Finance Watch Feedback on OCC Principles for Climate-Related Financial Risk Management for Large Banks

Introduction

Opening Comment

Finance Watch welcomes the OCC work on the principles for climate-related financial risk management, which recognizes the challenges faced by banks and supervisors alike in this area. However, our feedback outlines that principles-based guidance for supervisors and financial institutions will not be sufficient to achieve timely and impactful outcomes in managing climate-related financial risks of the banking sector. In addition to these, further measures are needed based on a precautionary approach in tackling these risks, which can and should be done as part of the holistic review of bank prudential regulation.

Detailed points on addressing climate-related financial risks can be found in our recent report “A silver bullet against green swans”.

Applicability

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

Climate-related financial risks are systemic in nature and this is consistent with the perspective of focusing on large banks. An important consideration from the systemic perspective is the fact that continued financing of climate change accelerating activities leads to the situation where banks will no longer be able to mitigate their risk due to irreversible changes of the climate.

However, the principles should ultimately apply broadly to all banks, particularly given the financial implications of climate change for all bank's financial positions. There are still significant implications from banks of smaller sizes on customers and for the economy if they are not properly managing climate-related financial risks. Furthermore, whilst smaller banks may not pose the same systemic level of risk on their own, the kinds of impacts from climate-related financial risks will be materializing at similar times for all banks and this could make a collective of smaller banks very systemically significant in this context.

Given the global nature of climate change, its impact and the interconnectedness of financial markets, international coordination on minimum regulatory and supervisory requirements is both justified and needed.

Symon, Julia, A silver bullet against green swans: Incorporating climate-related financial risk into bank and insurance prudential rules, November 2021.
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?

First and foremost regulatory action is needed to ensure that climate-related financial risks are properly managed. This means taking a holistic regulatory perspective, covering all of the prudential ‘pillars’. As part of these regulatory upgrades supervisors can be specifically mandated to investigate whether proportionality on the grounds of size, complexity, or scope of operations could be justified. An underlying principle for the assessment of proportionality must be to ensure that risk is still properly managed and not to create a deregulatory agenda that transfers risk to clients or citizens to reduce administrative burden.

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?

Climate-related financial risks have specific features, which pose significant challenges when it comes to deploying existing prudential tools and approaches to tackle them. Specifically:

- Disruption risk: Climate-related events are defined as “green swans” and have specific features, which makes them impossible to predict and model. In particular, green swans are characterized by: i) certainty of their occurrence despite highly uncertain impacts and the impossibility to determine the exact timing of their materialization; ii) wide-ranging and existential impacts on the economy and the financial system; iii) a high degree of complexity, including cascade effects and chain reactions in the environment, economy and society.

- Probabilities of climate-related events not reflected in past data: Traditional risk modeling based on historical data is not possible as we are dealing with a forward-looking phenomenon, for which no past data can be used reliably to extrapolate the future. By definition, when the data eventually arrives, it will be too late to avert a global climate change-induced financial crisis.

- Growing risk with prolonged inaction: The magnitude and probability of climate change materialization are increasing as long as no tangible actions are taken to reduce greenhouse gas emissions. Once global temperatures have exceeded their

---

pre-industrial level by 2°C, the consequences on human society and the global economy will be irreversible and largely unpredictable.\(^3\)

- The time horizon of climate-related financial risks materialization can be significantly longer than the horizon of the current business forecasting, planning and risk management frameworks. This poses additional challenges for financial institutions to appropriately incorporate climate-related financial risks into management practices.\(^4\)
- Environmental stability, including climate, is by nature a public good, which comes at no cost to private agents. Coupled with the long materialization horizons of climate-related financial risks, this means that businesses and financial institutions do not have incentives to consider the implications of their activities for the environment/climate. Looking after public good is the mission of governments/regulators, not private agents.

Due to these specific features of climate-related financial risks, no credible methodologies or tools have been developed yet to accurately identify and assess or measure these risks. The Basel Committee on Banking Supervision (BCBS) published two reports in April 2021 outlining numerous challenges and conceptual issues related to climate risk measurement and methodologies. The most notable of these include the specific features of climate-related financial risks (as was mentioned in Section 2 above), data gaps\(^5\), difficulties to translate climate-related events into financial impacts on institutions’ portfolios (climate risk drivers and transmission channels).\(^6\)

**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?**

At this point in time climate-related financial risks are not being successfully managed. As credit ratings for fossil fuel assets do not take into account transition, physical or disruption risk there is an effective risk subsidy in place. Capital requirements cannot be properly calibrated to cover the risk in this case, unless specific updates to existing prudential rules are introduced. Until this underlying issue is dealt with, other measures unfortunately are closer to window-dressing than risk management.

This conclusion is supported by the results of the European Central Bank (ECB) assessment of the banks’ current progress on Pillar II measures, whereby the ECB has concluded that banks’

---

\(^3\) Climate scientists have introduced a notion of the tipping points in the climate developments, which represent thresholds in temperature rise, which cannot be reversed and which can lead to large changes in the state of the system.

\(^4\) Mark Carney “Breaking the tragedy of the horizon – climate change and financial stability” speech, September 2015

\(^5\) Also extensively investigated by NGFS, Progress report on bridging data gaps, May 2021.

\(^6\) BIS, Climate-related financial risks – measurement methodologies; Climate-related risk drivers and their transmission channels, April 2021.
current practices fall short of supervisory expectations. Banks were found to be “not yet in a position to identify, manage and monitor [climate and environmental] risks at counterparty level”. Also the banks’ plans to set a framework for climate management do not yet ensure that most banks can properly manage these risks. The study by BlackRock Financial Markets Advisory on “Development of tools and mechanisms for the integration of ESG factors into the EU banking prudential framework and into banks’ business strategies and investment policies” also concluded that “integration of ESG within banks’ risk management and investment practices, as well as prudential supervision, is at an early stage” and “needs to be accelerated”.

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

Operationalisation of the traditional guidance on materiality assessment represents a major issue in the case of climate-related financial risks, as there is significant level of uncertainty associated with climate-related risks, insufficient availability, as well as standardization and consistency of data with which to analyze and measure these risks. Transmission channels between climate events and financial implications for the balance sheets of affected institutions require further exploration before these are fully understood.

Further, the fact that the OCC considers only financial materiality is a significant gap in its approach to the interaction between climate change and banking institutions. Financial materiality is of course essential, but when it comes to climate change financial materiality is fed by environmental materiality. In other words, attempting to address financial materiality without addressing environmental materiality is tantamount to deciding to ignore the root causes of climate-related financial risks. A doom loop exists by which financial institutions, and in particular banking institutions, make climate change possible by providing financing to the fossil fuel industry, which is at the source of the bulk of CO2 emissions. At the same time, banking institutions are themselves threatened by climate change. The lack of consideration of the double materiality approach by the OCC hinders its ability to develop appropriate policies to tackle the vicious circle between climate change-enhancing financing and risks that it represents to the banks.

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

---

7 ECB Guide on climate-related and environmental risks setting supervisory expectations relating to risk management and disclosure has been in place since November 2020.
8 ECB, The clock is ticking for banks to manage climate and environmental risks, Supervision Newsletter, 18 August 2021.
9 BlackRock Financial Markets Advisory, Development of tools and mechanisms for the integration of ESG factors into the EU banking prudential framework and into banks’ business strategies and investment policies, Final Study, May 2021 (published 27 August 2021); Executive Summary, p. 3, 7.
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?

There is currently a significant lack of data and climate models and metrics are still very much under development. There are too many uncertainties over exactly when and how the impacts of climate change will materialize. This means it is still not possible to quantify climate-related financial risks. The process of properly developing these models, metrics, tools, developing indicators and collecting data should continue to try and reach this goal with the degree of accuracy possible, whilst realizing that due to the specific features of climate-related financial risks, as outlined above, modeling these risks will likely never be possible with sufficient degree of precision.

In the meantime action is needed to address the absolute and scientifically asserted certainty that climate change is and will have devastating impacts that will either require or force significant changes to financial markets and economies. Either through a managed transition or disruption as a result of climate change-related events. This certainty must form the basis for taking regulatory action to ensure that climate-related financial risks are not threatening financial stability and creating a pocket of untreated risk.

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

Banks can have an important role in the transition to a more sustainable economy. They can use this role to mitigate their own exposure to transition risk, as well as in turn reduce activities that contribute negatively to climate change. By extension this then mitigates physical and disruption risks. Some large banks are already starting to make public commitments to divest from fossil fuels that do not start actively planning and proving that they are transitioning.

There is an implied role for supervisors here to ensure the standardization and validity of information relevant to financial markets provided by banks. This role should become more explicit and give supervisors an active mandate to set science-based standards and methodologies for alignment of the banks’ portfolios with the Paris agreement goals, transition pathways towards these goals and monitor their implementation, to ensure that banks set credible transition goals and stick to them.

**Scenario Analysis**

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

The world’s leading supervisors have put a lot of value on climate “stress tests” as a tool to identify and manage climate-related financial risks across the financial system. These stress
tests have effectively been scenario analysis exercises so far. The results of these exercises do offer valuable insights into the climate-risks of financial institutions and potential channels and effects of their materialization. These insights in turn help shape supervisors' actions and also raise awareness among financial institutions to enhance their risk management practices and adapt business models. However, there are significant limitations to the so-called "stress tests", which can be found in Finance Watch's report "A silver bullet against green swans".  

A fundamental point that needs to be further explored is the transmission channels between climate events and financial implications for the balance sheets/capital of affected institutions. As the BCBS report from April 2021 highlighted, “Existing analysis does not generally translate changes in climate-related variables into changes in banks' credit, market, liquidity or operational risk exposures or bank balance sheet losses. Instead, the focus is on how specific climate risk drivers can impact narrowly defined sectors of particular economies, individual markets, or top-down assessments of the macro economy as a whole". The report concludes that significant further research and empirical evidence are required. The EBA pilot exercise on identifying and mapping climate risks in the banks' portfolios reached similar conclusions.

A key issue is that existing scenarios do not take into account the feedback loop, i.e. the impact which the financial sector itself has on transition and climate developments. There can be scenarios where the financial system plays a hampering role in transition so that the resulting impacts of scenarios (risks) might be underestimated.

The ECB has made progress to overcome some of those challenges in its EU-wide stress test exercise; however, the ECB also outlined that a significant amount of work is yet to be undertaken towards “a comprehensive climate stress-testing framework”. The limitations of climate scenario exercises were confirmed by the NGFS based on the experience of 30 central banks and supervisors across the world.

---

10 Symon, Julia, A silver bullet against green swans: Incorporating climate-related financial risk into bank and insurance prudential rules, November 2021.
11 BCBS, Climate-related risk drivers and their transmission channels, April 2021, p. 2.
12 EBA, Mapping climate risk: Main findings from the EU-wide pilot exercise, 21 May 2021.
13 S. Alogoskoufis, N. Dunz et al, ECB economy-wide climate stress test: Methodology and results, ECB Occasional Paper Series, No 281, September 2021, p. 64-67. Some of the most notable of advancements have been the following: i) analysis of banks’ credit and market portfolios at exposure level, thus accounting for firm-specific vulnerabilities to climate risk factors; ii) capturing key transmission channels of climate risks by means of employing models specifically developed for the exercise; iii) analysis of the interactions between physical and transmission risks. Yet, with reference to the identified limitations, the following avenues of future work have been outlined in the ECB report: i) modeling of the banks’ endogenous reactions and their feedback loop to real economy; ii) consideration of additional physical risk hazards; iii) inclusion of additional sets of bank portfolios such as retail portfolio, which could not be considered due to lack of sufficient data or of sufficient granularity; iv) modeling contagion dynamics in the financing sector that could amplify the impact of climate risks.