

# Discussion

---

## 1. Matthew Boge\*

The paper by Grahame Johnson and Eric Santor raises the issue of what role a central bank should have within 'core' funding markets. In doing so, it recognises that this may involve more than just transacting in financial assets. It may also encompass regulatory policy and infrastructure development; in the Canadian case, for example, the promotion of a central counterparty for repos. However, the focus of the paper is very much on how a central bank's unique capacity to provide liquidity should best be deployed within these core markets to keep them open.

To this end, the Bank of Canada has developed a framework for thinking about when intervention may be warranted and the principles under which it is conducted.

The authors style such intervention as an extension of the central bank's lender-of-last-resort function. This might imply that the degree of market dysfunction is such that participants ordinarily reliant on it for liquidity are unable to procure it. Whether that is true may not always be easy to tell in practice. Elevated spreads may still be consistent with the market clearing, and the case for intervention might involve a more subjective assessment.

Either way, whether the market has broken down or whether liquidity premia are simply deemed to be excessive, central bank intervention can be rationalised as correcting a market failure, and the generally understood reasons for such failure are mentioned in the paper.

Consistent with the idea that central bank intervention is of the last resort, the paper stresses that interventions in core markets are best designed to be self-liquidating; that is, priced so that when market pressures abate, the demand for central bank funding disappears.

This raises the question of whether the programs themselves should be discontinued or whether the arrangements could simply be left in place during periods of normalcy. In the same way that a regular central bank standing facility may only be infrequently used, but is always in place to address institution-specific needs, facilities designed to address market-wide, systemic problems could be left in place and would trigger participation only when needed, assuming that the cost of access is, as suggested in the paper, set above market levels that would pertain during normal times.

For some, such permanency might raise the spectre of moral hazard, an issue that is never far away when discussing this topic. A more likely problem with sustaining the sort of programs discussed in the paper is that, by pre-committing the central bank to moderating movements in market prices, it would remove some of the central bank's flexibility. In this regard, perhaps the appropriate course is, as the Bank of Canada has done, to simply articulate the principles that will guide such intervention, rather than foreshadow the precise mechanics that would be applied in any given situation.

---

\* The views expressed are those of the author and do not necessarily reflect those of the Reserve Bank of Australia.

However, while central banks have tended to close down many of the special programs and facilities introduced during the financial crisis (when market conditions have permitted), for many central banks, there will be elements of such interventions permanently in place within their operating frameworks.

A central bank that has as its operational target a short-term interbank rate will generally look to the private sector to establish the appropriate relativities between this rate and the yields on other financial assets. For this reason, central bank operations may be concentrated in the most liquid 'core' markets – such as the repo market for government bonds – where central bank activity is less likely to alter the relativity with the operational target.<sup>1</sup>

That is the case for Australia, but only superficially. While most of the Reserve Bank's transactions in the domestic market are indeed in repos involving government bonds, the range of securities eligible for the Bank's repurchase transactions has long been broader than this and, to the extent that it was widened further during the financial crisis, those changes, for the most part, were made permanent.

Combined with the wide range of counterparties eligible to participate in the Bank's routine operations and the ability of these counterparties to nominate the preferred maturity of their transactions, the equivalent of the Bank of Canada's term purchase and resale agreements was largely automated within the Australian context. That is, the Reserve Bank does not necessarily need to introduce a special facility to provide this type of funding; to a large extent, it can happen spontaneously within the Bank's routine market operations.

Can this approach be reconciled with the five principles for intervention as set out in the paper? Mostly, I would think that it could. Certainly, it is consistent with the idea that intervention should be graduated. As liquidity premia on eligible securities change, counterparties have the opportunity to alter the composition of the central bank's portfolio by delivering what are now the 'cheapest-to-deliver' securities, on both new and outstanding transactions. However, absent deliberate central bank action, increasing the size of these asset holdings further would only be automated to the extent that an expanded central bank balance sheet was needed to maintain the operational target.

Does this approach meet the principle of minimising unintended market distortions? In thinking about this, it should be acknowledged that eligibility for central bank operations can reduce the liquidity premia attached to securities and the effect is no doubt greater where eligibility pertains to routine market operations rather than just a standing facility, or where eligibility effectively classes an asset as liquid for prudential purposes, as will be the case in Australia under Basel III. In other words, the dividing line between eligible and ineligible assets can be of some significance. In this sense, a framework that seeks to ensure that bank funding can be sustained in a stressed period may have some impact on non-core markets (namely, the markets for potential bank assets). This is largely unavoidable in Australia and is something we have been conscious of in trying to accommodate a regulatory standard that requires banks to hold many more liquid securities than actually exist in the market.

---

1 In some cases, such as for the Bank of Canada, the operational target is the general collateral repo rate for government securities.

## DISCUSSION

The paper provides examples of where central bank intervention had the desired effect on core markets. Thinking about why these interventions might have been successful raises some issues about the nature of liquidity provision by central banks.

The success of the central bank foreign exchange (FX) swap lines is easy enough to understand. Central banks (having accessed US dollars from the Federal Reserve) were able to provide US dollars to market participants in much the same form as that of the impaired 'core' market; either secured against local currency (as in an FX swap) or against local currency-denominated securities. While not every user of FX swaps would have had access to these operations, the breadth of eligible counterparties was such that the central banks were effectively acting as market makers in the impaired market.

The reasons why central bank intervention succeeded in driving down rates on short-term unsecured bank funding are perhaps less straightforward. Indeed, the authors are understandably cautious in not necessarily attributing all of the improvement to the actions of the central bank. Here, the intervention was not directly in the core market – such as in the form of outright purchases of unsecured bank debt – but was via collateralised funding. Why did this work?

In Australia's case, the equivalent operations involved contracting repos with counterparties (both banks and non-banks) against a list of eligible securities that included debt issued by banks. Hence, the success of these operations in moderating spreads on bank certificates of deposit (CDs) may have been partly because we were funding purchases of bank CDs by our counterparties. In that sense, providing funding liquidity was sufficient to encourage investors to remain in, or re-enter, the market, taking on the bank credit risk themselves. Alternatively, the successful outcome may have come about because the Reserve Bank was funding banks and allowing them to use comparatively illiquid assets as security for that funding (assets that could not have been directly funded otherwise), thereby limiting the need for them to issue CDs.

If the latter effect was more important, and I think that it was, this suggests that rather than supporting the 'core' market, the central bank effectively substituted for it. A similar interpretation could be made regarding the effect of the European Central Bank's (ECB's) long-term refinancing operations (LTRO). Granted, those operations didn't resolve the problems in the sovereign markets, as is noted in the paper. However, the LTRO did appear to assist bank funding. Nevertheless, I don't think it was by fostering the re-emergence of an active interbank market but, rather, by supplanting it.

It is also useful to consider central bank interventions that didn't work. As noted, the ECB's LTRO is characterised as being ultimately unsuccessful in the paper. One comment I would make about the ECB's experience is that I'm not sure that it is a good advertisement for a graduated response to market stresses, although I accept that others may simply view the preliminary responses as being misdirected, as the authors do.

In the Australian context, while we would characterise our operational changes as being generally successful, the positive effects were more pronounced in some areas than in others. In terms of the market near the heart of the financial crisis – namely, that for securitised assets – there was not much the Reserve Bank could do to revive that market. Making these securities eligible for the Bank's repo operations perhaps assisted their liquidity at the margin, but it did nothing to ease investor concerns about the credit quality of these assets.

While the securitisation market could not be considered 'core' in Australia (as funding the underlying assets on-balance sheet was an effective substitute for at least the larger players), this does perhaps highlight the limits to central bank intervention taking the form of acting as the 'market-maker of last resort', as it is phrased in the paper.<sup>2</sup>

---

## 2. General Discussion

Much of the discussion focused on the long-run objectives of central bank intervention in core funding markets. There was broad agreement among participants that central banks should intervene to keep core markets functioning. However, several participants suggested that policymakers had been too willing to fix problems that should never have occurred had markets been more structurally sound, and in doing so had allowed markets to return to sub-optimal pre-crisis equilibria. It was generally agreed that central bank intervention should be combined with structural reforms, including strengthening regulation, market infrastructure and the capital base, to reduce vulnerability to shocks in future. Grahame Johnson emphasised that even in the absence of structural problems, sufficiently large shocks to the system could motivate a role for central bank intervention. He also noted that conditionality in well-designed intervention programs should prevent a return to bad equilibria. The low credit risk premia on peripheral euro area countries' sovereign debt before the crisis was offered as an example of a bad pre-crisis equilibrium. In this context, Mr Johnson noted that neither the stated objective of the OMT program nor its realised effect had been to return spreads in peripheral countries to pre-crisis levels.

Another topic of discussion was motivated by one participant noting that the high level of wholesale market funding of financial institutions was often viewed as a potential source of instability. This raised the question of whether policymakers should be considering how to create a new steady state with a larger share of deposit funding. It was noted that there could be benefits from a higher share of deposit funding, since this source of funding had recently proven to be more sticky and less sensitive to banks' financial conditions. However, at the same time, the regulatory focus had been on making wholesale funding more stable by making debt 'bail-inable'. Having a wedge in the capital structure comprising wholesale debt that could convert to equity when needed, and was held by large sophisticated agents who understood the risks involved, could be preferable to the Cypriot experience where losses were imposed on depositors in the absence of alternatives.

This provoked debate about policymakers' apparent lack of willingness to haircut wholesale debtholders when risks crystallised. In contrast, it was noted that an important objective of current regulatory initiatives was to make wholesale debt more loss absorbing. Switzerland was cited as a jurisdiction in which banks had issued debt that could be written down if capital levels were to fall below stated thresholds. This observation was countered by the argument that the true

---

<sup>2</sup> A more substantive intervention in the securitisation market was made by the Australian Government's debt management office – the Australian Office of Financial Management (AOFM). The AOFM undertook a program of *outright* purchases of residential mortgage-backed securities (RMBS). These purchases were targeted at those RMBS sponsored by (smaller) financial institutions that had less capacity to fund the mortgages on their balance sheets. While the AOFM's program no doubt assisted those firms and helped to provide a pricing benchmark for an illiquid market, it did not catalyse a more general revival in the market.

## DISCUSSION

test of credibility was not in being able to issue such debt, but in whether the authorities had the will to follow through on such writedowns in the face of an adverse shock. Mr Johnson observed that one benefit of issuing contractual, rather than statutory, 'bail-inable' debt was that it should reduce the extent to which political pressure could undermine this credibility.

Another participant suggested that identifying foreign exchange spot and swap markets as core funding markets could give central banks more scope to intervene than might be appropriate. As an example, it was suggested that the decline in activity in the foreign exchange swap market during the financial crisis reflected a worldwide shortage of US dollar-denominated liquidity, rather than a disruption to market functioning that would warrant central bank intervention. Other participants argued that the foreign exchange spot market needed to function at all times, in the sense of exhibiting two-sided prices, and was therefore a core funding market. Mr Johnson noted that the Bank of Canada operated with a conditional commitment to take the other side of the market if the Canadian dollar market ever broke down by this measure.

A range of other observations were made. One participant asked whether the counterparties to the central bank in its interventions were afforded a competitive advantage; in such circumstances, the central bank would be expected to price funding more favourably than the prevailing market prices to enable the counterparty to profitably on-lend funds to other institutions. This raised the question as to how counterparties were selected. It was put forward that transactions should be limited to typical participants in the market to minimise market distortions. Another participant criticised the common approach of evaluating the success of non-standard monetary policy measures by assessing *ex post* market outcomes, claiming that since no counterfactual was observed, this was an incomplete analysis.