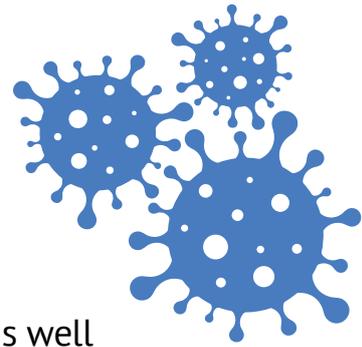


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# How coronavirus could reshape the world



Pandemic recovery choices will shape our future climate, as well as our economic structure, says Professor Jonathan Williams.

**T**he COVID-19 pandemic is emphasising just how important it is to consider the shape of our future economic structure. Specifically, how restructuring could provide further opportunity for nations to actively tackle climate-related concerns. Such steps would be a logical extension of the Paris Agreement of 2015 and the pledges of 190 signatories to reduce emissions and limit the rise in global temperatures to below 2°C above pre-industrial levels.

In the absence of regulatory actions, the multitude of potential climate-change impacts could pose a significant challenge to central banks charged with maintaining financial stability. Policymakers are acutely aware that legislation should provide an incentive for financial flows that are compatible with climate-based objectives.

One theoretical challenge facing legislators seeking to encourage a reallocation of capital from climate-insensitive investments towards climate-friendly ones is that climate is a public good, which has characteristics that cannot be priced. While citizens benefit by consuming public goods, private firms do not internalise the broader societal gains and will under-provide such goods. Public goods entice free riding because firms have little incentive to voluntarily protect the environment in the absence of directly observable prices and tradable markets. Free-riding incentives are compounded in the

presence of large numbers of firms and the belief that individual actions will not produce meaningful impacts. Coordination problems, for example between sovereign governments with different objectives, can adversely affect provision of public goods such as stable climate.

## Commitments to change

Since 1992, the United Nations Environment Programme Finance Initiative (UNEP FI) has aimed to encourage firms in the private and financial sectors to adhere to the UN's Sustainable Development Goals (SDGs). The UN's Principles for Responsible Banking provide a framework to ensure that signatory banks' strategy and practice align with the vision set out in the SDGs and Paris Agreement. To date, nearly 200 banks from around 50 countries and representing around 40% of the banking industry are signatories to the Principles. The UN has also set out Principles for Sustainable Insurance and Responsible Investment.

At national level, the Bank of England set out proposals for stress testing the financial stability implications of climate change in December 2019. Called the Biennial Exploratory Scenario (BES) exercise, the stress tests are scheduled for mid-2021 and follow the 2019 Insurance Stress Test.

The Prudential Regulation Authority (PRA) has also set out its expectations as to how firms should manage the financial risks from climate change. The PRA expects

**“Economic restructuring could provide further opportunity for nations to actively tackle climate-related concerns.”**

boards of directors to understand and assess the risks from climate change that affect their businesses. Firms should address these risks within their business strategies and risk appetites, and boards should take a longer-term view of financial risks that could arise beyond standard planning horizons.

**A global financial risk**

Financial risks from climate change originate via two channels: physical risks and transition risks. Physical risks from climate change include effects associated with storms, floods, wildfires and heatwaves, as well as longer-term changes in climate, for instance, sea level rises, extreme weather variability, and changes in precipitation.

The implications for insurance are clear cut: for example, an increase in flooding could affect collateral values held by banks and increase their credit risks. Transition risks arise from the adjustment process of moving towards a low-carbon economy. They can include risks associated with developments in policy and regulation, emergence of technologies that could disrupt business models, shifts in sentiment, and societal preferences. Essentially, tighter energy standards and the introduction of more efficient technologies in addition to companies’ inability to accommodate changes could lead to falls in the value of assets held by banks thus prompting an increase in credit risks.

The academic literature addressing these risks offers useful insights. For instance, physical risks caused by catastrophic weather and climate-related events could cause contraction in companies’ profitability, which would impact banks via a reduction in asset values, collateral and exposure to greater credit risk.

Physical risks can create a knock-on effect if a bank suffers large losses and decides to ration the amount of credit it supplies. Physical risk can reduce the value of a bank’s investments based on the negative sensitivity of company earnings and exposure to extreme temperature. High temperature is also associated with companies being subjected to higher capital costs.

Transition risks could see overexposed banks liquidating holdings of carbon-intensive assets at significantly discounted prices, which, in turn, could create not only liquidity problems for banks but also contribute to uncertainty and market risk. Movement towards a low-carbon economy could increase the probability of default for carbon-intensive companies as their profits decline

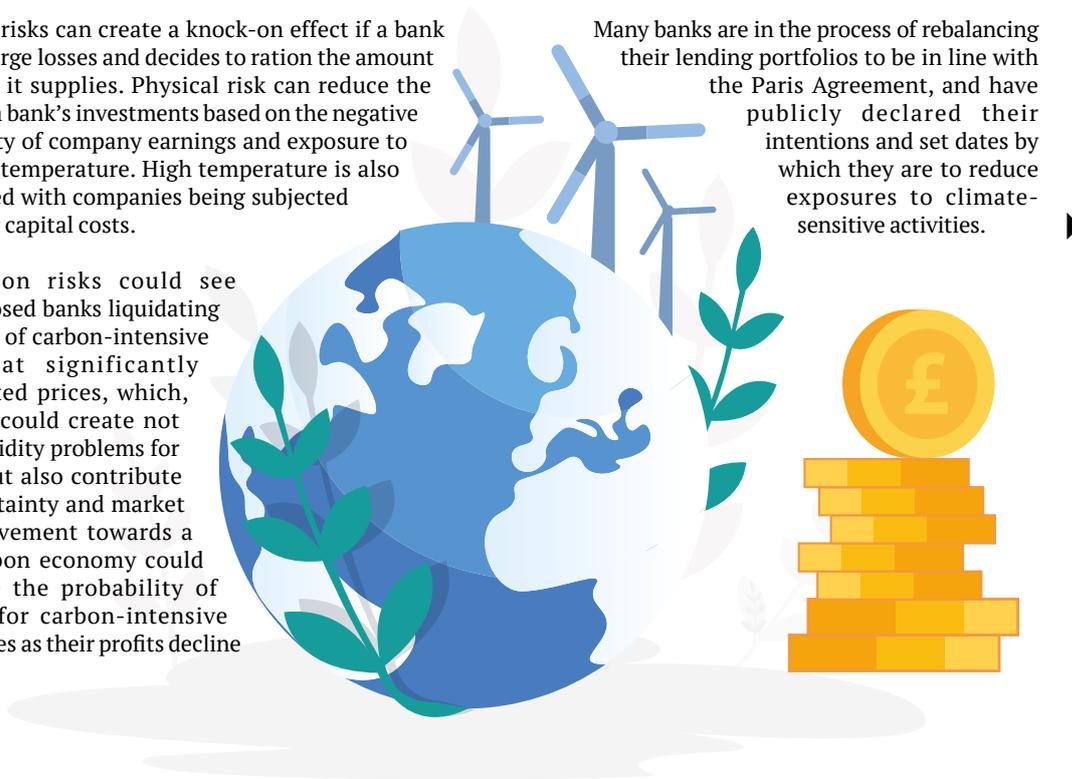
**“One challenge facing legislators seeking to encourage a reallocation of capital from climate-insensitive towards climate-friendly investments is that climate is a public good, which has characteristics that cannot be priced.”**

and consumer preferences change, which could subsequently lead to an increase in banks’ credit risk.

Notwithstanding the potential costs associated with risks arising from climate change, some banks did move early and have long embraced actions to enhance sustainability and develop cleaner technologies. Early movers can gain comparative advantages and build relationships with customers.

A simple application of the net present value formula suggests that the discounted value of expected cash flows from companies needing to expend large future clean-up costs will be far lower than companies that have either cleaned up in anticipation of regulatory requirements or use cleaner technologies.

Many banks are in the process of rebalancing their lending portfolios to be in line with the Paris Agreement, and have publicly declared their intentions and set dates by which they are to reduce exposures to climate-sensitive activities. ▶

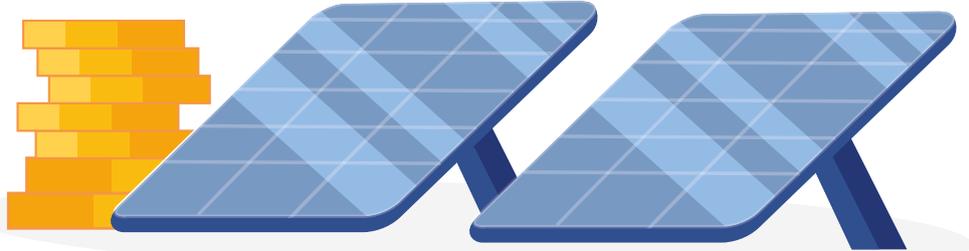


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### ► Good intentions, sensitive issues

However, the role of banks and their commitment to addressing climate-related matters remains heavily controversial. Part of the problem might relate to the volume of detailed information banks are providing on how they are planning to reduce exposures to various sectors and the associated timelines. Nevertheless, and while noting the positive attempts banks have made, for example, in funding the renewables sector, claims abound that banks are still financing climate-sensitive activities, such as, coal.

One criticism levied at the banking industry relates to the difference between project finance and trade finance. Specifically, environmentalists have challenged banks to abide by the spirit of the Principles for Responsible Banking. Environmentalists contend, and justify their claims with supportive data, that while banks are willing to reduce exposures to climate-sensitive project finance, they remain tight-lipped on their trade financing of environmentally sensitive commodities.



Since 2015, global banks have directed US\$154bn through loans and underwriting to commodity trades associated with deforestation and land degradation, and furthermore, bank financing of commodities firms has increased by 40% since the Paris Agreement was signed.

Investment management firms alongside banks have fallen under the spotlight for investing in businesses associated with increasing deforestation risk and financing activities that violate environmental and human rights. It remains to be seen how banks and/or their regulators respond to arguments to include the trade finance of climate and environmentally sensitive activities as part of banks' climate strategies. **CB**

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