VIEW POINT

THE (UN)SURPRISING IMPACT OF CLIMATE CHANGE ON THE FINANCIAL SECTOR.

Abstract

The impacts of climate change have never been clearer. Natural disasters in the recent decades are telling of the havoc climate change can create on the environment, our lives, and the world economy. Countries and corporates are taking note and planning their way towards a lower carbon strategy.

The financial sector, however, finds itself in a precarious situation, owing to the diverse sectors it caters to. For starters, climate change has a direct implication on risk exposure for the financial sector (banks, financial services and insurance companies / BFSI). Therefore, it makes sense to evaluate investments from an ESG (Environmental, Social and Governance) perspective to manage risk. But it's not just about minimizing risk. The financial sector can have a direct impact by driving the transition to low-carbon economy through the creation of relevant financial instruments.

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The growing risks of climate change

It is no surprise that climate change and related natural disasters are amongst the top 5 risks identified by the World Economic forum[1]. Because the financial sector conducts business across all industries, they have to be even more adaptable to changing landscapes. The sector is impacted not only by the climate change risks of its own business but also, by those faced across sectors they work with. For example, sectors like oil and gas, power, transport, and automobile are seeing impact. It is incumbent upon the financial sector that they prepare and adapt to these risks, in order to counter the challenges presented to them as well as their clients.

Risks faced by the financial sector can be classified as:

Transition risk: These include regulatory risks (current or emerging regulations), change in market preferences and/or customer behavior, policy changes, technology, and reputational risks.

Physical risk: These include regulatory risks (current or emerging regulations), change in market preferences and/or customer behavior, policy changes, technology, and reputational risks.

If these risks are not assessed or managed well, both by the financial institutions themselves and their clients, they can result in massive economic losses. In 2017 alone, natural disasters caused overall losses of US$ 340bn, with insured losses of about US$ 128bn[2]. The financial sector needs to ensure an effective climate change risk management process is in place to assess these risks and plan for adaptation or mitigation measures as needed.

The financial sector also plays a vital role in helping low-carbon transition, i.e.: 'adaptation' and 'mitigation'. These could be by means of financing the green transition or creation of green bonds, etc, thereby fueling innovation and research in the space. Financial institutions could also include stringent criteria on climate change risks management process, while evaluating investment or credit ratings.

[1] http://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf

[2] https://www.munichre.com/content/dam/munichre/contentlounge/website-pieces/documents/TOPICS_GEO_2017-en.pdf

Global actions being taken in this space

In December 2015, 196 countries adopted the Paris Agreement with the aim of limiting global warming to well below 2°C, to fight climate change. This would mean a dramatic shift in way we live and function today. This would also call for action by Governments, policy makers, and corporates, amongst other entities.

Taking note of the growing natural disasters, and the economic and social loss created, today most financial regulators, rating agencies and sector experts are formalizing new requirements on climate change risk management and reporting. For example: in 2017, G20 Finance Ministers, Central Bank Governors, and the Financial Stability Board (FSB) came together to form the Taskforce for Climate Financial Disclosures (TCFD). TCFD reporting is designed to aid well-informed investment, credit, and insurance underwriting decisions, which enables investors and stakeholders to better understand the financial sector and system's exposures to climate-related risks.

The Network of Central Banks and Supervisors for Greening the Financial System (NGFS), a network of 83 Central Banks and financial supervisors around the world, was created to accelerate the scaling up of green finance and develop recommendations for central banks' role for climate change.

Today many regulators have requirements around climate change risk management:

- **UK, Prudential Regulation Authority** require banks to identify, measure, quantify, and monitor exposure to climate risks
- **UK, Bank of England's biennia exploratory scenario (BES)** explores the financial risks posed by climate change to determine the UK's financial exposure and changes needed to make the economy resilient
- **EU, European Banking Authority (EBA)** is establishing regulatory and supervisory standards for ESG risks and has published a multi-year Sustainable-Finance Action plan. (The EBA will likely provide a blueprint for USA, Canada, Hong Kong, and more)[3]
- **Australia, Australian Prudential Regulation Authority** recently implemented requirements for the management of climate change financial impacts for all its regulated entities
- **Singapore, Monetary Authority of Singapore** proposed new guidelines to help firms address environmental risks and transition to an environmentally sustainable economy

While these are just some examples, the trend is indicative of a future with an impetus on integration of climate change risk assessment across all sectors, including financial institution risk frameworks.

[3] https://www.mckinsey.com/business-functions/risk/our-insights/banking-imperatives-for-managing-climate-risk

Transitioning to a low-carbon economy

Financial institutions play a vital role in the world's low-carbon transition. An effective transition to a low-carbon economy requires an immediate and large shift in energy, land, urban, infrastructure and industrial systems as they are today.

This transition therefore requires significant funds that only the capital markets can provide. For the financial sector, this presents a great opportunity. However, the sector must do more to understand its overall climate impacts and the risks faced from its financing activities.

As a financial institution, you can prepare for climate risks by:

1. Integrating climate change risk assessment into their overall business.
2. Considering climate scenario analysis for assessing company's resilience to climate risks.
3. Evaluating exposure to climate change risks for every investment, lending, credit risk assessment, or underwriting decisions.
4. Investing on capacity building both internally and for clients on climate change risks and its impacts. Collaborating with experts and thinktanks in the space to understand financial impact assessments for the same.

Aiding low carbon transition

The OECD estimates that to meet Paris Agreement goals, financing and refinancing in the renewable energy, energy efficiency and low-emission vehicle sectors have the potential to reach USD 620 to 720 billion in annual issuance and USD 4.7 to 5.6 trillion in outstanding securities by 2035 in the automobile sector alone.

The financial sector can aid low-carbon transition by funding projects that help in:

1. Reducing our dependence on fossil fuel-based power and old inefficient systems, and transitioning to clean power sources
2. Steering technological innovations that reduce carbon emissions (eg. electric vehicles) or help in energy storage
3. Evaluating climate change related micro-finance options
4. Considering advisory on carbon risk services for clients

The CDP financial sector report 2020 shows that amongst the 332 financial institutions that reported on CDP in 2020, over 76% see these opportunities from low-carbon transition products like sustainability-linked loans, green and transition bonds, sustainable investment funds and insurance solutions. The opportunities for just these companies who reported on CDP, is estimated to be about USD 2.9 trillion.

Tech powering innovation

The finance sector now more than ever needs to forecast more effectively and adapt continually to changing pressures. The right data and insights solutions can help build climate forecasting into your models to increase value while better managing risk.

Partnering with world-leading tech providers such as Microsoft and Infosys gives organizations the ability to quickly gain insights from data at any scale and build customized risk and rewards profiles to both account for climate change, as well as promote positive change with green bonds, loans, and more.

Infosys is already working on driving workplace transformation, as well as building smart spaces, energy management and similar sustainability related platforms that can help clients in their low carbon transition. Infosys is able to do this by leveraging Microsoft's Azure, edge and IoT technology along with Infosys's global array of innovation hubs to develop robust connected ecosystems.

Having gone through the climate risks assessment studies ourselves, as well as having achieved carbon neutrality, Infosys can use its own sectoral expertise along with the above tools and platforms, to help the financial sector in their journeys.

A sustainable future for your organization and the world

The overwhelming proof of climate change and its impact is ushering in stringent regulatory requirements on climate change risk management in the not so far future. Better preparation for climate change is in the best interest of financial institutions not only for managing these risks, but also for realizing the opportunities presented in the form of low carbon investments, green bonds, catastrophe bonds, green loans, green funds, sustainable investment funds, insurance solutions, and green securities.

The role of the financial sector in achieving low-carbon transition has been elicited in the Paris Agreement. Its aim includes "making finance flows consistent with a pathway towards low-carbon and climate resilient development". The financial sector should therefore, with collective leadership in low-carbon transition and collaboration, ensure effective climate change risk management.

Discover more

We've developed a series of opinion pieces on sustainability based on the pillars of ESG across some of the different industries our clients operate in.

Take a look at the papers below to discover the main sustainability challenges and trends in your industry today and how Infosys can help you get the best of both worlds, profits and ethics, with an ESG approach.

ESG approach »

Fashion »

Food »

About the author

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Mathsy is a Regional Head at Infosys, with about 19 years of experience in the environment and climate change space. She has played a pivotal role in helping assess and manage the climate change risks for Infosys. Her areas of expertise include carbon neutrality, GHG footprint, climate change risks management, carbon offsetting, ESG and auditing. She has to her credit helping Infosys achieve its carbon neutral commitment in 2020, 30 years ahead of the Paris agreement.

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