Green Finance and the Resilience of the Financial Sector to Climate Change
Debate on 18 January 2018

Summary

On 18 January 2018, the House of Lords is due to debate a motion moved by Lord Teverson (Liberal Democrat) "that this House takes note of the case for the UK to remain a global leader for green finance, and for the UK's financial sector to be resilient to climate change".

This Lords Library Briefing outlines what green finance is, recent government policies designed to promote it and finishes with an examination of the potential effects of climate change on the UK's financial sector, with a particular focus on the work of the Bank of England.

An Introduction to Green Finance

The UK Government has defined green finance as including private sector investments in technologies, infrastructure and start-ups which assist in the creation of jobs, the expansion of businesses and the development of economic growth, whilst reducing greenhouse gas emissions.[1] The G20's Green Finance Study Group (GFSG) has described green finance as financing investments that provide environmental benefits in the broader context of environmentally sustainable development.[2] Such environmental benefits include:

- Reductions in air, water and land pollution.
- Reductions in greenhouse gas (GHG) emissions.
- Improved energy efficiency while utilising existing natural resources.
- The mitigation of and adaptation to climate change and their "co-benefits".[3]

The GFSG states that green finance involves efforts to "internalise environmental externalities" and adjust risk perceptions to encourage environmentally friendly investments whilst reducing environmentally harmful ones.[4] An externality refers to situations in which the effect of the production or consumption of goods and services imposes costs or benefits which are not reflected in the prices charged for the goods and services being provided.[5] In its *Green Finance Synthesis Report* (5 September 2016) the GFSG gives examples of such externalities, including:

> A renewable energy project may have higher construction costs than conventional alternatives and in the absence of measures to internalize the benefit of reduced pollution, the project return may be too low to attract private investment. Some countries have used subsidies, tax credit, feed-in-tariffs, emission-trading systems (ETSs), renewable portfolio standards (RPSs) and environmental regulations to address such externalities with varying degrees of success. At the same time, financial sector measures such as credit enhancements and guarantees, concessional loans, grants, and interest rate subsidies have been experimented with in some countries to

> improve risk-adjusted returns of such projects.[6]

The GFSG has identified the cost-effective internalisation of environmental externalities as one of the fundamental challenges to green finance alongside a lack of clarity as to what constitutes green finance activities and products, and issues with the availability of information and analytical capacity. The GFSG was established under China's presidency of the G20 in 2016. It was co-founded on behalf of the UK by the Bank of England with the People's Bank of China and the UN Environment Inquiry as a secretariat.[7]

The Bank of England also co-founded the Network of Central Banks and Supervisors for Greening the Financial System in December 2017, alongside the Banco de Mexico, the Banque de France and Autorité de Contrôle Prudentiel et de Résolution (ACPR), De Nederlandsche Bank, the Deutsche Bundesbank, Finansinspektionen (the Swedish FSA), the Monetary Authority of Singapore, and the People's Bank of China.[8] The members will share, on a voluntary basis, experiences, best practices and contribute to the development of environmental and climate risk management in the financial sector. The Network also aims to mobilise mainstream finance to "support the transition toward a sustainable economy".[9]

The UK Government has argued that green finance is important because despite increased global interest, significant investment is required for countries to meet their Paris Agreement targets. The Paris Agreement is a development of the United Nations Framework Convention on Climate Change (UNFCCC), and aims to limit global temperature rises this century to "well below 2 degrees celsius above pre-industrial levels".[10] The Agreement also aims to "pursue efforts to limit the temperature increase even further to 1.5 degrees celsius".[11] The UK ratified the agreement in November 2016.[12] The Government has argued that private sector finance could provide much of the required investment supported by green finance initiatives:

> Although the green finance agenda has gained global momentum in recent years, the market must accelerate to meet climate change commitments. An estimated $13.5 trillion of investment is needed between 2015 and 2030 in the energy sector alone, for countries to meet their Paris Agreement targets. The Government recognises that much of this investment will come from the private sector and wants to use the UK's green finance capabilities to provide a real national economic boost and help meet global challenges.[13]

Similarly, the Organisation for Economic Cooperation and Development's (OECD) Centre on Green Finance and Investment (CGFI) believes that green finance initiatives and greater investment in the 'green economy' are necessary to achieve the Sustainable Development Goals and the "ambitions" of the Paris Agreement. The 17 UN Sustainable Development Goals were adopted on 25 September 2015 and each consist of targets to "end poverty, protect the planet and ensure prosperity for all" as part of a new sustainable development agenda.[14] The CGFI was established by the OECD in 2016 to undertake research and analysis and provide recommendations to governments, and organise events and forums to "support the rapid scaling-up of green investment and financing flows on a scale commensurate with the challenge".[15] The City of London Corporation has said that it regards green finance as "prudent, profitable and one of the best tools available in the race to cut carbon".[16]

UK Green Finance Initiatives

On 18 September 2017, the Government announced a number of initiatives to promote green finance. These included the establishment of a Green Finance Taskforce, continued support to the City of London's Green Finance Initiative (GFI), and the endorsement of the Financial Stability Board's Task Force on Climate-related Financial Disclosures. These are outlined under separate headings within this section.

Additionally, as part of its Industrial Strategy, and in order to build on the UK's green finance capabilities, the Government is also working to develop the world's first green financial management standards:

> We will extend the UK's global leadership in green finance—building on our world-leading financial sector—working with industry through our new Green Finance Taskforce. We are now working with the British Standards Institution and the City of London's Green Finance Initiative to develop the world's first green financial management standards.[17]

As part of the Industrial Strategy, the Government has also published a Clean Growth Strategy.[18] In this the Government argues the UK demonstrates global leadership in green finance through the UK co-chairing the G20's GFSG, the City of London's Green Finance Initiative, and the UK's participation in the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). The Clean Growth Strategy also highlighted the value of green bonds listed on the London Stock Exchange:

> The first offshore green bond issued by an Indian entity and the first green bond issued by a Chinese bank were listed on the London Stock Exchange and 50 green bonds denominated in seven currencies with a value of $14.8 billion are now listed in the UK.[19]

The Government is also seeking to support 'green mortgages' that reflect the energy efficiency of homes. It has done this through supporting the LENDERS project (Levering Economics for New Drivers to Energy Reduction and Sustainability) with funds from Innovate UK.[20] One of the aims of the project was to provide lenders with information on the energy efficiency of homes to inform their lending and encourage prospective buyers and existing owners to improve energy efficiency.[21]

Green Finance Taskforce

The Green Finance Taskforce is co-hosted by the Department for Business, Energy and Industrial Strategy (BEIS) and HM Treasury. The Taskforce's members are drawn from a range of both public and private sector organisations including the Bank of England, the London Stock Exchange, banks such as Barclays and HSBC and the universities of Oxford and Cambridge.[22] It is chaired by the chair of the City of London's Green Finance Initiative, Sir Roger Gifford. The Taskforce's terms of reference include:

- Helping to deliver investment necessary to support the Government's Industrial Strategy and Clean Growth Strategy.
- Further consolidating the UK's "leadership in financing international clean investment".[23]
- Maximising the opportunities for UK business in what BEIS describes as a rapidly growing area.

The Government has asked the Taskforce, within six months, to produce up to ten recommendations as to how government can best support the finance sector in achieving the above objectives.

City of London's Green Finance Initiative

The Green Finance Initiative (GFI) was established by the City of London Corporation in January 2016, in partnership with the Government. The GFI brings together members from across a range of financial organisations and service providers, with the aim of:

- Providing public and market leadership on green finance.
- Advocating for specific regulatory and policy proposals that might enhance the green finance sector worldwide.
- Promoting London and the UK as a leading global centre for the provision of green financial and professional services.[24]

The GFI states that the UK and the City of London are already a 'hub' for green finance, but it has argued that expanding this capability and experience of green finance provision would allow the UK to further seize the opportunities that:

> [W]ill enable both the UK and the City of London to develop a distinctive and competitive offer to investors everywhere. Building upon a groundswell in support from financial institutions for 'greening' finance catalysed by the work of the Bank of England, it will also ensure the UK can meet both its domestic and international policy obligations and deliver a successful Brexit process.[25]

In December 2017, the GFI published *Fifteen Steps to Green Finance*, a discussion paper which sets out 15 steps to expand green finance in the UK. These steps included recommendations to:

- Offer direct grants or tax exemptions to firms issuing and listing verified green bonds in the UK. Announce a consultation on potential incentives for holders and issuers of green securities and loans.
- Embed an industry-wide understanding that environmental and social issues are important drivers of long-term investment value. Consult on requiring pension funds to have at least one trustee with sustainability/environmental expertise.
- Use the National Productivity Investment Fund and the £40 billion UK Guarantee Scheme as public-private risk sharing facilities to boost investment in the UK and support delivery of the Clean Growth Strategy and the 25 Year Environment Plan.
- Task the Foreign and Commonwealth Office (FCO) to work with the UK Green Finance Initiative to further boost the UK's global profile and offer on green finance and ensure the City of London becomes first choice for structuring and arranging green investments globally.[26]

Financial Stability Board's Task Force on Climate-related Financial Disclosures

The Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (TCFD) was established to develop recommendations for voluntary climate-related financial disclosures that are "consistent, comparable, reliable, clear, and efficient, and provide decision-useful information to lenders, insurers, and investors".[27] The TCFD has 32 members drawn from users and preparers of disclosures across the G20. TCFD argues that its work is important because it will allow for a more accurate assessment of risks and allow investors to make more informed decisions:

> Better access to data will enhance how climate-related risks are assessed, priced, and managed. Companies can more effectively measure and evaluate their own risks and those of their suppliers and competitors. Investors will make better informed decisions on where and how they want to allocate their capital. Lenders, insurers and underwriters will be better able to evaluate their risks

and exposures over the short, medium, and long-term.[28]

The TCFD published its final report and recommendations on 29 June 2017, alongside an annex on implementing its recommendations and a technical supplement on the use of scenario analysis in disclosure of climate-related risks and opportunities.[29] Its recommendations included climate-related financial disclosures under the headings of governance, strategy, risk management and metrics and targets. The TCFD provided recommended disclosures under each, for example, it recommended that companies "disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process".[30] The UK Government has endorsed the TCFD's recommendations and "encourages all listed companies to implement them".[31]

Climate Change and the UK's Financial Sector

The Bank of England has stated that central banks and financial regulators have a core responsibility to understand risks to financial stability and risks to the institutions they supervise. The Bank has argued that the financial risks stemming from climate change are therefore relevant to the mandates of central banks.[32] Whilst the Bank believes there are potential monetary policy implications from factors such as inflation from food and energy price changes, it has stated that its response to climate change is "primarily driven by its responsibilities to promote the safety and soundness of regulated firms and to maintain financial stability".[33] Through the Prudential Regulation Authority (PRA), the Bank of England also has responsibility for regulation of insurance companies in the United Kingdom as part of its prudential regulatory responsibilities. In September 2015, the PRA published *The Impact of Climate Change on the UK Insurance Sector: A Climate Change Adaptation Report by the Prudential Regulation Authority*.

In a topical article, *The Bank of England's Response to Climate Change* (June 2017), the Bank of England built on the PRA's report and explained that its approach focuses on two primary classes of risk:

- **Physical risks**: Weather and climate events such as droughts, floods, storms and sea-level rises. Such events can cause significant financial losses and have direct implications for insurance firms. Uninsured losses can cause financial burdens to fall on households and corporates and "significant uninsured losses from physical risk could also result in economic disruption at a national level, reducing tax revenues and increasing fiscal expenditures".[34] The Bank has argued that the future impact of physical risks will be affected by measures to adapt to climate change, including changes to building codes and flood defences, as well as reductions in greenhouse gas emissions. However, the Bank states that this gives rise to 'transition risks'.
- **Transition risks**: These are financial risks which could result from the process of the UK adjusting towards a lower-carbon economy. This includes the potential revaluation of a range of assets as a result of changes in climate policy, technology or "market sentiment", the impact of which would be determined in part by the speed at which this occurred.[35] The Bank of England cited evidence of this impact, saying that the combined market capitalisation the top four US coal producers had fallen by 95 percent since the end of 2010, and three of the top five had "recently filed for bankruptcy".[36] The Bank argued that risks to financial stability would be minimised if the transition began early and followed a "predictable path, thereby helping the market anticipate the transition to a 2°C world".[37]

The work of the PRA also examined a third category of risk, that of liability, such risks being of particular relevance to insurance firms.

The Bank of England would assist in enhancing the resilience of the UK financial system to climate changes by supporting an "orderly" market transition to a lower-carbon economy.[38] This has consisted primarily of:

- Following the work of the FSB's private sector TCFD.
- Co-chairing the G20's Green Finance Study Group (GFSG) on behalf of the UK.
- Co-ordinating with other insurance regulators through the Sustainable Insurance Forum.

The UK Government has also argued that the involvement of the private sector is crucial if the Paris Agreement targets are to be met. In answer to a written question it cited its engagement with the work of the GFSG and the FSB's TCFD:

> Climate change is not only a huge threat to our natural environment, but to our economic prosperity too. The private sector's involvement is crucial if we are to be successful in reaching the ambitious targets agreed in Paris last year. The UK government and regulators are together at the forefront of engaging with the private sector to address this pressing issue.[39]

The Committee on Climate Change (CCC) has also examined the impact of climate change on business. The CCC is an independent statutory body established under the Climate Change Act 2008 to advise the UK and the devolved administration governments on setting and meeting carbon budgets, and preparing for climate change. The CCC's Adaptation Sub-Committee published the *UK Climate Change Risk Assessment 2017 Evidence Report* in July 2016.

The *Evidence Report* included a technical chapter on business and industry.[40] In this the CCC argued that the Government should keep a 'watching brief' on the risks to business from potentially reduced access to capital and those risks and opportunities for business from changes in demand for goods and services, as a result of climate change. The CCC stated that the insurance industry and insurers are "advanced in modelling climate change risks".[41] However, it expressed concern that there was less of an understanding of the impacts on banking and investment and the consequences for access to capital, especially for smaller businesses. It highlighted the importance of monitoring the affordability of insurance and "access to adaptation funding and to investigate potential tipping points in companies' access to capital that might require intervention".[42] The CCC described identifying market opportunities and managing risks as "core business activities", and therefore unless these were disrupted by access to capital or by low adaptive capacity it expected that companies would respond to climate change risks and opportunities.[43] However, it also said there was a risk that business would be unable to overcome adaptive capacity constraints and that "relatively little is known about UK companies' sales of adaptation goods and services and the potential for future growth".[44]

Further Information

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