

Decarbonising finance: Lesson from world economies as India's central bank addresses climate risk

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India's central bank, the Reserve Bank of India (RBI) has recently embarked upon a consultation process on climate change with various stakeholders. Climate risk is inherently systemic. A siloed approach is, therefore, dangerous. Other financial services regulators should be drawn into the exercise. This submission made to the RBI discusses a few emerging risks and good practices across many economies.

The breadth and scope of the RBI exploration is impressive. However, there are some critical missing components. Moreover, looking at policies and their implementation there is many a slip between the cup and the lip. The endeavour here is to highlight some successful global approaches. Needless to mention, a siloed approach to financial services is a rather dangerous approach.

The price for not having a unified financial services regulator: Onus falls on the RBI

In an open letter sent to policymakers in the European Parliament, Finance Watch and 13 partners called for the inclusion of mandatory transition plans and capital requirements for climate-related risks in their review of the EU banks' and insurers' prudential rules.¹

Clearly, Indian banks need to account for climate risk with US\$84bn at stake, as global sustainability disclosure platform CDP has said.² However, in not including financial institutions other than banks in the RBI review, the Indian economy will be doing only lip service to the challenge of climate change, particularly when there are banks who own insurers and the likes of LIC, which not only owns a bank but is a major investor in Coal India and the National Thermal Power Corporation of India (NTPC). Amongst the top 20 financial actors in the world owning half of the world's oil-gas-coal emissions is India's HDFC Asset Management. Should key financial sector players like this stay off the radar?³

Superannuation and managed funds: Lessons from Australia

For superannuation and managed funds in Australia, asset valuation risk is typically borne by the investor, not the trustee. So while investment funds seeking to maximise the return for investors need to

¹ Finance Watch, [Open letter: banks and insurers must account for climate risk](#), 7 July 2022

² S&P Global Market Intelligence, [India banks need to account for climate risk with \\$84B at stake, warns nonprofit](#), 7 March 2021.

³ Mining.com, [Ten financial actors own half of the world's oil, gas, coal emissions – study](#), 24 July 2022.

take into account the risks and impact that climate change will have on asset prices, the trustee does not face the physical and transitional risks of climate change. But assessing the sensitivity of the stranded asset risks and potential return on particular investments to climate change is difficult, given the inconsistent and incomplete information available and the absence to-date of clear and high price on carbon emissions (although with the safeguard mechanism review underway, this is starting to be addressed). That said, while super funds don't operate as direct channels of financial stability risks from climate change, they could become indirect channels if they were to contribute to rapid price falls through large sales.

There is also the third risk related to climate change, and that is liability risk. Insurers, banks and super fund trustees all face liability risk if they do not disclose, address and manage the effects of climate change sufficiently for their customers and owners. Ensuring they provide detailed information on their exposure to climate risk is important in managing liability risk.

Financial regulators and climate change financial risk

Given financial regulatory agencies have mandates covering the efficiency and stability of the financial system, they have a strong interest in the effects of climate change. For this reason, the Council of Financial Regulators (CFR) - comprising the Australian Prudential Regulation Authority (APRA), the Australian Securities and Investments Commission (ASIC), the Reserve Bank and the Australian Treasury - created a Climate Working Group back in 2017.

To fulfil their mandates in the face of climate change, the CFR agencies seek to ensure that financial institutions and other firms produce and disclose high-quality, consistent information about the climate-related risks and that they carefully manage those risks. These issues are also the focus of a substantial amount of work in international forums in which CFR agencies participate. Each CFR agency uses these connections to inform domestic policy and to consider the implications for Australian entities' participation in global financial markets.

“You can’t stock-pick your way out of environmental collapse”, warns superannuation boss David Neal, whose IFM Investors manages \$200bn.⁴ Neal says global heating could slash portfolios by up to 40%. Pension funds must use their global power as big investors to push “the new clean economy” to avoid an environmental collapse.

“They will and are impacting our entire economy. And these impacts will compound such that future market returns will deteriorate and many of the superannuation members we are investing for will have much lower retirement incomes as a result.”

⁴ Guardian, [You can't stock pick your way out of environmental collapse, superannuation boss warns](#), 12 September 2022.

Neal said a transition to net zero emissions by 2035 was conservatively estimated to slash 14%, or US\$7tn, from pension assets if not done in an orderly way. “That’s a lot of pensions not paid. That’s a lot of workers delaying their retirement and a lot of workers with a less dignified retirement. It also constitutes a failure of our fiduciary obligations to investors.”

Rabobank and the Dutch way

In an excellent piece, Lorenzo Migliorato at Risk.net dissects Rabobank's recent downgrading of its agricultural loans because of heightened climate transition risk:⁵

"The world's governments are yet to clearly articulate the nitty-gritty of net-zero policies, and the costs may be borne by companies seemingly far removed from the sectors more directly responsible for most emissions. As governments set climate targets in stone through legislation, draconian portfolio-level moves like Rabobank's may become a regular fixture of banks' risk management.

“What does it take for a €10.3 billion loan (US\$10.5 billion) portfolio to deteriorate in quality overnight? A market seizure? A trading mishap? A pandemic? For Rabobank, it was the unveiling of plans by the Dutch government to make the country's air safer to breathe. Measures outlined in June by prime minister Mark Rutte's cabinet to tackle the Netherlands' longstanding nitrogen oxide pollution problem - the legacy of decades of intensive livestock farming - sparked loud protests by farmers, fearing the new government targets could make their businesses unsustainable.

“That prospect led Rabobank - the country's main financier to the agricultural sector - to classify its entire exposure to the Dutch dairy industry under stage two of the International Financial Reporting Standard loan-loss framework, indicating a heightened risk of default. It's a clear-cut example of climate transition risk - the potential that borrowers may default as new requirements to tackle the climate emergency prove too financially onerous. So sweeping would be the impact of Rutte's reforms on the farming sector that talk of loan forgiveness has made news - although the idea was firmly rebutted by the bank.”

Indian case calls for a multi-pronged approach

While these are just a handful of scenarios, they make a compelling case for widening the scope of the RBI review to encompass, in the words of the open letter from Finance Watch and others,⁶ “the adoption of a holistic set of rules to ensure banks, insurers (and all other financial institutions) identify, manage and mitigate climate-related financial risks. Mandatory transition plans and targets should be part of the requirements and should be integrated into bank and insurance risk management processes, governance and subject to supervisory scrutiny.”

⁵ Risk.net, [Net-zero pledges bring big unknown for credit risk](#), 19 August 2022.

⁶ Ibid, [Finance Watch open letter](#), 7 July 2022.

“Recognising the many voluntary initiatives and efforts made by financial institutions to manage their transition risks and impacts on climate, regulators should ensure accountability, as well as robustness and comparability of the reported efforts and progress made. Transition plans should be complemented by robust capital requirements to cover potential future losses, in particular resulting from the financing of fossil fuels”.

Since climate-related risks are forward-looking, non-linear and highly uncertain, academic experts, regulators, supervisors and financial institutions alike recognise that measuring these risks with any degree of precision is currently out of reach. By the time historical data is available, it will be too late.

As Elizabeth McCaul from the ECB has written, “In order to properly understand their exposure to climate risks, banks need to gain insight into their clients’ transition plans. To be clear, we are not asking banks to divest from carbon-intensive activities. Rather, we are asking banks to fully grasp and manage transition risks in order to make their portfolios more resilient. This means that banks should evaluate what transition entails for their risk exposures to sectors that will continue to be reliant on carbon-intensive technologies for some time and reflect their evaluation in their overall risk management. Not all sectors will decarbonise overnight.”⁷

A June 2022 Finance Watch report asks “How finance can contribute to making the world reach its greenhouse gas net-zero target”.⁸ As it stands, this cost looks like it will be on public budgets and taxpayers, as the financial sector is successfully delaying the inevitable transition to a more sustainable economy and the building up of adequate capital buffers to absorb upcoming losses. Billions of dollars in profit have been spent by financial institutions on dividends and share buy backs rather than on engaging with their clients, transitioning business models and financing a just energy transition.

Biodiversity, human health

A report by the UK Finance for Biodiversity Initiative⁹ says that “biodiversity loss¹⁰, decline of ecosystem services, and overall environmental degradation can hit economies through multiple channels. The combined macroeconomic consequences can impact firms, sovereign creditworthiness and investors. Although there is definitely more to nature than the value of ecosystem services, the methodologies published and applied by leading credit rating agencies (CRAs) do not explicitly incorporate biodiversity and nature-related risks.

⁷ Elizabeth McCaul, for EuroFi Magazine, [Climate transition: risks and opportunities](#), 7 September 2022.

⁸ Finance Watch, [The problem lies in the net: How finance can contribute to making the world reach its net zero target](#), June 2022

⁹ Bennett Institute, [Nature loss and sovereign credit ratings](#), June 2022.

¹⁰ Hans Stegeman LinkedIn post: [Biodiversity loss, decline of ecosystem services, and overall environmental degradation can hit economies through multiple channels](#).

Omitting them may ultimately undermine market stability. This report is a first attempt to do so. Investors who rely on nature-blind measures of creditworthiness will be unable to correctly identify, price, and manage risk across their portfolio.

Backward-looking risk assessments are insufficient. Whilst it is important to acknowledge that nature loss and climate change have already begun to impact the cost of borrowing for some sovereigns, investors should apply forward-looking risk metrics.”

Is it difficult to include those risks? According to the authors: "Conceptually, incorporating biodiversity - and nature-related risks into sovereign ratings is no different from incorporating other highly uncertain risks such as geopolitical risk. Indeed, the risk of biodiversity loss can be precisely quantified and geographically localised. Given the potential size of the related economic risk for individual sovereigns, the inclusion of nature risks into sovereign risk frameworks is not only expedient, but inevitable.”

"In particular, we are unable to include air quality in the current analysis, which has a direct effect on health, human capital formation, and labour productivity. Similarly, soil health is not included, which impacts agricultural productivity. The effects of biodiversity loss on many high-income countries are also more difficult to assess. While the GDP dependency of these countries on biodiversity and ecosystems services tends to be smaller than in developing countries, it is not negligible, and given the already highly depleted status of their ecosystems, the risk of partial ecosystem collapse for these countries is comparatively high."

In other words, figures in the reports are probably an underestimation of real risks. It would, therefore, be important for Central Banks to do the same kind of exercise on bank exposures. The Dutch Central Bank builds scenarios to assess the impacts of biodiversity loss on the financial sector.

Decarbonising reserve funds: the Singapore way

The Monetary Authority of Singapore (MAS) has announced a plan to decarbonise its US\$300bn reserve fund, amid increasing global interest in the climate footprint of central banks’ foreign exchange (forex) portfolios.

In a speech in late July,¹¹ managing director Ravi Menon revealed that the MAS will instruct external fund managers to integrate climate change considerations into their investment process, and work with other shareholders to ensure portfolio companies have robust transition plans.

In measures due to take effect next year, the MAS will also tilt its equities investments towards climate-friendly companies, and exclude equities and bonds from companies deriving more than 10% of their revenues from thermal coal mining and oil sands. Menon said that as a result of its actions, the

¹¹ Ravi Menon, [MAS Sustainability Report 2021-22 media conference](#), 28 July 2022

central bank expects to reduce the weighted average carbon intensity of its equities portfolio by up to 50% by 2030 against a 2018 baseline.

The forex reserves of central banks are increasingly being scrutinised over their climate impact and potential role in the net-zero transition. A recent paper from the Inspire research network¹² stresses the important example that central banks can set through their reserves management for other actors in the financial sector.

Sanitising fiduciary space

The majority of directors at the world's biggest banks have affiliations to polluting companies and organisations, a DeSmog investigation shows.¹³ The findings raise concerns over a systemic conflict of interest at a time when the international financial sector is under increasing pressure to stop funding fossil fuels.

DeSmog's analysis found 65 percent of directors from 39 banks had 940 past or current connections to industries that could be considered climate-conflicted. Directors with affiliations to companies involved in extracting oil, gas and coal - the world's most polluting energy sources - were well-represented across bank boardrooms, with 16 percent of all board members having current or previous roles in the polluting energy sector.

There were also significant ties to banks and investment vehicles supporting polluting industries, as well as to think tanks and lobbying groups with a history of campaigning against climate action. "Having its fingers in all the pies allows the fossil fuel industry to quietly put its thumb on the scales of institutional decision making, helping delay action and protect the status quo."

What about the retail customers?

Are you funding global warming every time you make a bank deposit? If you are with one of the major banks, your money is likely to be funding fossil fuels. Here's how to find out more and consider making a switch.

[Climate & Capital Media](#) is partnering with the climate fintech startup, [GreenPortfolio](#), to support its efforts to bring transparency to the relationship between finance and climate change for American consumers.

What happens to your money when it is deposited in a bank? Chances are you never worry about it as long as you think your money is safe. But as the global climate crisis escalates, you may want to take a closer look at your bank and whether it is using your money to fund fossil fuel projects worldwide.

¹² Inspire, [Sustainable management of central banks' foreign exchange reserves](#), 19 July 2022.

¹³ DeSmog: [Revealed: The climate-conflicted directors leading the world's top banks](#), 6 April 2022

According to banking watchdog BankFWD and the Rainforest Action Network (RAN), the top 60 U.S. banks have provided \$4.6 trillion to the fossil fuel industry since 2016.¹⁴ Compare that to the \$203 billion in bonds and loans that have gone toward renewable projects¹⁵ - a mere 5% of what has gone into fossil fuel financing. Even as the International Energy Agency (IEA) has made it clear that there can be no new coal, oil and gas projects to remain below 2 degrees Celsius of warming,¹⁶ banks continue to provide a staggering amount of cash to finance them.

Green Impact Exchange: Greenwashing versus ESG

Greenwashing is perhaps the biggest obstacle to successful ESG integration. We need innovative solutions to address this problem. A clever idea in this space is the venture launched by veterans of exchanges, especially the NYSE. Essentially, companies that want to credibly signal their green credentials can list on the [Green Impact Exchange \(GIX\)](#) and comply with its rigorous green standards. Dual listing on GIX is an instant stamp of green credentials instead of fiddling with ESG ratings, and the confusing world of several NGOs who give companies a thumbs up or a thumbs down.

Last but not the least: Synergy

From North America to down under we have seen higher frequency and severity of flood losses, the result of creating assets in flood plains and vulnerable geography. It is not so much about lack of regulations - for want of which banks continue to lend and insurers readily cover - as it is about lack of common sense. Why else would Indian financial institutions continue lending to build dams in seismically hyper-sensitive terrain with resultant unintended ecological consequences? What makes frantic asset creation continue in a sinking metropolis? The entire length and breadth of the country could be potentially littered with stranded assets. And all fingers will point at climate change.

In conclusion

While this is not a comprehensive account, the above-mentioned are some of the challenges posed by the burgeoning climate crisis to our financial system. Climate does not recognise silos - its onslaught is systemic. Ironically, the architecture of our financial system, as it metamorphoses, manifests in growing cross-holdings or ownerships. That itself poses systemic triggers - whatever 'too big to fail' size various entities may assume. On the other hand our regulatory oversight remains fragmented. Climate triggers, therefore, provide both an opportunity as well as threat. This is the time to act with urgency.

Related to this fragmentation is the handling of Environmental, Social & Governance (ESG) considerations. Each of our financial regulators operates in a different frame of reference. The insurance

¹⁴ RAN et al, [Banking on climate chaos: fossil fuel finance report](#) 2022.

¹⁵ Barrons, [Big Banks are funding climate disaster: Business needs to push back](#), 27 August 2021.

¹⁶ IEA, [Net zero by 2050: a roadmap for the global energy sector](#), May 2021.

regulator has not even entered the ESG ring. The International Financial Reporting Standards (IFRS) disappointed by omitting sustainability. The birth of the International Sustainability Standards Board (ISSB), a key driver of global standardisation of reporting, has seen some significant strengthening of late.¹⁷ The key issue that was missing was ‘double materiality’,¹⁸ which recognises that an entity must take responsibility for its impacts on the world at large. Factoring in carbon pricing – and, critically, including Scope 3 emissions – can make the transition to a decarbonised world a lot easier. But we live in challenging times.

¹⁷ ESG Clarity, [ISSB standards to include scope 3 emissions](#), 21 October 2022.

¹⁸ Thomson Reuters, [“Double materiality”: New legal concept likely to play in debate over SEC’s climate plan](#), 12 April 2022.