GLOBAL MARKETS RESEARCH

Credit Research: Sustainability Special Interest Commentary

28 June 2024

Sharpening The Sustainability Focus for Financial Institutions

Andrew Wong
Credit Research Analyst
WongVKAM@ocbc.com

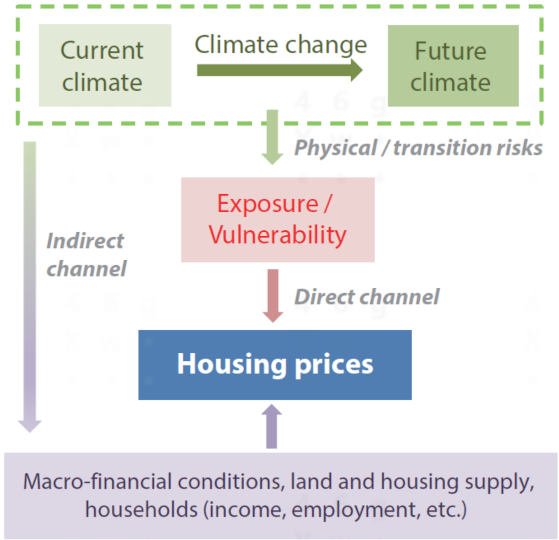
Our January 2023 special interest piece titled "***The Amplifying Influence of Sustainability for Financial Institutions***" covered the pervasive influence of Financial Institutions on sustainability and that environmental, social and governance considerations in turn also heavily influence the activities of Financial Institutions. This is given Financial Institutions' critical service, high systemic importance and resultant strong regulatory oversight that highlights the widespread influence of Financial Institutions on society. Despite the breadth of influences however, the overall sensitivity of Financial Institutions to sustainability remains moderate in our view as the quality of sustainability influences offset their collective quantum. That is, we see governance influences on the Financial Institutions we cover as positive and effectively managing the high influence of environmental and social sustainability factors as well as other present and future elevated risks facing Financial Institutions. For further information on the risks facing Financial Institutions, please see our 2H2024 industry outlook titled "***Financial Institutions – Looking for Challenges***."

Focusing on Climate Transition Risk

Sustainability risks are a key influence on Financial Institution fundamentals, particularly climate transition risks. This is not only because they continue to evolve and increase, but also because they are future risks that are unprecedented but yet expected to be highly impactful.

- Per the European Central Bank's ("ECB") second climate stress from September 2023, banks are exposed to the highest credit risk if there is any delay in a timely green transition with investment requirements at higher costs. Per the ECB's report, credit risks for banks are expected to rise by more than 100% by 2030 compared with 2022 in a late-push transition (defined as a green transition starting in 2025 but achieving similar emissions reductions by 2030 to the accelerated transition scenario, albeit at higher costs). Even under the accelerated transition scenario (green transition starting immediately), the increase of credit risks for banks is expected to be around 60% by 2030.
- In the Monetary Authority of Singapore's ("MAS") November 2023 Financial Stability Review, a special feature on Financial Stability related to "Assessing the Impact of Climate Transition Risk on the Financial System" also found that banks and insurers will incur 50% higher financial losses under the Abrupt Transition scenario (concerted climate policy action beginning in 2026) than under the Smooth Transition scenario (concerted climate policy action beginning in 2023) over an eight-year scenario from 2023 to 2030 with aggregate credit costs of 2.43%. This equates to 14.2% of banks' FY2022 net profits on an annualized basis under the Abrupt Transition scenario.
- The Hong Kong Monetary Authority's ("HKMA") Half Yearly Monetary and Financial Stability Report from March 2024 looked at the impact of climate change and extreme weather conditions on mortgage collateral values, in particular in coastal areas (exposure to typhoons) and in low-lying areas (vulnerable to flooding). Physical impacts were identified as only one transmission channel of climate-related risks into financial stability – other indirect transmission channels include (1) transition risks from lower emission policies and regulations as well as technological developments and (2) changes in macro-financial conditions, such as land and housing supply, employment and household incomes, as well as productivity that also influence house prices and in turn can impact banking and financial stability.

Figure 1: Transmission Channels for Climate Change to House Prices and Macro-Financial Conditions.



Source: IMF, HKMA

Rising urgency

The MAS review highlighted that a disorderly transition would be potentially destabilising and disruptive for the financial system with significant financial losses for Financial Institutions. This necessitated an immediate need for Financial institutions to engage clients to prepare and execute credible transition plans to enable an early and orderly transition. At the same time, MAS would need to continually monitor and assess impacts of climate transition risks to the financial sector and the financial stability implications.

Following the MAS November 2023 Financial Stability Review, the ECB announced in late January 2024 an expansion of its climate work over 2024 and 2025 given the increasing impact of climate crisis on the economy and financial system with three focus areas:

1. Impact and risks of the green transition, including associated transition costs and investment needs.
2. Physical impacts of climate change, and how adaptation measures affect the economy; and
3. Risks stemming from nature loss and degradation, and how they interact with climate-related risks and impact the economy and financial system.

With regards to the transition to a green economy, the ECB also announced that it "will intensify its work on the effects of transition funding, green investment needs, transition plans and how the green transition affects aspects of our economy such as labour, productivity and growth." The ECB's expanded climate work will be implemented via a planned work program for 2024 and 2025.

Figure 2: ECB Climate and Nature Plan Roadmap 2024-2025

Source: ECB

Establishing a Blueprint for a Green Future

Key to the ECB's plans of expanding its climate work is also understanding the impact and risks of the green transition to financial stability risks and the role of banks and insurance in transition, particularly given:

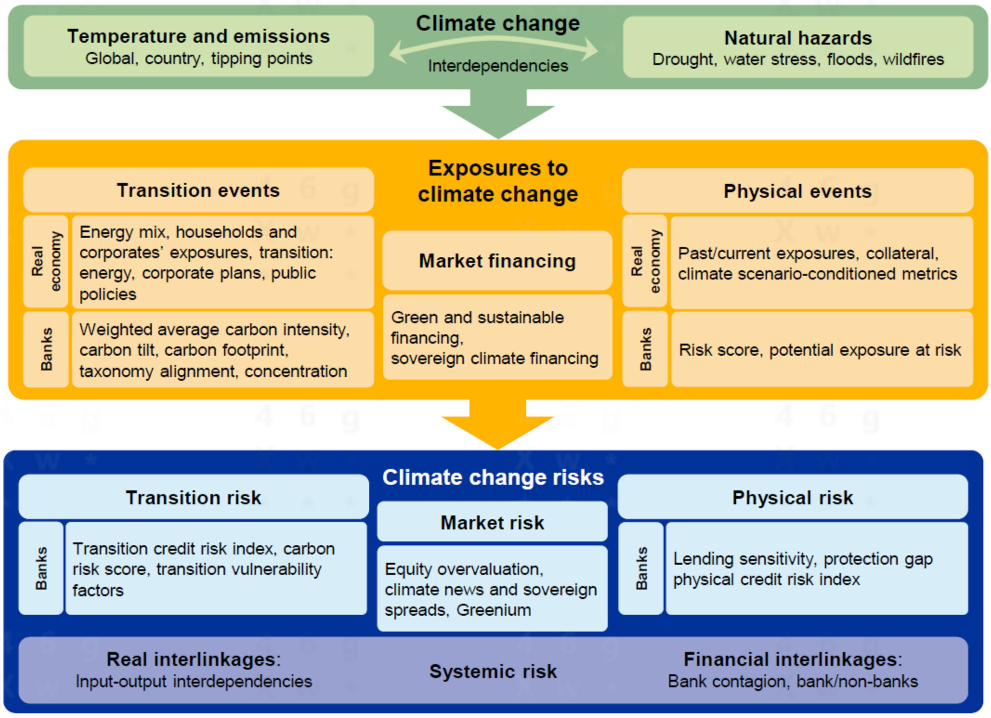
1. The multiple channels in which climate change risks can influence the financial system including physical risks (asset valuation and earnings losses), economic impacts from shifts in market sentiment and lower economic output from high carbon industries, asset stranding and financial asset revaluation losses.
2. A disproportionately higher amount of funding from banks to sectors with high exposure to climate-related risks. Per the ECB and European Systemic Risk Board, the share of high-emitting sectors in bank lending is ~75% higher than its equivalent share in economic activity while 60-80% of all mortgage lending in Europe are to high-emitting households. Over 60% of banks' interest income is from the most carbon-intensive sectors including real estate, construction, and wholesale and retail trade while over half of total loan exposures are to the mining, water supply and wholesale sectors that are affected by extreme flood risk.

To understand the impact and risks better, the ECB and the European Systemic Risk Board ("ESRB") released a report titled " Towards macroprudential frameworks for managing climate risk" in December 2023. The report seeks to establish a macroprudential strategy with frameworks that include policies for effectively and pro-actively managing climate transition risks. Per the ECB press release, "reassessing and repricing climate risk could create financial instability through numerous channels with high exposure to climate-related risk."

The December 2023 report proposes three frameworks for connecting climate risk to financial stability:

1. **Surveillance framework** of defined indicators for monitoring climate risks to financial stability. These include climate shocks such as water stress, wildfires, and subsidence and how these physical risks can transform into credit risks for sectors such as construction, manufacturing, transport, and wholesale and retail. Additionally, the framework aims to identify entity level exposures (financial and economic) to these climate risks as concentration to some climate risks increases financial vulnerabilities for some. Furthermore, the framework considers the impact on overall financial vulnerability from these climate risks given the potential to amplify financial risks and losses through abrupt changes on asset prices, economic shocks from supply chain disruptions, changes in financial market sentiments and possible risk transfer to sovereigns through uninsured risks.

Figure 3: Surveillance framework for climate-related financial stability risks

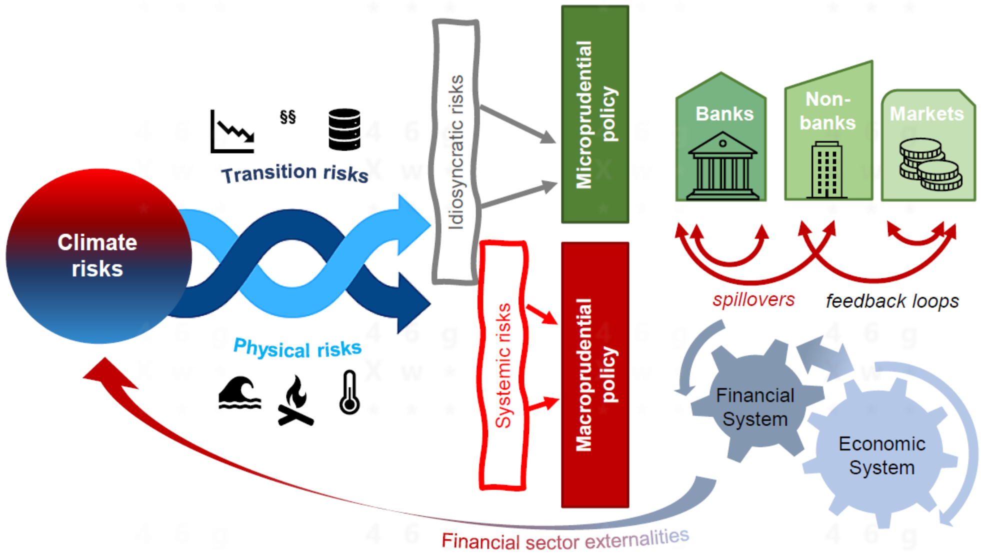


Source: ECB/ESRB

2. **Policy framework** that reflects common risks across Europe but is (1) flexible enough to consider heterogeneity in geographies, industries and information and (2) allows co-ordination in policy responses across countries and sectors. Such a framework would include both microprudential (bank level to support physical adaptation and mitigate climate change) and macroprudential (system wide or sector level to limit associated financial risks) policies that work together to limit the impact of systemic climate risks and

the connection between the real economy and financial sector. Policies would be focused on banks given their key financing role in Europe and complemented by banks' own policies to contain climate risks for borrowers. The implementation and oversight of the policies would be overseen by a supervisory function.

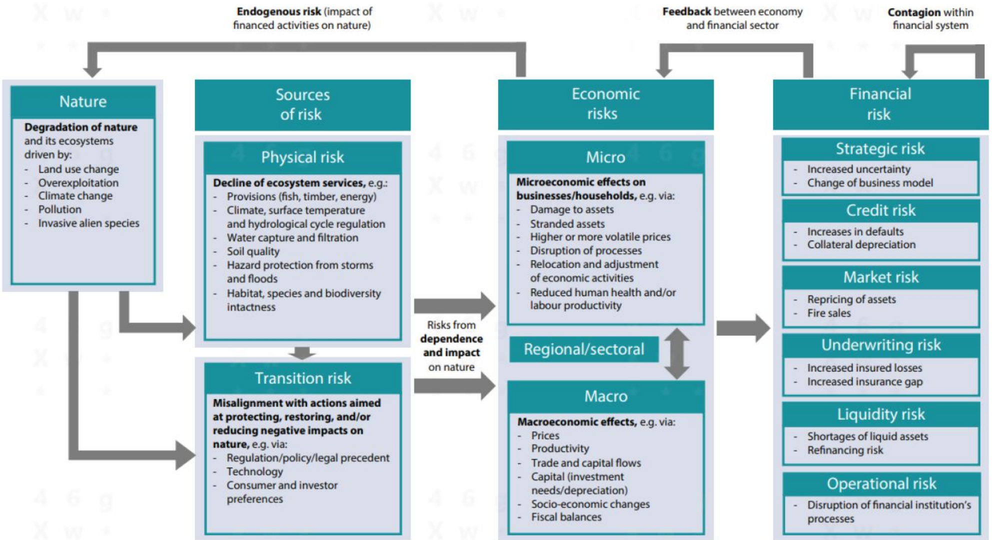
Figure 4: Prudential policies protecting the financial system from climate risks



Source: ECB/ESRB

3. Forward-looking **risk assessment framework extending the scope of financial stability risk to broader nature related risks** from climate related ones. Nature related risks include (1) physical aspects (nature degradation) and transition aspects (measures to protect, restore or reduce physical impacts), (2) its transmission to the economy and financial system and (3) its relationship to climate risks as both a result and a driver. Nature related risks are most present in the agriculture, mining, and infrastructure sectors with initial findings that nature degradation may cause chronic and acute physical risks in sectors that generated 26% of the European Union's annual gross value added in 2015. Similarly, European financial institutions are heavily exposed to nature dependent sectors with the ECB and ESRB estimating that 75% of corporate loans among euro area banks and 31% of investments in corporate bonds and equity among European Economic Area insurers are to economic sectors that have a high dependency on at least one ecosystem service. A forward-looking assessment should be focused on nature-related scenarios rather than exposure analyses to better estimate potential financial losses and financial stability risk.

Figure 5: Transmission channels of nature-related risks



Source: ECB/ESRB, Network for Greening the Financial System ("NGFS") Conceptual Framework on Nature-related Financial Risks (2023).

Just the beginning

The intention of the ECB and ESRB project team was to improve climate risk management through a structured approach that (1) creates more understanding of climate-related risks to financial stability through ongoing surveillance, (2) establishes macroprudential policy to protect the financial system from climate risk and (3) considers additional financial stability risks from nature-related developments. The 2023 report also establishes the important role of banks and insurers in managing financial stability risks given their outsized exposure to climate transition risk. This will continue to influence the business risk for financial institutions increasingly in the near term to avoid impacts to financial risk in the medium to longer term.

Explanation of Issuer Profile Rating / Issuer Profile Score

Positive ("Pos") – The issuer's credit profile is either strong on an absolute basis or expected to improve to a strong position over the next six months.

Neutral ("N") – The issuer's credit profile is fair on an absolute basis or expected to improve / deteriorate to a fair level over the next six months.

Negative ("Neg") – The issuer's credit profile is either weaker or highly geared on an absolute basis or expected to deteriorate to a weak or highly geared position over the next six months.

To better differentiate relative credit quality of the issuers under our coverage, we have further sub-divided our Issuer Profile Ratings into a 7-point Issuer Profile Score scale.

IPR	Positive		Neutral			Negative	
IPS	1	2	3	4	5	6	7

Explanation of Bond Recommendation

Overweight ("OW") – The bond represents **better relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Neutral ("N") – The bond represents **fair relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Underweight ("UW") – The bond represents **weaker relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Please note that Bond Recommendations are dependent on a bond's price, underlying risk-free rates and an implied credit spread that reflects the strength of the issuer's credit profile. Bond Recommendations may not be relied upon if one or more of these factors change.

Other

Suspension – We may suspend our issuer rating and bond level recommendation on specific issuers from time to time when OCBC is engaged in other business activities with the issuer. Examples of such activities include acting as a joint lead manager or book runner in a new issue or as an agent in a consent solicitation exercise. We will resume our coverage once these activities are completed. We may also suspend our issuer rating and bond level recommendation in the ordinary course of business if (1) we believe the current issuer profile is incorrect and we have incomplete information to complete a review; or (2) where evolving circumstances and increasingly divergent outcomes for different investors results in less conviction on providing a bond level recommendation.

Withdrawal ("WD") – We may withdraw our issuer rating and bond level recommendation on specific issuers from time to time when corporate actions are announced but the outcome of these actions are highly uncertain. We will resume our coverage once there is sufficient clarity in our view on the impact of the proposed action.

Macro Research

Selena Ling
Head of Research & Strategy
lingssselena@ocbc.com

Tommy Xie Dongming
Head of Asia Macro Research
xied@ocbc.com

Keung Ching (Cindy)
Hong Kong & Macau Economist
cindyckeung@ocbc.com

Herbert Wong
Hong Kong & Taiwan Economist
herberthtwong@ocbc.com

Lavanya Venkateswaran
Senior ASEAN Economist
lavanyavenkateswaran@ocbc.com

Ahmad A Enver
ASEAN Economist
ahmad.enver@ocbc.com

Jonathan Ng
ASEAN Economist
jonathanng4@ocbc.com

Ong Shu Yi
ESG Analyst
shuyiong1@ocbc.com

FX/Rates Strategy

Frances Cheung, CFA
Head of FX & Rates Strategy
francescheung@ocbc.com

Christopher Wong
FX Strategist
christopherwong@ocbc.com

Credit Research

Andrew Wong
Head of Credit Research
wongvkam@ocbc.com

Ezien Hoo
Credit Research Analyst
ezienhoo@ocbc.com

Wong Hong Wei
Credit Research Analyst
wonghongwei@ocbc.com

Chin Meng Tee
Credit Research Analyst
mengteechin@ocbc.com

Co.Reg.no.: 193200032W