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Research Brief

Granting central bank loans against lower-quality collateral may improve money market conditions

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Collateral policy can affect money market conditions

The principles formulated by Walter Bagehot (Bagehot, 1873) state that central banks should only grant loans to commercial banks against adequate collateral and at an appropriate price. This reflects the main objective of collateral policy – protecting central banks from losses. However, collateral policy can have a significant impact on financial market activities once a central bank's balance sheet has reached a substantial size. When selecting a specific collateral framework, the central bank then finds itself faced with various trade-offs, including the following: if the bank is primarily concerned with limiting operational losses, lending against high-quality collateral could be the optimal way forward. However, if larger amounts of high-quality collateral are tied up at the central bank in this way, they will no longer be available as collateralizable assets in private sector collateral markets. This can impair the functioning of these markets, for example if safe assets become increasingly scarce. If a central bank considers the impact of its collateral policy on private markets, granting loans against lower-quality collateral (with appropriate risk-adjusted, higher haircuts) might be an optimal solution in such a stylised framework (Choi, Santos, Yorulmazer, 2021).

Temporary relaxation of Eurosystem's collateral framework as a natural experiment

A new study (Greppmair, Paludkiewicz, Steffen, 2024) provides empirical evidence for the described relationship between central banks' collateral policy and private collateral markets. It exploits a temporary relaxation of the Eurosystem's collateral framework as a natural experiment. In the Eurosystem, both marketable assets such as government and corporate bonds and non-marketable assets such as credit claims are eligible for refinancing via the central bank. Figure 1 shows the composition of the Eurosystem's collateral pool. It shows that credit claims (red bar) represent the largest group of collateral, followed by covered bonds (blue bar) and government bonds (brown bar). It also becomes clear that the share of credit claims has increased over time, especially since April 2020, when the collateral framework for additional credit claims (ACCs) was temporarily extended due to the coronavirus pandemic. These additional credit claims do not meet all of the eligibility criteria set out in the general collateral framework.

Collateral mobilised for refinancing operations with the Eurosystem

Figure 1

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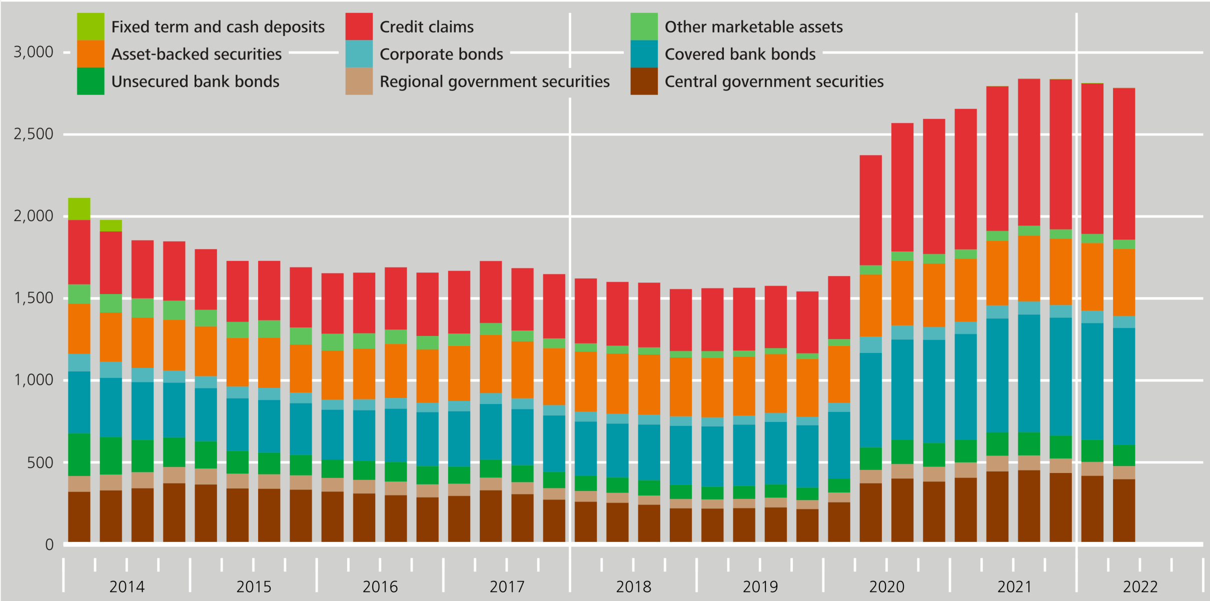

Sources: ECB.
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The circumstances considered here differ in some respects from the stylised framework outlined in the introduction. Scarcity of certain collateral was attributable to the large-scale asset purchases carried out by the Eurosystem from 2015 onwards in order to provide additional monetary policy stimulus at the zero lower bound and to counteract the consequences of the pandemic. Conversely, excess liquidity increased strongly. Furthermore, the Eurosystem made scarce securities available to the market again through its securities lending facilities. Nevertheless, the temporary relaxation of the collateral framework provides important insights into the impact on money markets.

To determine whether a broader collateral framework can actually affect banks' collateralisation and securities lending behaviour, we take advantage of the fact that some banks do not submit credit claims as eligible collateral. The decision not to use credit claims may be related to the associated costs and hurdles (such as extended documentation requirements; legal restrictions on the mobilisation of credit claims; lack of standards and limited rating availability). In the difference-in-difference approach used here, these banks therefore form the control group whose behaviour is unlikely to be affected by the extension of the ACC framework. By contrast, the treatment group includes banks with a mixed collateral pool that use both marketable and non-marketable eligible assets. Ideally, modifying the ACC framework would affect only the latter group.

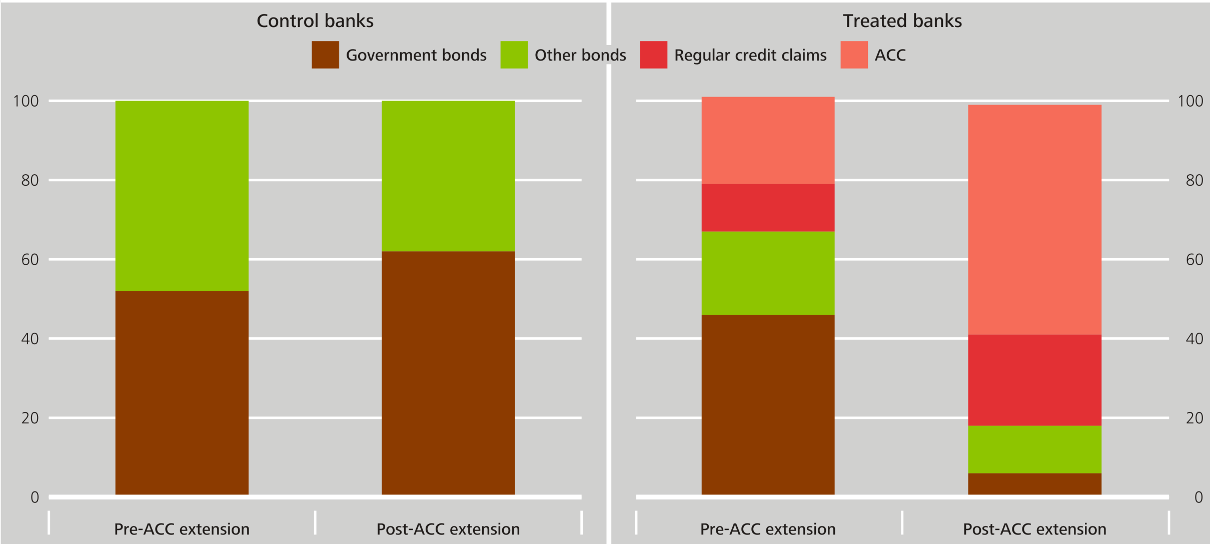
The extension of the collateral framework changes the composition of certain banks' collateral pools …

Chart 2 shows how additional collateral assets of the treatment and control groups, when broken down by collateral type, vary in the three months before and three months after the ACC framework is extended. It shows that banks with a mixed collateral pool (right-hand panel) use additional credit claims as collateral to a much greater extent following the extension of the ACC framework (light red area). At the same time, they pledge only very small amounts of additional government bonds in order to obtain new central bank funding (brown area). Banks in the treatment group therefore do not just switch from marketable to non-marketable assets. They also decide to post lower-quality credit claims and withhold higher-quality government bonds. By contrast, for banks that do not submit credit claims as eligible collateral, the extension of the ACC framework has no effect. They continue to pledge additional high-quality marketable assets (left-hand panel).

Pledged collateral

decomposition of flows in %

Figure 2



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… with the volume of securities lending rising and collateral scarcity declining at the same time

Using granular administrative money market transaction data, we use a regression analysis to show that, after the extension of the ACC framework, the banks in the treatment group (for which a change in collateralisation behaviour is observed) expand their securities lending operations and offer their high-quality assets in the private sector secured money market. The increase in the supply of loanable securities can also be seen on an aggregate basis: bonds that are predominantly held by the banks in the treatment group record an overall increase in securities lending activity. They are being re-used on a larger scale and have a declining scarcity premium. All of this suggests that the scarcity of certain collateral at that time has decreased.

Conclusion

The results show that if the central bank grants loans against non-marketable low-quality collateral, this can improve the functioning of the repo market as more high-quality collateral becomes available for private market transactions. When collateral had become scarce as a result of the Eurosystem's extensive asset purchase programmes, banks benefiting from a looser collateral framework submitted non-marketable credit claims as eligible assets and lent marketable government bonds in the repo market. The expansion in the bond supply, especially the increased re-use of additional bonds in several transactions, together with other Eurosystem measures, ultimately led to a reduction in scarcity premia and thus to a decline in asset scarcity. However, whether and to what extent such a measure could be a meaningful addition to the monetary policy toolkit requires an overall assessment that would cover, for example, additional balance sheet risks, alternative measures and incentives set for banks, and this goes beyond the scope of this analysis.

References

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