OCBC Bank

Andrew Wong
+65 6530 4736
WongVKAM@ocbc.com

Ezien Hoo, CFA
+65 6722 2215
EzienHoo@ocbc.com

Wong Hong Wei, CFA
+65 6722 2533
WongHongWei@ocbc.com

Toh Su N
+65 6530 8355
TohSN@ocbc.com

Sustainable Finance Regulations for Financial Institutions to Weather The Storm

While the multitude of principles and agendas covering sustainability highlights its depth and breadth and established the 'what', the resulting network of regulations as mentioned in "***Disclosures in Sustainable Finance – Addressing Words that Speak Louder than Actions***," are focused on the 'how'. The quickening pace of regulatory developments to establish how sustainability agendas can be achieved is perhaps indicative of rising concerns surrounding climate change and increasing instances of severe weather events as well as the lack of progress and passing of time towards key future milestone sustainability dates. It may also represent better familiarity and knowledge of the issues and increasingly efficient thought leadership in finding a way forward.

We highlighted above that sustainability related regulations were growing in both quality and quantity and as understanding of sustainability issues and the cost to address them rises, so has the specificity of regulations grown towards the Financial Institutions sector. This is due to the compounding influence that Financial Institutions have on sustainability and environmental, social and governance ("ESG") issues given their role as a facilitator for the broader economy. The influence of environmental concerns stretches beyond their own footprint and operations to the activities that Financial Institutions chooses to fund. Social issues influence Financial Institutions given their functional and financial capacity to address problems with social inequality through the essential services they provide. Finally, governance is relevant for Financial Institutions given their systemic importance as a steward in the world of finance, highly regulated nature, and their sensitivity to sentiment and public confidence.

Developments in sustainable finance regulations such as SFDR are occurring alongside the Financial Institution sectors' own separate and significant regulatory development journey. This commenced following the 2008 financial crisis with a desire to improve financial sector resilience and ensure its ability to withstand a future crisis primarily through higher minimum capital requirements but also with minimum short term and long-term liquidity coverage obligations. This was achieved through Basel III regulations that seeks to improve banking regulation, supervision and risk management.

As we head into 2022 however, both regulatory tracts are seemingly merging to create a financial system that is overall more resilient to both systemic and environmental shocks. As discussed in "***Financial Institutions – a cruise to nowhere?***", the European Commission ("EC") published on 27 October 2021 legislative proposals for the postponed implementation of Basel IV into European law that includes more formal requirements for Financial Institutions to include an assessment of ESG risks and to adequately disclose these risks and their consistency with the EU's overall sustainability strategy. This is to ensure that the influence of ESG risks on Financial sector systemic stability is incorporated in capital adequacy assessments whilst also ensuring that Financial Institutions are contributing to sustainability efforts and complying with the European Green Deal to make Europe the first climate neutral continent by 2050. This is separate to the mandatory obligations to disclose ESG risks as per SFDR and could be a preliminary step to incorporating ESG risks into minimum capital requirements and prudential regulatory frameworks.

The first parameter in understanding Financial Institutions' resilience to ESG risks is by looking at climate-related stress and how climate change may impact their financial performance through their operations but also their lending and investment portfolios. Per an opinion piece in the Business Times, the concept of a stress test came from the recommendation of the Task Force on Climate-related Financial Disclosures ("TCFD") that climate-related stress impacts and its reporting

should include forward-looking scenario planning of a warmer planet. Whilst Financial Institutions are improving their disclosure of ESG and climate related information for their own operations including their policies for doing business with carbon emitting industries and clients, their ability to report the comprehensive impact of climate change on their lending and investment portfolios is weaker given it relies on the disclosure of their customers, something they have much less control of.

That said, Financial Institutions are under pressure. The European Banking Authority ("EBA") released results of a pilot climate risk assessment exercise in May 2021 and the European Central Bank ("ECB") released the results of an economy-wide climate stress test in September 2021 ahead of the launch of a climate stress test for European banks in 2022. This is amongst several other sustainability or ESG related regulatory developments in Europe through 2022 including further progress under SFDR, the replacement of the Non-Financial Reporting Directive ("NFRD") for larger corporates with the Corporate Sustainability Reporting Directive ("CSRD"). Key findings from the EBA and ECB exercises were as follows:

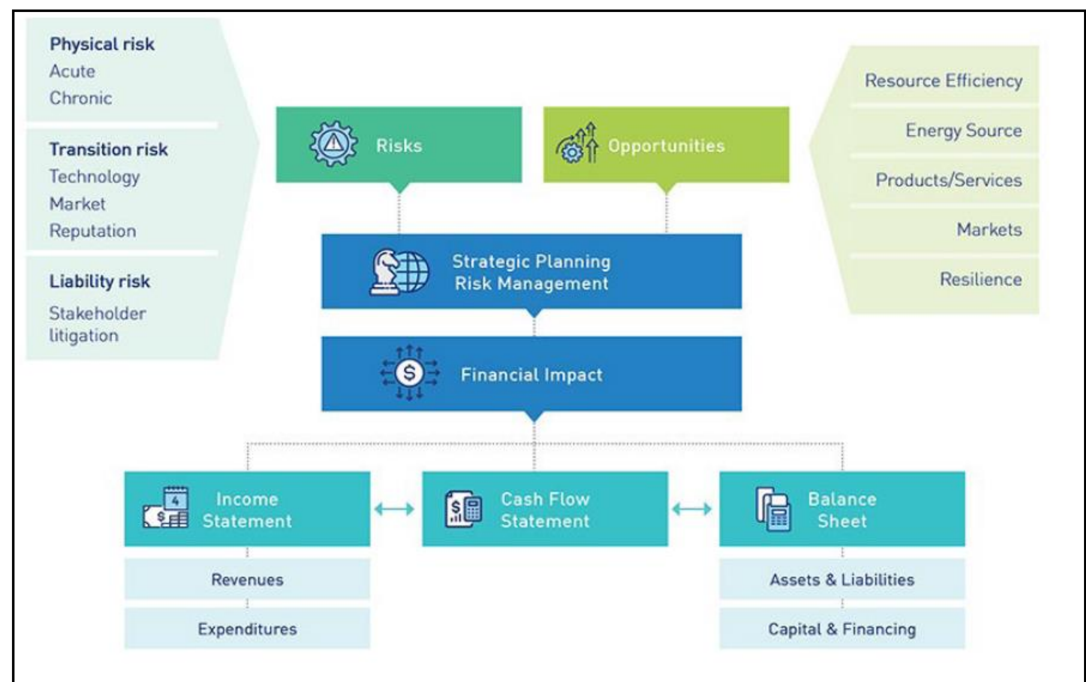
- More disclosure is needed on transition strategies and greenhouse gas emissions to improve climate risk assessments.
- Banks need to improve their data monitoring capabilities and infrastructure to deal with the additional disclosures.
- Climate risk assessment accuracy and results are sensitive to the composition of the bank's loan portfolio based on the size of the borrowers and their exposure to industries susceptible to transition risk and/or with high greenhouse gas emissions.
- Physical risk (economic costs and financial losses from increasingly severe and frequent climate change-related weather events and permanent climate changes, both direct and indirect) represents the dominant negative impact for corporates and financials. This impact increases if there is no policy action.
- While there are transition costs for all firms (business transformation, technological changes), these are lower than the expected costs of not transitioning (or projected costs from higher physical risk).
- Failure of corporates to transition presents a material risk for financial sector stability through projected losses for corporate credit portfolios which increase depending on the severity of climate risks using three scenarios that indicate the transmission channels for transition and physical risks (orderly, disorderly and hot house).
- Governments and Central Banks should implement as soon as possible adequate climate policies, regulatory frameworks and robust stress testing tools to ensure an orderly transition to net zero and maintain financial stability.

The ECB's next climate stress test exercise will commence in March 2022 to test climate risk stress test capabilities as well as exposure to transition and physical risks. The results will be published in July 2022 and will be used as an input into the Supervisory Review and Evaluation Process ("SREP") according to KPMG. SREP is an annual process conducted by the ECB together with local regulators who review a Financial Institution's business model, governance and risk profile to ensure that the Financial Institution has adequate capital and liquidity as well as appropriate risk mitigation strategies and processes. The outcome of the review are entity specific capital requirements (Pillar 2) and recommendations in addition to system-wide minimum capital requirements (Pillar 1) under Basel III.

Other global regulators are also looking at implementing their own climate stress tests. The Australian Prudential Regulation Authority ("APRA") published in September 2021 an information paper that provides an overview of the Climate Vulnerability Assessment and information on what international activities are being done on climate scenario analysis and stress testing. China earlier in 2021 announced that it would monitor financial risks related to climate change and work with

other financial regulators to establish a framework for managing climate change-related financial risks in the future as part of its wider annual stress test exercise in 2021. This announcement was followed in June by People's Bank of China ("PBOC") Governor Yi Gang stating that the PBOC has conducted stress tests to assess climate risks, the results of which will be published in the future. In Singapore, the Monetary Authority of Singapore announced that banks will have to undertake stress tests by end 2022 under a range of climate change scenarios that impact physical and transition risks with mandatory regulatory disclosures on the management of risks related to climate change and other environmental issues. MAS' climate stress test will reference the climate change scenarios developed by the Network for Greening the Financial System ("NGFS") that is made up of 91 central banks and monetary supervisors. NGFS published the second version of their climate scenarios in June 2021 to simplify the climate stress test process by focusing on key factors with economic implications and assuming six possible levels of government action that range from holding temperatures from rising to 1.5 degrees Celsius (prompt government action) to temperatures rising at least 3 degrees Celsius (no improvement in current policies). MAS like other regulators are also consulting the practices and approaches of other global regulators.

Figure 1: Climate risks, opportunities and financial impact



Source: APRA Information Paper – Climate Vulnerability Assessment, 3 September 2022

There are numerous implications for Financial Institutions going forward from climate related stress tests. KPMG highlighted several establishment considerations even before considering the stress test results including:

(1) Set-up of internal people and processes to conduct these stress tests and who will be responsible for its results.
(2) Criticality of data integrity through quantity and quality of data as well as an adequate understanding of the interdependence of different data.
(3) Data analysis may be negatively impacted by the obvious lack of experience in conducting these relatively novel stress tests and difficulty in judging the results. Together with data integrity, results could be highly prone to error.
(4) Additional technology investments by Financial Institutions to ensure data is collated and presented in the ECB provided templates.

The real implications however could occur as a consequence of the stress test results:

- Higher capital requirements will be necessary if exposure to transition and/or physical risks are elevated.
- Financial Institutions may be forced to change the way they do business – particularly if the cost of doing business in certain jurisdictions or with certain clients or industries outweigh the profits.
- Business segments may be de-emphasized where adequate disclosure of ESG related data is challenging, in particular small to medium-sized enterprises.
- Mandatory disclosure of heightened ESG risks may drive capital and investors away from certain Financial Institutions when they may need it most, thereby creating higher credit dispersion and less competition. This may raise costs for consumers and possibly undermine financial sector stability.
- Disclosure obligations may amplify as regulators seek additional and more routine disclosures for Financial Institutions with poor climate risk stress test results.

Climate risk stress tests appear to be a useful and necessary component of the overall package of sustainable finance related regulations. The ultimate challenge however will come from interpreting the results and gaining confidence in their accuracy. The absolute accuracy of the results may not be as important as the process however, especially if it hastens Financial Institutions' actions in driving impactful sustainable finance activities. This may ultimately fulfil the aims of the sustainable finance related regulations jigsaw puzzle, even if it does so in an indirect way.

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

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.

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 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 represents **weaker relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

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.

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.

OCBC Bank

Treasury Research & Strategy

Macro Research

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

Tommy Xie Dongming
Head of Greater China Research
XieD@ocbc.com

Wellian Wiranto
Malaysia & Indonesia
WellianWiranto@ocbc.com

Howie Lee
Thailand, Korea & Commodities
HowieLee@ocbc.com

Herbert Wong
Hong Kong & Macau
herberthtwong@ocbcwh.com

FX/Rates Strategy

Frances Cheung
Rates Strategist
FrancesCheung@ocbc.com

Terence Wu
FX Strategist
TerenceWu@ocbc.com

Credit Research

Andrew Wong
Credit Research Analyst
WongVKAM@ocbc.com

Ezien Hoo
Credit Research Analyst
EzienHoo@ocbc.com

Wong Hong Wei
Credit Research Analyst
WongHongWei@ocbc.com

Toh Su N
Credit Research Analyst
TohSN@ocbc.com

Analyst Declaration

The analyst(s) who wrote this report and/or her or his respective connected persons held financial interests in the following above-mentioned issuers or companies as at the time of the publication of this report: Singapore Airlines Ltd, GuocoLand Ltd, Oxley Holdings Ltd, Frasers Centrepoint Trust, Suntec Real Estate Investment Trust, Mapletree Commercial Trust, Frasers Hospitality Trust, United Overseas Bank Ltd, CapitaLand Integrated Commercial Trust, AIMS APAC REIT, Lendlease Global Commercial REIT, Ascott Residence Trust.

Disclaimer for research report

This publication is solely for information purposes only and may not be published, circulated, reproduced, or distributed in whole or in part to any other person without our prior written consent. This publication should not be construed as an offer or solicitation for the subscription, purchase or sale of the securities/instruments mentioned herein. Any forecast on the economy, stock market, bond market and economic trends of the markets provided is not necessarily indicative of the future or likely performance of the securities/instruments. Whilst the information contained herein has been compiled from sources believed to be reliable and we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee and we make no representation as to its accuracy or completeness, and you should not act on it without first independently verifying its contents. The securities/instruments mentioned in this publication may not be suitable for investment by all investors. Any opinion or estimate contained in this report is subject to change without notice. We have not given any consideration to, and we have not made any investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate.

This publication may cover a wide range of topics and is not intended to be a comprehensive study or to provide any recommendation or advice on personal investing or financial planning. Accordingly, they should not be relied on or treated as a substitute for specific advice concerning individual situations. Please seek advice from a financial adviser regarding the suitability of any investment product taking into account your specific investment objectives, financial situation, or particular needs before you make a commitment to purchase the investment product. OCBC and/or its related and affiliated corporations may at any time make markets in the securities/instruments mentioned in this publication and together with their respective directors and officers, may have or take positions in the securities/instruments mentioned in this publication and may be engaged in purchasing or selling the same for themselves or their clients, and may also perform or seek to perform broking and other investment or securities-related services for the corporations whose securities are mentioned in this publication as well as other parties generally. There may be conflicts of interest between Oversea-Chinese Banking Corporation Limited ("OCBC Bank"), Bank of Singapore Limited, OCBC Investment Research Private Limited, OCBC Securities Private Limited or other members of the OCBC Group and any of the persons or entities mentioned in this report of which OCBC Bank and its analyst(s) are not aware due to OCBC Bank's Chinese Wall arrangement.

This report is intended for your sole use and information. By accepting this report, you agree that you shall not share, communicate, distribute, deliver a copy of or otherwise disclose in any way all or any part of this report or any information contained herein (such report, part thereof and information, "Relevant Materials") to any person or entity (including, without limitation, any overseas office, affiliate, parent entity, subsidiary entity or related entity) (any such person or entity, a "Relevant Entity") in breach of any law, rule, regulation, guidance or similar. In particular, you agree not to share, communicate, distribute, deliver or otherwise disclose any Relevant Materials to any Relevant Entity that is subject to the Markets in Financial Instruments Directive (2014/65/EU) ("MiFID") and the EU's Markets in Financial Instruments Regulation (600/2014) ("MiFIR") (together referred to as "MiFID II"), or any part thereof, as implemented in any jurisdiction. No member of the OCBC Group shall be liable or responsible for the compliance by you or any Relevant Entity with any law, rule, regulation, guidance or similar (including, without limitation, MiFID II, as implemented in any jurisdiction).

Co.Reg.no.:193200032W