Green Central Banking

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1—Introduction

To transition to a low-carbon economy, banks and other financial institutions will need to shift billions of pounds away from fossil fuels and ensure they fill the ‘gap in green investment’. It’s clear, however, that a changing climate threatens the profits and stability of the private financial sector, either through physical damage from weather events or revaluations caused by technological or policy changes.

Central banks, as coordinating institutions at the heart of the financial system, are aware that they have a role to play in managing these issues. The Bank of England and other central banks currently see their task as ensuring that climate change and the low-carbon transition do not damage financial stability. Encouragingly, this discussion is accelerating fast through central banks, academia, civil society and the mainstream media - including the financial press.

In the UK, action is being taken by The Bank of England which in April 2019 announced it would disclose its own climate risk after significant pressure from civil society and academicians. This is radical. Central banks are historically orthodox and establishment institutions steeped in mainstream economics, which itself does not recognise how the market failure of climate change points to huge flaws in orthodox economics. Impressively it is now mainstream to argue that climate change and society’s response to it create risks that threaten the stability of the financial system.

Whilst that shift is welcome, if it is the only approach taken the Bank runs the risk of leaving meaningful action until it is too late. Unless it considers the long-term viability of the economy, concern for climate risk looks incoherent. Currently Bank officials reject the arguments put forward by many in civil society calling for their assistance in raising investment for the low-carbon transition. Central banks are public institutions responsible for regulating finance, so should contribute towards closing the green investment gap. Considering climate change only as a financial stability risk will not be sufficient for meaningful action.

A Green New Deal must also look to ensure that throughout a green transition the economy is made more equitable and equal. Power cannot stay as it has been: concentrated. If we’ve learned anything from the 2008 global financial crisis, it’s that the instability of the financial system will always undermine social and environmental progress. That means we can’t deliver the ambitious Green New Deal we need to whilst maintaining the status quo: a financial sector which is inherently extractive, rent-seeking, and concentrates wealth and power among fewer and fewer hands.

One of the key problematic design features of the current money and banking system is how commercial banks have abused their power to create new money when they lend. By pumping 80% of new loans into property and financial markets, they have inflated asset bubbles whilst fuelling wealth inequality and building up a private debt mountain, exposing the economy to financial instability. At the same time, they have undertaken excessive credit allocation to environmentally destructive activities like fossil fuel extraction, and insufficient lending to green industries.

It is well within the capacity of central banks to do more to accelerate decarbonisation and change the rules of the game away from an extractive rent-seeking financial sector. We present several policies that the Bank of England could adopt, ranging from the adaptation of existing rules and schemes to bold new tools to address underlying problems in the system. Of course, central bank policy cannot take place in a vacuum, and must speak to the current institutional framework and wider context, including developments both in government policy and financial markets. Designing a climate-friendly central bank for the 21st century is fundamentally a political process. A substantial literature now exists on the financial and economic effects of climate change. It is time policymakers took this on board and envisaged a new mandate for the Bank of England to reflect it.

We start by looking at the big topic that is gaining traction: climate risk, and whether improvements to financial regulation can be the game changer for deflating the carbon bubble. Then we look at the central bank’s role in accelerating green investment. Finally, we turn to how wider issues are key to making sure a Green New Deal includes significant financial sector reform.

2—Climate risk to financial stability

Climate-related financial risk has been a huge driver in getting climate change on the agendas of central banks and financial institutions. There are two main sources of risk that climate change presents to the financial sector: transition, and physical damage.

‘Transition’ risk results from the revaluation of assets due to changes and costs associated with the shift to a low-carbon economy. The overvaluation of fossil fuels (or other high-carbon industries) is called the ‘carbon bubble’. Financial instability will be caused by the inevitable bursting of the bubble, so if we account for transition risk now, we can - in theory - deflate the carbon bubble in a more managed and less volatile way. Financial losses from the drop in value of fossil fuels is already underway: for example, a Carbon Tracker Initiative report showed how the EU’s largest five power generators collectively lost over 37 per cent of their value...
from 2008 to 2013. And projections published by Mercer show that ‘annual returns from the coal sub-sector could fall by anywhere between 18 per cent and 74 per cent over the next 35 years’. In 2015, the Governor of the Bank of England Mark Carney identified that “19 per cent of FTSE 100 companies are in natural resource and extraction sectors, and a further 11 per cent by value are in power utilities, chemicals, construction and industrial goods sectors.” Data for the FTSE 100 at the end of March 2019 show that these proportions have only increased. It is not a question of whether transition risk materialises, but how and when. As the world economy continues to burn fossil fuels, the shock – when it eventually arrives – will be much more severe. This is the angle that Carney has been pushing at the Bank of England. Banks understand risk, especially when it means their profits are at risk. The problem in getting them to act now is that short term profits still prevail over long-term planning in financial institutions, even among actors who profess their commitment to climate goals.

‘Physical’ risk is the damage and resultant loss in value that occurs due to weather and climate-related events like floods and storms. Extreme weather events can have a dramatic effect even over a relatively short time period. For instance, ‘total economic damages for England and Wales from the winter 2013 to 2014 floods were estimated to be between £1,000 million and £1,500 million.’ A further example is the Pacific Gas & Electric company, which filed for bankruptcy following the wildfires in California in 2017-18. The big challenge is how to calculate the risk in a useful way. In a forthcoming paper by Van Lerven and Ryan-Collins they argue that a key problem is that risk can only accurately be measured over the environment in which we are operating, which is not the case with climate change. Arguing that risk is therefore inherently endogenous, they state that central banking policy response should therefore be implemented in a precautionary way, and that central banks should be much more proactive than they currently are.

**Disclosure**

To date, the primary answer to ‘what do we do about climate-related financial stability risk?’ has been ‘disclosure of the current risk on banks’ balance sheets’. The rationale is that we first need to assess the risk financial institutions are exposed to. Transition risk can be assessed by understanding how much of a bank’s balance sheet would be affected by a change in fossil fuel pricing or energy demand. As outlined above, the methodology of calculating that risk is complex: unfortunately this fact has been used to argue against seeking mandatory disclosure. The argument goes ‘if we don’t know how to measure it yet, we shouldn’t make it mandatory because it won’t produce useful data’. The counter argument is of course ‘let’s make it mandatory - accelerate the process and good practice will emerge.’

Over the last two years civil society has been calling on central banks to lead the way in disclosing the climate risk of their balance sheets; since central banks are calling on banks and large finance institutions to disclose risk, surely they must lead by example? In the UK, this argument has already been won. In April the Bank of England announced it will be disclosing an assessment of how it manages climate-related financial risk in its 2019/20 annual report. Alongside this the NGFS (Network for Greening the Financial System), of which the Bank of England is on the steering committee, made further demands on financial institutions asking them to take significant steps in accounting for climate risk. For one, supervisors are encouraged to set expectations to ensure financial firms are adequately addressing the financial risks from climate change. And secondly, firms are encouraged to take a long-term, strategic approach to the consideration of these risks, and to embed them into their business-as-usual governance and risk-management frameworks.

These developments are welcome and heading in the right direction, but in order for disclosure to be effective, it should be mandatory. There are some excellent banks leading the way, particularly those championing the Platform for Carbon Accounting Financials (PCAF). A 2018 Prudential Regulation Authority survey showed that most banks are still some way from the necessary level of disclosure: only 10% manage climate risks comprehensively and take a long-term strategic view, while 30% of banks still only consider climate change as a corporate social responsibility issue. We have to be sceptical about certain banks and their willingness to move. A report released in March 2019 showed that since Paris climate agreement banks have financed $1.9 trillion of fossil fuel projects with financing on the rise each year. Accord-

ple, the risk of the mortgage market creating financial instability. There have been proposals to take this further by specifically targeting risks brought about by climate change. This approach could be hugely important in deflating the carbon bubble, simultaneously increasing financial flows towards a green transition whilst ensuring financial stability.

Once again, the challenge regulators face is the complexity of calculating risk. Proposals range from very simple - tagging certain assets as ‘green, amber, or red’, which would help immediately allocate capital away from activities whose risk is no longer acceptable - to more complex. New taxonomies have been put forward, but critics have suggested this could risk a lot of inaction, as committees get stuck arguing over the exact taxonomy to use. Additionally, complex regulation tends to favour bigger financial institutions with the ability to identify loopholes, whilst putting a disproportionate large burden on smaller, mission-driven banks.

To mitigate any systemic risks, a ‘brown-penalising factor’ must be introduced, e.g. higher capital requirements for loans carrying carbon risk, or entities that are severely reliant on fossil fuels. This would reflect the growing systemic risk of investing in carbon intensive activities, and could discourage lending that contributes to climate change. It would also give banks a buffer to withstand carbon bubble related losses and the repricing of stranded assets. There isn’t currently any clear regulatory mechanism that would deflate the carbon bubble. So it was disappointing that during the development of The EU Sustainable Finance Action Plan there was a significant amount of resistance to a brown penalising factor, and much more support for a green supporting factor. A green supporting factor would mean banks have to hold less capital against loans to green markets, but critics say this would actually be a bad thing, as it promotes financial instability and greenwashing. It’s clear that the
industry is putting up significant resistance to having to hold increased capital against lending to carbon intensive activity. Unless there is progress on the regulatory side of climate risk, then the impact of disclosure will be too limited.

3—— Driving investment for the green transition

Monetary policy

A key battleground in the fight for greener central banking has been corporate bond purchases: as part of central banks’ quantitative easing (QE) programmes, corporate bonds have been purchased from the market. Studies have shown that a disproportionately high amount have been bought from fossil fuel companies such as Shell and BP. The Bank of England has defended these purchases arguing that they have to be ‘market neutral’, and it just so happens that fossil fuel companies fulfil the criteria. A recent study16 shows that the ECB invests more than 110 billion euros (about 63% of the program) towards the four most carbon-intensive sectors (fossil fuel extraction and distribution, the automotive sector, the most energy-intensive industries, and electricity generation).

Monetary policy is not market neutral. Since the crash, QE has been shown to have real distributive effects by increasing wealth inequality17. Additionally, using their own reasoning of market neutrality, the purchase of any corporate bonds by central banks shouldn’t be undertaken because it moves into the realm of picking winners, which is fiscal policy. Putting that issue aside, purchasing the most bonds in high-carbon sectors should be undertaken because it would be capital into the green economy — transitioning our energy, transport and heating infrastructure to clean, renewable, and sustainable systems. Though there have been a number of proposals on the table, none have been picked up. This is primarily due to the fact that the status quo around the conversation on monetary policy has not shifted significantly.

QE policy should have meant breaking the taboo that central banks can create money (on vast scales), and therefore triggered a debate on how the monetary system works, and whether its current design is fit for purpose. Despite significant efforts, this discussion is yet to hit the mainstream, and the orthodoxy around current monetary policy shouldn’t be underestimated. There have been countless critiques of QE from all sides, including academia18, civil society19 and the finance industry, but central banks still push back with the same assertion that QE was a market neutral undertaking and is not at odds with their mandate. They state that Green QE, however, would be. Part of the frustration with this argument is that this debate is situated within a larger debate on macroeconomics, and the flaws in the Financial Policy Committee (FPC)20, the crash. Encouragingly there is a growing debate about what new banking institutions are needed for a GND (see Greening the UK financial system chapter).

Additionally, the UK is a laggard in terms of issuing public debt tied to green investment (sovereign green bonds) - it is well behind France and the US. This reluctance is tied to its conservative approach to banking and government debt. The UK government privatised the Green Investment Bank, a perfect institution for issuing green bonds, and has peddled an economic myth that government debt hurts growth21. The UK government could easily start issuing a green sovereign bond, and Green QE could also involve purchasing such bonds on the secondary market.

Reforming the Bank of England’s Mandate

The arguments claiming that a greener central bank is important to undertake because it could be one way to mitigate the climate fail to account for the reality of monetary and fiscal cooperation. Monetary policy since the crisis has not been ‘neutral’ with respect to the market or to the environment. All monetary policy interventions have fiscal and market-shaping outcomes. It is a political question to design the remit to produce the most desirable consequences. Political reform could make central bank policy that harms the climate illegitimate.

As the Bank of England often likes to tell campaigners, it is constrained by its mandate. It is clear that where a Green New Deal and climate change are concerned, many central bank mandates are not fit for purpose. Rethinking a central bank’s mandate is generally considered a significant action not to be done too often. However whilst we would argue a rethink is needed, there are also some fairly easy changes possible when it comes to incorporating climate into the Bank of England’s mandate. The Chancellor of the Exchequer, a member of the elected government, could very easily make simple alterations to the Bank’s mandate via the remit for the Monetary Policy Committee and recommendations to the Financial Policy Committee (FPC)22. These changes would accelerate the progress towards greener monetary and financial policy. For example, the FPC could add ‘environmental sustainability’ under the heading of ‘matters to which the FPC should have regard.’ The Bank itself should prioritise how to adapt the Monetary Policy Committee decision-making process to incorporate the macroeconomic impact of the climate crisis. In light of this review, the Chancellor of the Exchequer should update the remit for the MPC to require that its decisions take account of (and effectively communicate) the links and potential trade-offs between climate sustainabilty and price stability.

The Bank of England isn’t the only central bank which has been willing to talk climate risk but not take the implications of this discussion to their conclusion - mandate update. In a recent paper of 133 central banks reviewed, only 12% had a sustainability mandate. “Often it is more talked about than action when it comes to central banks and climate change, but with only a decade to transition our economy in the face of climate change, this complacency cannot continue.

Credit policy

The main driver of the 2008 global financial crisis was the build up of debt and credit by the private sector with banks lending unprecedented amounts to property and financial markets. Due to this lending dynamic, the UK economy is skewed towards an oversized financial sector and prone to property bubbles. After the crash this problem was, to an extent, identified by politicians as needing to change, with a need to ‘rebalance the economy’23. However despite the rhetoric, policies have not delivered, and net lending to SMEs and the green economy has not increased. The lending profile of banks is essentially unchanged24, with the vast majority still flowing into property and financial markets.

The era of financial deregulation that started in the 1980s followed by central bank independence in the 90s has seen finance ministries relinquish responsibility of social and economic outcomes of the financial sector. Following the crash, reform has focused on the management of an inherently risky system, instead of reforming the system so it works in a more beneficial way for wider society. The consequence is that both types of institution seek to pass the blame for adverse economic and social outcomes to the other; the Treasury claims that monetary policy,
and more recently financial stability, is and should remain outside of its control, while the Bank refuses to engage on issues outside its mandate. Because of this, the UK’s economic policy framework lacks a full appreciation of the importance of the distribution of credit in the economy. The Bank of England has several levers which influence where credit is allocated, such as its collateral framework and refinancing operations. Because of its mandate, it is unable to align these levers with broader social and economic objectives. The Treasury ignores the question of where credit is distributed, because the tools to influence it sit under the control of the Bank of England. However, bank lending and systemic factors within the money and banking system are a source of endemic financial instability, economic stagnation, and inequality. Delivering a Green New Deal requires the central banks’ role be updated to include addressing these issues.

Credit guidance, where the central bank uses its power to direct credit into different parts of the economy, is gaining support among economists. Credit guidance used to be common practice where banks had to lend to non-financial, productive firms in the economy. A sustainable Bank of England must be able to use its power to increase lending into green and sustainable productive sectors of the economy.

The wider financial system

Central banks and the banks they regulate are part of a wider complex financial system including pension funds, insurance companies, credit ratings agencies, hedge funds, shadow banks and plenty of other actors. The good news is that central banks have a lot of clout and influence with the rest of the financial sector: as academics have pointed out, the important role central banks play is key in ‘leading by example’, by ‘signalling’ and using their ‘narrative power’ to shape the agenda and help close the vacuum of leadership in this area. The less good news is the financial system is huge, powerful, and complex. Proposals include the need to delist companies from the UK Stock Exchange that are failing to tackle climate change, as put forward by the Labour Party; the need for regulators to better understand and regulate shadow banking and shadow money; and the need for pension funds and asset managers to divest in fossil fuels, and invest in green and sustainable parts of the economy.

4 Conclusion

The climate risk discussion has been an important step forward in the debate of how we get the huge global financial sector to wake up to climate change. Putting climate change in a language that the financial sector understands has allowed us to open and accelerate the debate, and identified some pioneers that clearly want to lead the decarbonisation of the financial sector.

However, getting to where we need to go in the next decade requires a step change in action that few people have really envisioned. Closing the green investment gap requires finance to be directed from the private and public sector. As powerful public institutions underpinning the financial system, central banks must have their mandates and toolkits updated to ensure a transition to a low carbon economy. A Green Bank of England is a key step towards a Green New Deal.

Footnotes

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