Climate change and central banks

Protecting the climate is the challenge of the century. We argue that central banks and financial supervisors have a significant role to play, acting as catalysts for mobilising private finance, addressing climate-related financial stability risks and improving data availability and disclosure. The key climate policy choices, however, concern regulation, taxes and subsidies: these choices pertain to elected governments.

Policy decisions addressing climate change and accelerating the transition to net-zero global emissions are urgent and politically difficult. Unlike any others, climate policies affect all parts of economic and social behaviour. Consumption patterns and personal lifestyles are affected. The investment and production decisions of firms across all sectors need to adjust, and these decisions need to be taken with a very long time horizon in mind.

Furthermore, the global dimensions of climate risks and financial markets require global coordination. Addressing climate change is, accordingly, a top priority of the Italian presidency of the G20.

Central banks cannot stand on the sidelines, and they must play their part.

Their first contribution, of course, must be to deliver on their core tasks, namely price stability and financial stability**.** The higher and the more volatile the inflation rate, the harder it becomes for market participants to extract clear price signals. There is more 'noise'. Thus, without price stability, the effectiveness of key climate policies such as carbon pricing is diminished.

Financial stability is equally important in this context, if not more. The transition to net-zero requires enormous investment; investors are in fact increasingly keen on supplying funds for 'greening' purposes. Fully functional financial markets are needed that allocate resources efficiently, and they are a prerequisite for pricing climate-related risks in an appropriate way. Mobilising resources to finance specific investments is not part of the tasks of central banks, though ensuring that private financial markets can operate in an orderly way and mitigating risks to financial stability certainly is.

A few specific issues are also directly relevant to central banks and financial supervisors. Climate change and climate policies cause physical and transition risks. Yet we know too little about their magnitude and the effects of these risks. The good news is that we do not need entirely new risk categories to account for them: climate-related risks usually take the well-known form of credit, market, or legal risks. Regulatory tools are available to address climate risks within the prudential framework. At the same time, we do not think that prudential regulation should be used to provide direct incentives for steering the transition, which are best reserved for climate-related laws.

In terms of modelling and data, we see three main priorities:

First, we need better analytical tools to analyse climate-related risks and ensure that financial institutions use them. The risk models of banks and central banks typically use historic,

backward-looking data. They are seldom equipped to grasp the impact that climate policies have across sectors and over long time horizons.

We also have to acknowledge the many uncertainties surrounding climate change that cannot be 'priced' in standard risk models. We know little about the dynamics of the climate and its interaction with the economy. In the profession's jargon, tipping points and non-linear dynamics complicate the analysis. Improved modelling and climate stress tests are thus high on the agenda of central banks. Improved scenario analysis is also important.

Second, data availability is a key issue. For agents to make choices about climate issues, good information is essential. No model, however good, can yield sound results based on faulty data. The current situation is far from satisfactory. Achieving better, more reliable data on exposure to climate risks and greenhouse gas emissions is a global public good and should be pursued as such.

Third, companies that want to disclose their carbon footprint face a range of different, non-comparable accounting standards. As climate awareness increases worldwide, savers and asset managers are ever more inclined to put their money into green investment. Considering the vast amounts of money at stake, evidence-based taxonomies and disclosure guidelines are essential to ward off the risk of greenwashing and of asset price bubbles based on fads or misleading labels.

Central banks are acting as catalysts for improvements on these fronts. Many have joined the Network for the Greening of the Financial System, a group that works *inter alia* on better data, on disclosure and on scenarios. The G20 Finance Track has established a working group on sustainable finance, in which all the main central banks take part.

Finally, central banks have a duty to practice what they preach. Many, including our two institutions, strive to reduce the carbon footprint of their own activities, and examine the use of environmental criteria in the management of their own funds.

We can do much within the sphere of our tasks. Nothing we can do, however, reduces the need for public policy action.

The key public policy decisions concern taxes, subsidies, and regulation. Decisions must be made in a way that is consistent with the net-zero objective. Rules affect behaviour directly; carbon pricing yields information about how individual decisions impact the environment and provides key incentives for change. Setting rules, pricing carbon, and defining enforcement mechanisms entails complex political choices and trade-offs. They are the responsibility of democratically accountable governments.

Good public policy is also a prerequisite for mobilising private finance. A credible path for future carbon prices and environmental rules is needed for markets to find prices that incorporate climate issues appropriately. Thus, public and private action are complementary in tackling the climate challenge.

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