Navigating climate risk stress tests in the financial landscape

Banks and financial intermediates are tackling the dual challenges of physical climate-related and environmental risks as we are transitioning to a low-carbon future. Understanding and pricing these risks is crucial for financial stability, capital allocation, and driving sustainability. The consequences go beyond economic impacts, affecting health, social equality, and environmental degradation. Central banks and policymakers are embracing stress-testing methodologies to assess the financial implications of climate-related and environmental risks. By unraveling these risks, we can navigate towards a resilient and sustainable future.

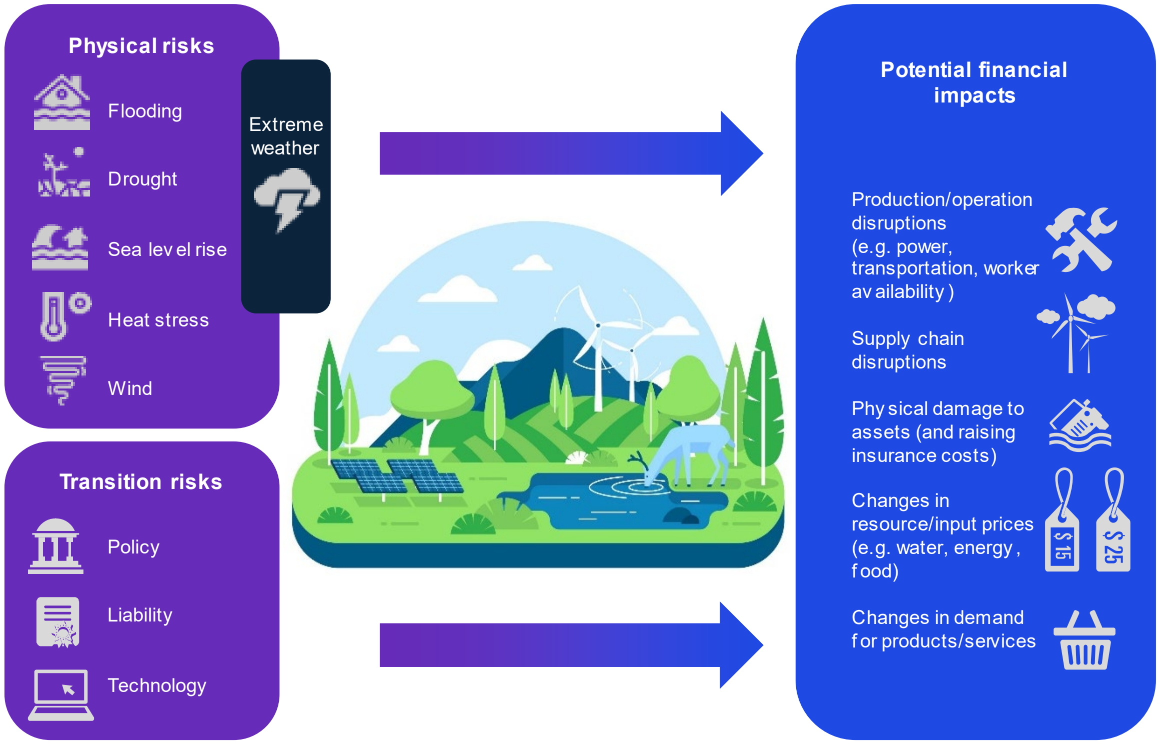

Figure 1: The potential financial impact of physical and transition risks (UNEP, 2021)

In Indonesia, climate stress assessment scenarios are being implemented with the support of the financial services authority (*Otoritas Jasa Keuangan* or OJK) to address the risks associated with climate change. As part of this framework, banks are encouraged to integrate climate-related and environmental risks into their existing risk management processes. This involves performing scenario analyses that identify and measure risks within specified timeframes. The quantitative assessment focuses on evaluating the impact of transition and physical risks (which are the primary risks considered in the climate risk stress test) on credit and market risks. On the other hand, operational and other risks are evaluated qualitatively. Banks are required to assess both the short-term and long-term effects of climate risks on their overall financial health. To ensure accuracy and consistency, banks are advised to incorporate aspects of climate risk into their data requirements and stress testing methodologies, leveraging key variables and data published by the Network for Greening the Financial System (NGFS) in their analyses. This approach aims to enhance the resilience of the banking sector in the face of challenges related to the implementation of climate stress assessment scenarios in the banking sector in Indonesia.

In the context of climate risk stress testing, the findings from the KPMG 2022 CEO Outlook survey[1] are particularly relevant. The survey reveals that 38 percent of organizations are committed to investing 6 percent to 10 percent of revenue to enhance their sustainability efforts, highlighting their dedication to addressing climate-related and environmental risks. While this signals a strong commitment, further capital investments are identified as crucial to accelerate progress. Additionally, 28 percent of respondents believe that failing to meet stakeholder expectations for ESG, including climate-related risks, could lead to higher financial costs or difficulties in raising finance. Hence, fostering a proactive environment that supports organizations in achieving their ESG ambitions becomes paramount, facilitating the transition into a low-carbon economy and fostering growth in the financial industry.

[1] Please see also KPMG 2022 CEO outlook survey https://kpmg.com/xx/en/home/insights/2022/08/kpmg-2022-ceo-outlook.html

CEOs are also recognizing the vital connection between digital transformation and ESG, as 74 percent of them emphasize the inextricable link between their organizations' digital and strategic investments in environmental, social, and governance initiatives. With CEOs facing growing accountability to supply chains and broader stakeholders, the success of their endeavors hinges on the effectiveness of their digital systems. In this scenario, multinational organizations must extend their focus on ESG considerations to encompass all aspects of their operations, including the shadow cast by the organization, to effectively navigate climate-related challenges and ensure financial resilience.

Banks and other financial institutions will be impacted indirectly from these ESG transformations and therefore should start to monitor their counterparties closely. These survey results indicate that CEOs expect that low carbon economy initiatives will adversely affect financial performance and may impact their credit ratings, as rating agencies have started to incorporate ESG factors into their assessments. In climate risk stress tests, particularly when looking at transition risks, the performance of corporate borrowers needs to be thoroughly analyzed by the banks because their risk portfolio will move (e.g., changes in the probability of default due to these green initiatives).

Physical risks reflected in climate risk stress tests will require banks to start monitoring data related to collateral provided as loan securities, and the climate change impact on asset values. It would be reasonable to expect that the parameters for climate risk stress tests may incorporate data collated by national agencies by region on climate and related perils to provide for consistency across banks with similar direct and indirect locational risks.

In conclusion, climate risk stress testing has become an indispensable tool for banks and financial institutions in Indonesia to navigate the complex challenges posed by climate change and the need for sustainability. With the increasing awareness of climate-related risks and their potential impact on the financial landscape, Indonesia is taking a significant stride towards building resilience in the financial sector. However, it is essential for all stakeholders, including businesses, policymakers, and individuals, to actively participate in these efforts. By collectively recognizing the importance of climate risk assessments and by taking decisive action, we can collectively navigate the challenges posed by climate change and forge a sustainable future for Indonesia and the world.

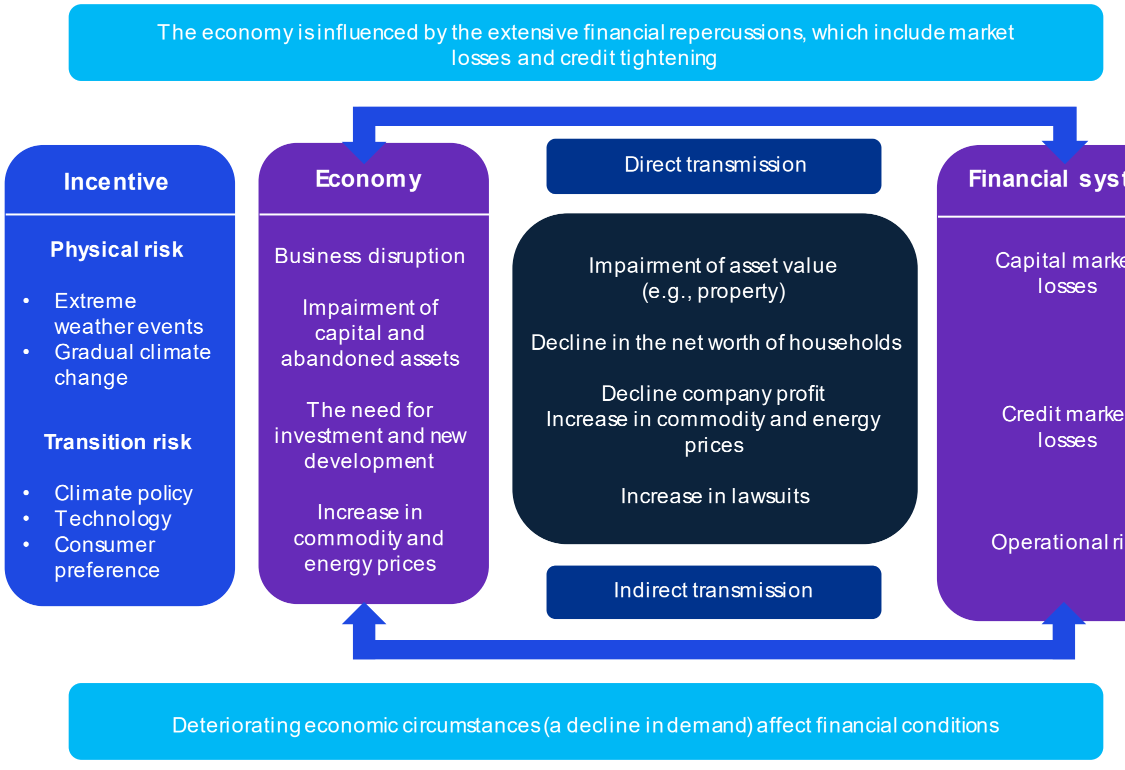

Figure 2: Schematic diagram of physical and transition risks in banking related to climate change (OJK, 2023)

KPMG notes:

- Financial institutions play a decisive role in the global transition to a more sustainable economy.
- Integrating climate-related and environmental risks into the banking business and risk strategies will require significant effort from the banking sector due to several existing challenges, such as the availability and consistency of climate and environmental related data.
- Banks needs to monitor policy changes, technology advances and social dynamics that occur in their counterparties and customers and assess their impact in the climate risk stress test, particularly regarding transition risks.
- For the climate risk stress test - physical risk, banks should start to collect data regarding acute natural disasters and long-term trends in climate patterns and observe the correlation with their debtors' asset values.
- Proactive integration helps financial institutions better navigate towards their climate-related and environmental targets and strengthen their decision-making processes, particularly in credit lending.
- Regulators and supervisors have launched several initiatives and guidelines to help banks in this journey to meet all necessary requirements.

Sources:

- UNEP FI's Comprehensive Good Practice Guide to Climate Stress Testing Definition Climate Risk Stress Tests in Indonesia, 2021
- Climate Risks in the Industrials Sector, UNEP, 2023
- *Panduan Climate Risk Stress Testing untuk Perbankan*, OJK, 2023
- KPMG 2022 CEO Outlook, "Growth strategies in turbulent times" https://kpmg.com/xx/en/home/insights/2022/08/kpmg-2022-ceo-outlook.html

Contact us

Siddharta Widjaja & Rekan
Registered Public Accountants
33rd Floor Wisma GKBI
28, Jl. Jend Sudirman
Jakarta 10210, Indonesia
T : +62 21 574 2333 / 2888
F : +62 21 574 1777 / 2777

KPMG Siddharta Advisory
21st Floor Menara Astra
5-6, Jl. Jend. Sudirman
Jakarta 10220, Indonesia
T: +62 21 80602828
F: +62 21 80602830

Angga Pujaprayoga
Director, ESG Assurance Leader
Audit and Assurance Services
Angga.Pujaprayoga@kpmg.co.id

Denny Hanafy
Head of Risk Consulting
Denny.Hanafy@kpmg.co.id

Dian M. Listya
Director, Financial Risk Management
Dian.Listya@kpmg.co.id

Michael Horn
Head of Turnaround & Restructuring Services, Head of ESG Advisory
Michael.Horn@kpmg.co.id

kpmg.com/id

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.