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Central Banks and the Rise of Collateral

Is cash still "king", or will the growing importance of collateral see that old adage rewritten? What role do regulation and in particular little understood central bank "collateral frameworks" have to play in this revolution?

Any finance student will be familiar with the adage "cash is king". This saying reflects the importance of money in financial markets and the economy. However, cash may be in the process of being dethroned. A new saying among market participants has it that "cash is trash and collateral is king". So what is the role of collateral in financial markets and why has its relative importance grown in recent times? Much of the answer to this question has to do with recent regulation requiring trades to be collateralized and other regulation requiring banks to hold high-quality, liquid assets, as defined by regulators. But it is also related to the policies of central banks, which are what this month's SFI Practitioner Roundup focuses on.

Collateral is important, in part, because it backs up cash. When central banks issue money, they do so against collateral. The details regarding the type of collateral that central banks accept and the terms of exchange between such eligible collateral and money are tucked away in policy documents with the technocratic sounding label "collateral framework". These constitute a largely ignored, almost hidden, aspect of monetary policy that has far-reaching, but little understood, consequences. This article provides a brief overview, drawing especially on the experience of the euro area.

The European Central Bank's (ECB) money-injecting operations have traditionally been conducted through repos, or collateralized loans. The collateral framework assigns a collateral value to each eligible collateral that defines how much money the central bank is willing to issue against it. For marketable assets, the *collateral value* is the "price" of the collateral less a haircut. This "price" may well be a theoretical construction determined by the central bank rather than in a market. Only a small portion of all securities trade on a regular basis.

> "There is more to collateral frameworks than risk management—they also play a vital role in incentives and stimulus."

Collateral frameworks are often viewed as serving a risk management function. Just as banks may require collateral to protect against losses—in the case of default—when they lend to households and businesses, central banks require collateral when they lend (issue money) to banks. However, there is more to collateral policy than risk management. For example, the incentives created by a central bank's collateral framework may affect the production of financial assets and the underlying real assets. By way of an aphorism, "if central bank money is only available against igloos, or igloo-backed securities, igloos will be built"

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Kjell G. Nyborg is Chaired Professor of Finance at the University of Zurich, Research Fellow of the Centre for Economic Policy Research, Fellow of the Royal Society of Arts, and holds an SFI Senior Chair. He is also a former Director and Vice President and the current President of the European Finance Association. His research spans from corporate finance to central banking, liquidity, and collateral.

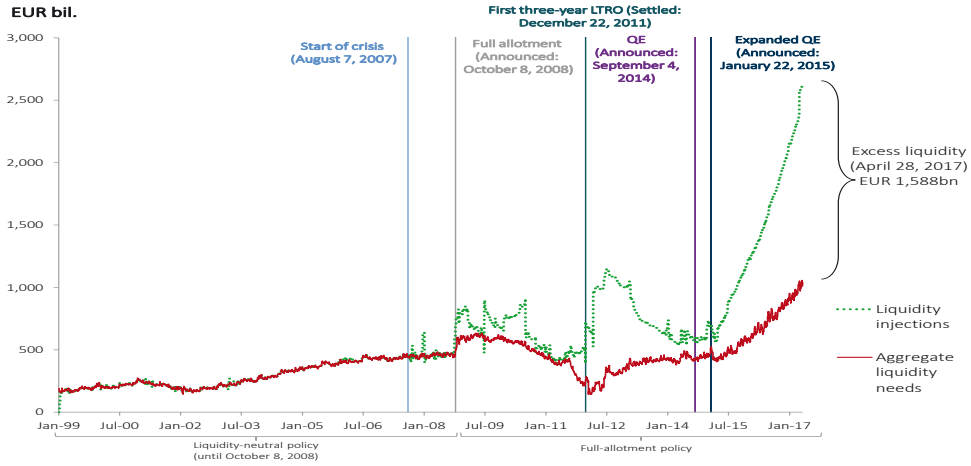
This SFI Practitioner Roundup draws on Prof. Kjell G. Nyborg's *«Collateral Frameworks: The Open Secret of Central Banks»*. http://nyborg.ch/book/

(Nyborg, 2017). In other words, favoring illiquid assets may stimulate their production. In turn, this may require further stimulus to banks holding these illiquid assets so as to "channel liquidity where it is needed". The evidence in Nyborg (2017) suggests that this perspective may be relevant with respect to understanding the increasingly stronger policies of the ECB over time.

The impact of collateral frameworks is potentially manifold: (i) haircuts may affect asset prices and thus the allocation of resources in the economy; (ii) banks' incentives to monitor debtors may be reduced through the eligibility of non-marketable collateral; (iii) political influence on the financial system may be facilitated by extending favorable terms to collateral with government guarantees; (iv) haircut rules and guarantee policies can interact to increase market segmentation; (v) favoring illiquid and risky collateral may weaken the balance sheet of the central bank and make the financial system more vulnerable to systemic shocks and crisis; and (vi) indirect bailouts can be facilitated by softening eligibility standards.

The evidence is that the Eurosystem's collateral framework suffers, to varying degrees, from all of the above. It also leaves little influence to market forces or discipline. As a simple illustration, there are 30,000 to 40,000 securities on the *public* list of eligible marketable collateral. The vast majority of these do not have a market price. Furthermore, evidence shows that banks have a preference for using collateral in less liquid and riskier asset classes where the incidence of market prices is lower.

Figure 1 below plots the issuance of central bank money in the euro area and aggregate needs from Jan 1999 to Apr 2017.[1] There are three regimes: (i) liquidity neutrality—here, aggregate liquidity injections equal (approximately) liquidity needs; (ii) full allotment—banks get whatever quantity of money they ask for in ECB operations, provided they post sufficient collateral. One view is that the excess liquidity here represents the central bank acting as a lender of last resort to banks with "liquidity" problems. Given that this has now been going on for almost nine years, a more plausible interpretation is that the excess injections represent indirect bailouts; (iii) full allotment augmented by quantitative easing—the level of excess central bank money in the system now stands at around EUR 1.5 trillion and is more than twice the need.



Source: Updated version of figure 11.2 in *Collateral frameworks: The Open Secret of Central Banks* (Nyborg, 2017: figure 11.2).

The issuance of excess central bank money soaks up collateral from the market and onto the balance sheet of the central bank. Since quantitative easing focuses mostly on relatively higher quality paper, this puts pressure on financial institutions in light of recent regulatory requirements to collateralize trades and hold more liquid assets. An excess quantity of central bank money and a "squeeze" on collateral may help explain the emergence of the saying "cash is trash and collateral is king". Mario Draghi has famously asserted that the ECB "will do whatever it takes to preserve the euro". An accommodative collateral policy and excess liquidity injections have been central to this. More generally, the ECB and other central banks have become major players in the markets. Do they have viable exit plans, or are large central banks here to stay—and if so, is this healthy?

[1] Liquidity injections include main and longer term refinancing operations and the various asset purchase programs introduced by the ECB since the beginning of the financial crisis. Liquidity needs is the sum of net autonomous factors and required reserves.

The full paper can be found at http://bit.ly/2rwDFjn.

Key Words
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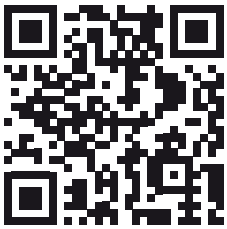

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