

Jens Weidmann: Climate change and central banks

Welcome address by Dr Jens Weidmann, President of the Deutsche Bundesbank and Chairman of the Board of Directors of the Bank for International Settlements, at the Deutsche Bundesbank's second financial market conference, Frankfurt am Main, 29 October 2019.

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1 Welcome

Ladies and gentlemen,

Allow me to bid you a warm welcome to the Deutsche Bundesbank's second financial market conference, on my own behalf and that of Sabine Mauderer, here at the Gesellschaftshaus in Frankfurt's green haven, the Palmengarten.

Frankfurt's most charming park, the Palmengarten was created 150 years ago, and a series of events have been scheduled this week to commemorate this anniversary. When Adolphe, Duke of Nassau, was forced to disband his collection of exotic plants housed in Schloss Biebrich in 1866, Heinrich Siesmayer, a Frankfurt garden designer, came up with a clever idea – he set up a stock corporation to buy the plants and build a botanical garden in Frankfurt. City folk snapped up the shares in this company, allowing Siesmayer to buy Duke Adolphe's green treasures for a price of 60,000 Gulden.¹ I suppose you could say that the foundation of Frankfurt's Palmengarten was an early example of "green finance", given that it was a privately funded green investment.

But there is more to green finance than that, of course. It is a term that also includes accounting for climate risks in the financial sector, or the transition to a greener financial system. If environmental concerns are joined by economic and social sustainability considerations, it is common to use the term "sustainable finance".² And that is what today's conference is all about: sustainable finance. Judging by the huge turnout, I dare say we've really got our finger on the pulse.

We want this conference to be a forum for dialogue among representatives from the financial industry, academia and the public sector. Government is hugely interested in growing a sustainable financial sector, as you can see from the fact that not one, not two, but three finance ministers are in attendance. And incidentally, the Palmengarten was more than just a private initiative – the city of Frankfurt provided the land needed to build it.

2 Climate risks and central banks

2.1 Financial stability

Ladies and gentlemen,

The need to transition to a low-carbon economy has become a very important topic, not just from financial market perspective, but also from the vantage point of central banks. And that is what I would like to discuss in a little more detail over the next few minutes.

When my colleague Mark Carney, Governor of the Bank of England, delivered his widely-regarded Lloyd's of London speech just four years ago, climate risk was still languishing as a marginal issue for most central banks.³ Climate awareness has changed dramatically since then: central banks, supervisory and regulatory authorities have come to recognise that climate risks also impact on their core tasks.

Mark Carney built his speech around the implications of climate change for financial stability,⁴ giving it the title "Breaking the tragedy of the horizon" in a reference to tragedy of the commons.

If a field or any other common (that is, shared) resource is used without constraint, individual users' rational desire to maximise their yield can end up destroying that resource through overuse. Economists call these situations "externalities" – that is, impacts on others which the agents had failed to account for – and thus explain the tragedy of why humanity finds it so hard to give the environment, as a common resource, the effective protection it needs.

When the market fails in this way, it is up to government to take corrective action. The English economist Arthur Pigou suggested imposing a tax. The alternative idea of emission trading was inspired by his compatriot Ronald Coase. What both theories have in common is the idea of putting a price tag on the external costs of our behaviour and creating incentives to change how we act.

Up until now, not enough attention has been given to the costs of environmentally harmful behaviour – as a result, the implications and risks associated with climate change and climate policy have not been fully priced into financial assets.

Mark Carney stressed recently that the global financial system is currently funding a 4°C rise in the temperature of the planet – double the pledge to limit increases to well below 2°C contained in the Paris Agreement.⁵ To stand a good chance of meeting the 2°C target agreed in Paris, annual emissions can be no more than 1,100 gigatonnes of CO₂. And to achieve the more ambitious 1.5°C target, that figure would be less than 400 gigatonnes.⁶

That would mean never using a large share of fossil fuel reserves, because that would deplete the remaining carbon budget many times over. And that, in turn, will result in carbon-intensive investments losing value. The massive and abrupt materialisation of such losses might have implications for financial stability.⁷

The role of financial supervisors is to gauge the significance of climate-related risks for the financial system – and not just the risks caused by transitioning to a low-carbon economy, but also the ones triggered by climate change itself – such as the damage caused by an accumulation of extreme weather events.

That is why it is so important for climate risks to be disclosed and anchored in supervisory practice. Supervisors are hard at work at the methodically challenging task of carrying out any climate stress tests that may be required.

Banks are required to also take climate risks into account. Our latest survey among small and medium-sized banks found that it is still early days for institutions looking to manage climate risks in practice: one-third of them said that climate risks feature, at least to a certain degree, in their risk management, while two-thirds said that they have not (yet) begun to do so.⁸

Modelling climate risks accurately is crucial for proper risk management at banks. It could also have the side effect of making it less attractive to fund environmentally harmful investment. That said, it would be wrong to want to use banking regulations to set climate policy incentives, for example by granting risk weighting "discounts" for "green" assets.⁹ Capital requirements should always be geared to risk. Creating incentives to protect the climate, on the other hand, is a matter for politicians.

2.2 Monetary policy

The importance of climate change and climate policy for central banks is not confined to our role as financial supervisors and guardians of financial stability, though. There can be all manner of monetary policy implications, too.¹⁰ Both climate change and climate policy can have a bearing on macroeconomic indicators such as output and inflation. Central banks need to learn how the transmission channels work. We are still at the beginning of this particular journey.

Climate change is particularly apparent over the course of the economic cycle when it takes the form of supply shocks – just take the price increases due to crop failures or low water levels. Monetary policymakers normally look through such temporary disruptions. But climate change could well make these shocks stronger and more frequent in the future.¹¹ This can make growth rates, inflation figures or financial market prices more volatile.

What is more, climate change might be accompanied by long-term structural shifts – such as changes in potential growth or the natural rate of interest – and could well be of relevance to monetary policymakers. The same can be said for climate policy tools such as a carbon tax or emissions trading which, depending on their configuration, will probably impact noticeably on economic and price developments.

In a nutshell, gauging the prospects and risks for price stability could become even more of a challenge going forward. On top of this, there are some who are calling for monetary policymakers to take specific action to combat climate change.¹² However, I am very critical when people say that monetary policymakers need to “go green” by launching “green QE”, say, or granting specific privileges to green assets within the collateral framework.

How hard should government, business and society push back against climate change? What measures need to be taken, and what behaviour should be encouraged or punished? These are political questions for elected governments and parliaments to answer. They are decisions which are not for central banks to take, because they lack the requisite democratic legitimacy.

Our mandate is to preserve price stability, and policy implementation needs to be in line with principle of market neutrality. Skewing asset purchases to green bonds, say, would run counter to this principle, which is anchored in Article 127 of the EU Treaty.

And a trade-off could arise once monetary policy considerations call for applying the brakes and scaling back the bond purchases. In this situation, I dare say there would be calls to press ahead with the green asset purchase programme. After all, it is not immediately apparent why efforts to combat climate change should only be made when price pressures are weak.

However, asset purchases need to be reserved for exceptional situations under the Eurosystem’s monetary policy framework and under no circumstances be deployed indefinitely. That would also render a further question redundant – the matter of whether the asset purchase programme in its existing form favours carbon-intensive enterprises and thus cements the existing structures.¹³

A monetary policy which pursues explicitly environmental policy objectives is at risk of being overburdened. And in the long run, the central bank’s independence might be called into question. What matters to me is that we do not generally promote sustainability using instruments which serve other purposes. I think a decisive and effective climate policy is the right course of action – but it needs to be implemented using the right instruments and by agents which have the democratic legitimacy needed for that purpose.

2.3 NGFS and portfolio management

That certainly does not mean that we at the Bundesbank do not also have scope, within the constraints of our mandate, to help green the financial system.

We are an active player in national and global bodies dedicated to forging a more sustainable financial system. Sabine Mauderer will use her speech later today to discuss our involvement in the Network for Greening the Financial System (NGFS).

Furthermore, as a fiscal agent, we manage a host of public sector pension portfolios and have already helped multiple clients gear their investment policy to sustainability criteria.

3 Conclusion

Ladies and gentlemen,

Central banks will play a part in transitioning to a low-carbon economy. We can help make the financial system more sustainable yet must never lose sight of our core mandate.

Green finance can augment effective and smart climate policy, but it cannot replace it. It is, and always will be, a matter for democratically elected politicians to make the necessary transition a reality and to break the tragedy of the horizon.

In closing, ladies and gentlemen, may I wish you a day rich with insightful and rewarding dialogue here at the Palmengarten, Frankfurt's green haven.

Thank you for your attention.

¹ B. Taudte-Repp (2012), Der Palmengarten – ein Führer durch Frankfurts grüne Oase.

² Deutsche Bundesbank, The market for sustainable financial investments: a stocktake, Monthly Report, October 2019.

³ Carney, M., Breaking the tragedy of the horizon – climate change and financial stability, speech at Lloyd's of London, 29 September 2015.

⁴ Harding, G. (1968), The Tragedy of the Commons, in Science, New Series, Vol. 162, No 3859, pp. 1243–1248.

⁵ www.theguardian.com/business/2019/oct/15/bank-of-england-boss-warns-global-finance-it-is-funding-climate-crisis

⁶ Mercator Research Institute on Global Commons and Climate Change, So schnell tickt die CO

⁷ European Systemic Risk Board (2016), Too late, too sudden: Transition to a low-carbon economy and systemic risk, Reports of the Advisory Scientific Committee, No 6.

⁸ Deutsche Bundesbank/Federal Financial Supervisory Authority, 2019 LSI stress test results, slide 10.

⁹ EU High-Level Expert Group on Sustainable Finance (2018), Financing a sustainable European economy.

¹⁰ Cœuré, B., Monetary policy and climate change, speech delivered at the Scaling up Green Finance: The Role of Central Banks conference, 8 November 2018.

¹¹ Rudebusch, G. D., Climate Change and the Federal Reserve, Federal Reserve Bank of San Francisco, Economic Letter 2019–09.

¹² Tooze, A. (2019), Why Central Banks Need to Step Up on Global Warming, Foreign Policy, foreignpolicy.com/2019/07/20/why-central-banks-need-to-step-up-on-global-warming/; Schoenmaker, D. (2019), Greening Monetary Policy, Bruegel Working Paper, issue 2.

¹³ Matikainen, S., E. Campiglio and D. Zenghelis (2017), The climate impact of quantitative easing, Policy Paper, Grantham Research Institute on Climate Change and the Environment.