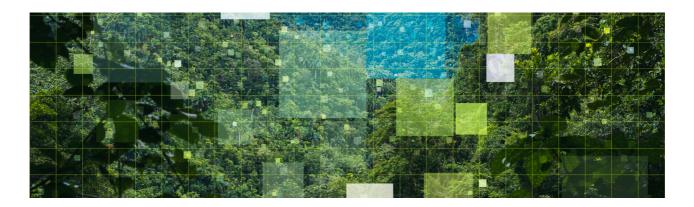
- 1. Supervisory and regulatory reporting and the collection of climate-related data from financial institutions on which to base the identification and monitoring of climate-related risks
- 2. System-wide supervisory and regulatory approaches to assessing climate-related risks, including the use of analytical tools such as climate scenario analysis and stress testing
- 3. Evaluating the extent to which current policies and tools address climate-related risks and the adequacy of the tools in addressing systemic risks based on the work of standard-setting bodies and authorities



Lack of climate risk data

The lack of consistent, comparable, granular, and reliable climate data reported by financial institutions is a key challenge for authorities in their development of supervisory and regulatory approaches to climaterelated risks, according to the report.

The FSB has also identified the key role of financial disclosures in mitigating climate-related risk. The past couple of years have seen a number of initiatives designed to make climate-related financial disclosures more comparable, consistent, and useful.



New climate-risk disclosure regime approaches

March 2022 saw the publication by the newly established International Sustainability Standards Board (ISSB), under the IFRS Foundation, of two Exposure Draft standards on general sustainability-related and climate-related disclosures. Following public consultation, the aim is to issue the final standards at the end of Q2 2023. In its deliberations, the ISSB also decided to introduce a requirement to permit, but not require, preparers to consider the Global Reporting Initiative Standards and the European Sustainability Reporting Standards in identifying disclosures about sustainability-related risks and opportunities.

Until now, authorities have collected climate-related data for various objectives (depending on the scope of their mandate), including but not limited to:

- Microprudential objectives to assess firm-specific strategy and risks such as business model viability, exposure quantification, scenario analysis and stress testing, and capital adequacy assessments.
- Investor protection or market integrity initiatives to enable investors to better assess and compare climate-related factors associated with different investments, and to reduce the risk of greenwashing.
- Macroprudential objectives that assess sector-level or financial system-level risks including the monitoring of vulnerabilities and their implications to financial stability.
- Macroeconomic objectives that assess the impact of climate change on economic growth, productivity, and inflation, as well as structural implications or other macroeconomic aspects.



Climate-risk reporting requirements to increase

Based on the FSB recommendations, banks, asset managers, insurers, and pension funds can expect regulators in several jurisdictions to expand the use of climate scenario analysis and stress testing for macroprudential purposes, with the objective of evaluating the potentially far-reaching impact of climate-related risks across the financial system.



Furthermore, the FSB recommends that authorities should begin by asking financial institutions to report qualitative information to their supervisors, supplemented with increasingly available quantitative information and move towards standardized regulatory reporting requirements *"in a manner proportionate to the nature, size, and risk profile of a financial institution's activities and that takes into account the balance of benefits and costs."*

Intuition Know-How has a number of tutorials related to the content of this article:

- Climate Risk An Introduction
- Climate Risk Banking & Decarbonization
- Climate Risk Stress Testing
- Climate Risk Measurement An Introduction
- Climate Risk Measurement Approaches
- ESG An Introduction
- ESG Primer
- ESG Data & Ratings An Introduction
- ESG Data & Ratings Reporting Frameworks



Rates turmoil strikes financial system

The spike in interest rates over the past couple of years has transformed the banking landscape and placed immense pressure on individual institutions, leading to dramatic rescues in the US and Switzerland, and raising the dual spectres of systemic failure and a credit crunch.

Since late 2021, the world's major central banks have been engaged in a fight against runaway and persistent inflation. This has comprised an extended cycle of coordinated rate hikes led by the Fed in the US – the most aggressive of the developed market central banks, having hiked its base policy rate by 475 basis points in just over a year.

End of low rate era

Financial markets and industry had become accustomed to an era of extraordinarily low rates maintained by monetary authorities in response to the Global Financial Crisis (GFC) of 2007/8. For some sectors, this radical change to a high interest rate regime poses significant – and in some cases existential – challenges.



Nowhere is this challenge more pronounced than in the banking sector. For well over a decade the sector was beset by low rates, which translated into low net interest rate margins and stagnant profitability for the sector. While rising rates have been positive for profitability, they have also caused significant declines in the value of banks' bond holdings held as assets on their balance sheets (given the inverse correlation between bond prices and yields).

The effect of this has been to generate substantial unrealized losses on US banks' securities holdings. The most extreme case was Silicon Valley Bank (SVB), which had taken considerable risk by parking large sums of cash in risk-free but high-duration (and therefore interest rate-sensitive) US Treasuries and in riskier agency mortgage-backed securities (MBS). Prior to the turbulence, SVB had a headline Tier 1 capital ratio of 12 %, but the unrealized losses on the securities it held effectively wiped out its capital.

Record deposit outflows

Similar problems elsewhere in the US banking system prompted a run on some smaller banks, with record deposit outflows into money market funds leading to the collapse of three regional banks within days. The prospect of an ever-widening run and a systemic crisis led to calls for the US government to guarantee uninsured deposits (above the standard USD 250,000 deposit insurance).

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Swiss bank bondholders get burned

One notable feature of the rescue was a CHF16 bn 'bail-in' of AT1 (additional tier 1) instruments. Finma invoked "extraordinary public support" as justification for the bail-in. However, the writing down of the banks' so-called AT1 bonds to zero while retaining shareholder value at CHF3 bn broke with convention regarding the hierarchy of payments in the event of a restructuring or liquidation. This controversial measure could well lead bank bondholders to demand higher coupons in future, increasing bank funding costs and in turn depressing lending.

This episode has highlighted a number of issues, including some apparently unresolved ones relating to the GFC and the post-GFC regulatory framework.



Differences between US and European bank regulation

The banking sector difficulties also highlight the contrast between the regulatory frameworks in the US and Europe.

The US regulates banks according to categories set by the Fed that correspond to size. Category 1 is for the largest banks, or so-called Globally Systemically Important Banks (G-SIB). Category 2 is banks holding assets in excess of USD700 bn. Category 3 is those with assets above USD250 bn, while banks with assets below the Category 3 threshold belong to Category 4 or the so-called "Other Banks" category. Banks at the Category 3 level and below have, since 2019, been allowed to opt out of the various stress tests and other supervisory measures required of larger banks, including a requirement to include unrealized losses (such as those triggered by the recent spike in interest rates) in their capital calculations.

This exemption followed the rolling back, in 2018, of parts of the Dodd-Frank Act that had been enacted in 2010, aimed at addressing the problems exposed by the GFC. The exemption meant that SVB, for example, could mark its bond holdings at their amortized acquisition cost rather than at fair value. The Dodd-Frank measures now look set to be reinstated in response to the recent turmoil.

The turmoil has exposed the US banking sector's greater vulnerability to interest rate risk versus the European sector, reflected in markedly higher unrealized losses on held-to-maturity (HTM) securities as a percentage of tangible book value (TBV). The European sector looks healthier on other metrics too. For example, a sample of leading US and European banks at the end of 2022 showed a liquidity coverage ratio (LCR) of 165% for the European sample (the mandatory level is 100%) compared with 118% for the US sample.

Central banks retain anti-crisis tools

Nonetheless, the Federal Reserve and other central banks have been decisive in their deployment of a range of tools to safeguard the global financial system in the aftermath of 2007/8. Balance sheets are stronger all round. More stringent capital requirements have reduced bad loans in European banks by two-thirds over the past 10 years. Loan-to-deposit ratios in US banks have fallen by 25 percentage points to 70% since 2007/8. Quantitative easing, forward guidance, and subsidized loans to banks all form part of central banks' anti-crisis arsenal.

For the time being, following the decisive bank rescues in the US and Switzerland, fears of systemic risk appear to have been assuaged. Concerns over the potential stress on the financial system from rising rates may give pause to central banks as they fight inflation. However, with any declaration of victory in that fight still looking premature, the prospect of more destabilizing credit events remains real.

Intuition Know-How has a number of tutorials related to the content of this article:

- Market Risk An Introduction
- Market Risk Management
- Market Risk Measurement
- Bank Balance Sheets
- Basel III Pillar 1 & Capital Adequacy
- Basel III Pillar 2 & ICAAP
- Basel III Pillar 3 & Risk Reporting
- Monetary Policy Analysis
- Global Financial Regulation
- US Regulation
- European Regulation