Central banks and climate change mitigation

A Money View perspective

I n 2015, world leaders at the UN Climate Change Conference in Paris reached a breakthrough in the fight against climate change – the Paris Agreement. Long-term targets were agreed for all nations to significantly reduce greenhouse gas emissions to restrict the global temperature increase this century to 2 degrees, ideally limiting it to 1.5 degrees. It has been estimated, however, that for global warming to be limited to 1.5 degrees, global emissions will have to reach net-zero by 2050.

A key objective of the Paris Agreement was to direct financial flows on a path towards low CO2 emissions. As Dr Jakob Vestergaard, Associate Professor in the Department of Social Sciences and Business at Roskilde University in Denmark, observes, “financial flows are not on that path at all”. In his investigation of the role of central banks in climate change mitigation, he focuses on a school of economic thought called the Money View to facilitate a nuanced and comparative analysis. He proposes an innovative dual strategy as the way forward for an effective form of green central banking.

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While there is an abundance of literature on green finance, little theoretical work has been carried out to date on green central banking, and in particular the approaches and associated instruments which might be mobilised by greener central banks. To help fill this void, Dr Vestergaard examines the foremost approaches to green central banking and assesses the key monetary policy instruments. He identifies the conditions for possibility of the effectiveness of green central banking, before concretely proposing a policy strategy for effective green central banking.

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MONEY VIEW

To perform a comparative assessment of the wide assortment of monetary policy instruments employed, Dr Vestergaard adopts a Money View perspective. This enables the identification of the most promising instruments for effective green central banking. The Money View, pioneered by Professor Perri Volz, links the academic fields of economics and finance. Put simply, where economics tends to consider how past investment influences current growth, finance considers how current cash flow imbalances and liquidity needs are important for financial participants to survive.

Employing a Money View perspective enabled Vestergaard to differentiate between the policy options identified by the Network for Greening Financial Systems (NGFS), a network established by central banks in order to set about ‘greening’ the broader financial system. In so doing, he identified monetary policy instruments that were most likely to be effective as well as those that were not.

APPROACHES TO GREEN CENTRAL BANKING

Much of the discourse surrounding green central banking advocates a distinction between defensive and proactive approaches to the climate considerations taken by central banks. Defensive approaches involve protecting financial systems from the disruptive economic consequences of climate change. Proactive approaches, on the other hand, are concerned with using central bank policy tools to mitigate climate change. Dr Vestergaard notes, however, that ‘one should not underestimate the potential interlinkages between the two’. He comments that the best way to reduce the risks to financial stability from climate change would be to alleviate changes to the climate first off. Subsequently, by definition, all proactive green central banking would also be defensive green central banking. Unfortunately, it doesn’t always work the other way around. Some defensive green central banking measures could have a positive climate change mitigation effect. For example, if better pricing of climate risks went hand in hand with better disclosure of them, the allocation of capital would be led in a greener direction, benefiting climate change mitigation. It cannot be generally assumed, however, that a defensive green central banking will contribute to climate change mitigation.

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The recommendations of the TCFD have been adopted by more than 2,000 large companies worldwide and its recommendations have influenced other disclosure frameworks too. Such proliferation, however, does not equate with success. Some adopters have registered their concerns regarding the lack of standardised metrics with the TCFD, but suitable remedies have not been proposed. Dr Vestergaard observes that there’s ‘little climate change mitigation impact – if any – of the voluntary disclosure approach championed by the TCFD’. This lack of meaningful change from the disclosure approach highlights the need for new, more effective tactics.

A DUAL STRATEGY

Dr Vestergaard explains that fundamentally, the way forward for an effective form of green central banking is to adopt a dual strategy. The first involves expanding collateral eligibility by means of positive screening – a process that identifies companies and assets that are actively contributing to the green transition. Expanding collateral eligibility is important as a transition is not possible in an environment of contracting market liquidity. The second entails widening haircut spreads so relative incentives are in favour of green over brown assets.

WIDENING HAIRCUT SPREADS

Dr Vestergaard comments that widening haircut spreads to change relative incentives is the most effective way of reshaping existing collateral hierarchies, an essential condition for green central banking. He considers three approaches. A sliding-scale approach could be applied that uses industry emission averages as a benchmark. Haircuts are then increased for assets with higher-than-average carbon emissions or decreased for those assets with lower-than-average emissions. Alternatively, haircuts could be adjusted in line with the carbon-intensity of the asset. The third approach involves the use of technical screening criteria for green and brown economic activities as upper and lower thresholds for differentiated haircuts. This could involve using the EU taxonomy of green economic activities, thereby considering not just climate change mitigation, but also the four other environmental challenges going forward (pollution, biodiversity, forests, and water). The latter option is advocated in Dr Vestergaard’s study.

A PROMISING PATH FORWARD

It is worth noting that deploying monetary policy instruments to skew incentives in favour of green assets contradicts the principle that central bank operations should be ‘market neutral’. Consequently, there is a substantial amount of political resistance from central bankers surrounding this idea. But market neutrality arguments are increasingly being challenged. It is likely that the pressure for green central banking will increase in coming years and eventually central banks will have to come around. When that happens, the innovative approach proposed in this research offers a promising path forward.

Dr Vestergaard mentions in his conclusion that green central banking does not stand alone. Both carbon pricing and green public investment are also essential in this process. He concludes that “it is not unreasonable to surmise that strong financial incentives created by environmentally differentiated haircuts, calibrated against proper standards for what constitutes green and brown assets, respectively, would cause a significant contribution towards a greening of finance.”

A Primer on Collateral Policy

Pawbroker practices in Ancient Greece – where borrowers posted collateral with a pawbroker to access loans – were an early form of secured lending. What is accepted as collateral, however, varies significantly over time. This holds for central bank lending too. What the European Central Bank (ECB) accepted as collateral before and after the financial crisis were altogether different things. When money and credit markets are liquid and well-functioning, central banks take a conservative approach, accepting only high-quality assets as collateral. In periods of market stress, on the other hand, they usually respond to their (explicit or implicit) mandate for preserving financial stability, by accepting a wider range of assets as eligible collateral for its open market operations.

Three core factors define the contours of central bank collateral policies (BIS 2015). First, eligibility criteria set out what assets are eligible as collateral when banks seek access to central bank money; second, haircuts determine how much central bank money a bank will receive (in percentage of the market value of the collateral) for different types of eligible collateral; and, third, stipulations on counterparty access define what types of financial institutions the central bank is willing to provide lending to.

The haircut denotes the difference between the market value of the collateral a bank pledges to the central bank, and the loan that the central bank will give in exchange. The haircut can be seen as the central banks’ insurance against liquidity risk.

References


