Swedbank

Climate change and central banking

Protection of price stability the minimum requirement

- Key policy tools available in the areas of **credit operations, collateral**, and **asset purchases**
- Minimum requirement for central banks is to protect price stability from climate-related risks
- Asset purchases will be tapered in time: not a long-term climate policy tool

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Central banks are starting to factor in climate change[1]

Climate change is happening now, and while central banks are not the main players in mitigating climate change, they are affected by it, and need to step up in order to protect price stability and the economy in a broader sense. In addition to this, central banks need to include climate change into their assessments of risks to the broader financial system.

From a central bank view, there are many reasons to be interested in climate change. Climate change can directly affect price stability for example through floods or droughts that can destroy crops and raise food prices. Climate-related shocks can also cause losses for central banks' balance sheets and affect the implementation of monetary policy by exposing monetary policy transmission channels to risks. Climate-related physical and transition risks also pose a threat to financial stability. In addition to risk management, central banks may also want to take a more active role on climate change mitigation, or at least ensure that their policy has no negative effects. In practice many policy measures could contribute to both objectives.

Recently, central banks have become more aware of their role in fighting the risks of climate change, and some important steps have already been taken. This year, the Bank of England became the first central bank to include climate change in its policy remit. In addition, the BoE and the ECB are running thematic stress test of their bank's exposure to everything from disaster weather to production declines in industrial production. The ECB is also expected to announce more climate-related measures as part of its strategic review, read more here. Across the Atlantic, the Federal Reserve is less ambitious in its climate approach than the regulators in Europe. The Fed has said it is in the very early stages of considering climate change scenarios to assess the longer-term risks of climate change to the broader financial system. Nonetheless, in January, the Fed launched two committees set up to deal with climate impacts: the Financial Stability Climate Committee and the Supervision Climate committee.

Nordic central banks are early movers

Nordic central banks have also incorporated green tools to their policy packages. Since late 2019, the Riksbank has dumped bonds from some issuers with an outsized carbon footprint from its foreign currency reserve. The Riksbank also has a policy of excluding bonds from companies that fail to meet international sustainability standards in its quantitative easing program. It has also started to measure the carbon footprint of its asset purchases.

[1] This analysis follows up on a previous analysis: Central banks and climate risks, 2019.

For Norges Bank, however, it is more difficult to address climate change through monetary policy. Norges Bank is very different from the other central banks in the sense that it does not have quantitative easing programs, which limits its tool box. Nevertheless, it manages the Norwegian Pension Fund, through which it can have a green impact. At the beginning of this month, the Fund announced that it will do a more thorough assessment of sustainability before investing in companies. Norges Bank has also pointed out the link between climate risk and financial stability. One specific suggestion they have is to promote financial stability by ensuring that financial institutions include climate risks in their risk assessments.

Central banks are facing more and more pressure to do their part in combating climate change and are more aware of the risks that global warming poses to price stability and the economy. In addition to research and financial regulation, changes to monetary policy operations may also be needed. Nevertheless, finding the right policy tools to meet the climate challenge without risking the effectiveness of monetary policy is not an easy task.

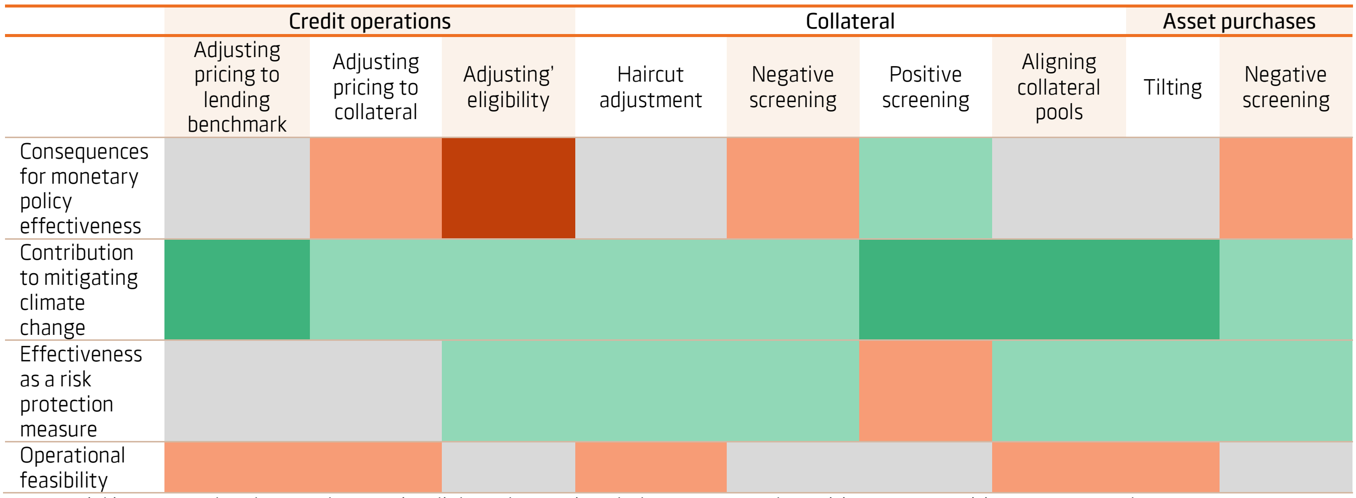
Central bank operations: several tools available, but all come with trade-offs

The Network for Greening the Financial System (NGFS, 2021) has published an analysis of central banks' options for addressing climate considerations in their operations. The report stresses that climate change creates considerable risks for central banks' balance sheets and monetary policy transmission channels. Taking no action is therefore not sustainable from a central bank perspective.

The report analyses nine policy options in the areas of **credit operations, collateral,** and **asset purchases.** When it comes to **credit operations**, central banks could for example adjust the interest rate on their lending facilities according to banks' climate-related lending or the greenness of their collateral. Eligibility to lending facilities could also be made conditional on climate-related disclosures or green investments.

On the **collateral side**, their valuation compared to market price (haircuts) can be adjusted to account for climate-related risks. Positive or negative screening of collateral according to their climate profile could also be applied by adjusting other collateral requirements. Banks could also be required to align their pool of collateral with a climate-related target. Finally, central banks' **asset purchases** could be tilted according to climate-related criteria. Negative screening, where some assets are excluded, is another option.

NGFS (2021): Simplified comparative assessment of the selected generic policy options under review



Potential impact: Dark red: strongly negative, light red: negative, dark green: strongly positive, green: positive, grey: neutral.
Source: NGFS, 2021: "Adapting central bank operations to a hotter world: Reviewing some options." Technical document, March 2021.

The report assesses these options from the perspectives of monetary policy efficiency, risk management, climate change mitigation, and operational feasibility. These objectives are often in conflict: for example, measures may need to be designed in a fairly detailed way to safeguard efficient monetary policy transmission, but this makes them more difficult to implement. When it comes to the efficiency of central bank policy, measures that excessively reduce the eligible pool of assets or collateral are considered problematic. In general, if criteria applied to credit operations are too strict, this could limit their functioning, especially in a crisis situation. The measures that get an overall good assessment in the report include haircut adjustments on collateral, the aligning of collateral pools to a climate objective, and the tilting of asset purchases. All of these are considered relatively challenging operationally, however. In general, the NGFS recommends gradual and predictable action and experimentation with pilot projects.

In addition to the policy instrument-related measures, central banks also have "softer" means of climate action, which some of them have already started to use. For example, the NGFS highlights that central banks should continue to develop methods to assess climate risks, such as forward-looking stress tests, and integrate these to their credit risk frameworks. Central banks can also contribute to better data availability with climate disclosure rules, while disclosure of their own operations can also be a helpful signal. These measures complement efforts by regulators such as the EU Commission and the EBA to develop climate-related disclosure and risk assessment in the financial markets.

Tweaking the instruments possible within the ECB's and Riksbank's mandate

But should central banks adjust their monetary policy tools to account for environmental considerations, or will they go beyond their mandate if doing so?

The ECB's mandate is to support EU economic policy, but not at the expense of price stability. In practice, according to the ECB's Frank Elderson, if there are two otherwise equally good options for achieving price stability, but the other supports the achievement of climate objectives, the latter option must be chosen. As for the Fed, Jerome Powell has said that making sure the financial system is "resilient" against climate change fits with the Fed's congressionally assigned mandates. However, the Fed's climate discussion has been limited to financial regulation, with no initiatives of changes to monetary policy instruments so far.

When it comes to the Riksbank, the Swedish government's proposal of the new Riksbank Act states that the Riksbank should identify risks towards sustainable development and that it may consider these in its operations. In addition, "special emphasis" is to be put to how sustainable development can be promoted in the Riksbank's asset management, without compromising other requirements. With its previous decisions the Riksbank has already adjusted policy instruments due to climate-related considerations. The new legislation gives it room for even more climate action in the future.

Green tilting of purchases can be motivated, but not as a major climate policy tool

At the policy level, the question is related to market neutrality. According to ECB's Isabel Schnabel "market neutrality" seems to have led to the dominance of climate-damaging sectors in the ECB's purchases. This is due to the fact that, for example, industrial companies are very capital-intensive. Therefore, the ECB should move from the principle of market neutrality to the principle of market efficiency. This could be done for example by tilting asset purchases in the direction of less emission intensive firms.

As shown in the table above, tilting asset purchases is a preferred measure also because it can likely be done without impairing the effectiveness of monetary policy. However, when considering available tools, it needs to be taken into consideration that the massive purchases currently taking place will be scaled down as the pandemic recedes. The ECB will most likely continue with smaller scale asset purchases for a prolonged time, but the Riksbank and the FED are ending new purchases relatively soon. Even if asset purchases may be increased in the future there is also a risk, albeit distant, that central banks would need to sell off bonds in the event of higher inflation. These factors speak against the use of asset purchases as a major climate policy tool. While green tilting can be motivated, it should focus on risk management and avoiding a "fossil bias" where necessary. At the same time, many central banks do not even have asset purchases as a tool, such as the Norwegian and the Danish central banks. For many central banks, policies related to for example banks' collateral are therefore a more relevant option to consider.

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