

Monetary Policy and Financial Stability: Governance Design Considerations

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Abstract

This note is an addendum to Monetary Policy When the Central Bank Shapes Financial Market Sentiment. I explain why monetary policy outcomes can be improved by having a well-structured macroprudential framework. I also give three suggestions for how the governance arrangements between the macroprudential authority and the monetary policy committee can be structured.

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Introduction

This paper supplements the analysis in Kashyap and Stein (2022) (henceforth KS). KS argue that recent research has suggested that a simple New Keynesian (NK) model of monetary transmission is incomplete. In particular, the typical NK model has a single interest rate that the central bank can control fairly effectively (except perhaps at zero bound) that affects output (and eventually prices). In practice, it is understood that policy operates through a variety of channels including by changing a wide range of asset prices.

KS emphasize that one important channel of transmission is via changing term premia which they define as the difference between the interest rate on a particular security (or loan) and the rate on a government security of the same maturity. The changes in these premia, however, are prone to reversals. So that, for instance, if a loosening of policy today compresses term premia it is likely that somewhat later the premia will retreat and in doing so increase the cost of credit. This means that policy choices involve a tradeoff under which changing policy now can create risks down the road. The bulk of the KS analysis takes it as given that there are limits to other tools that can be used to address the risks, so that monetary policy must take the reversal risk into account.

Nonetheless, there is a clear difference between a situation in the U.S. where there are essentially no macroprudential tools, and no single macroprudential regulator and in the U.K. where the Financial Policy Committee (FPC) has many tools and the power to make recommendations. I will argue in the remainder of this note, that even if a complete set of macroprudential tools are not available, a well specified macroprudential framework can still ease the pressure on monetary policy.¹ Even though this Review is not addressing the mandate for the central bank, the way monetary policy should be conducted will depend on whether it can be complemented by the use of macroprudential policies. Furthermore, if there are structural changes that can be made to the macroprudential policy framework and they are not undertaken, then monetary policy will be more constrained than is necessary.

To make this more tangible, in the next section, I will review three recent cases where there were macroprudential and monetary policy interactions that either were, or were not, managed well. Besides helping to show that the concerns I have expressed are not just hypothetical, they also provide some guidance about how to structure the macroprudential arrangements to support sound monetary policy making.

In the following section of the paper, I make some suggestions about the macroprudential arrangements in Australia could be reformed. Some of these suggestions might require legislation, but others could be implemented without it. Ideally, the government would decide that a review of the macroprudential framework in Australia would be warranted and a similar group to the one conducting the monetary policy review could be convened.

Macroprudential and Monetary Policy Interactions

The first example comes from a decision taken by the UK Monetary Policy Committee (MPC) in August 2013. At that time, the MPC was issuing forward guidance about its plans for interest rates. The MPC announced that it did not plan to raise its policy rate from the current level, or reduce the stock of its

¹ See Kashyap (2018) for a description of how macroprudential policymaking differs from conventional microprudential regulation.

asset purchases (and so would continue to reinvest maturing gilts) at least until the UK unemployment rate had fallen to 7%. This was similar to the policy guidance that the Federal Reserve had given.

The unusual thing about the MPC decision was that it included three caveats that stated conditions under which it would potentially deviate from that guidance. Two of these so-called “knockout clauses” were related to inflation developments, in particular whether forecast inflation were to move outside the committee’s target range or if inflation expectations were to become unanchored. Given the primacy of the MPC’s inflation objective, these conditions are hardly surprising. The novel third condition was if

“the Financial Policy Committee (FPC) judges that the stance of monetary policy poses a significant threat to financial stability that cannot be contained by the substantial range of mitigating policy actions available to the FPC, the Financial Conduct Authority and the Prudential Regulation Authority in a way consistent with their objectives.”

The minutes of the meeting do not give an explicit explanation for why this third condition was included. There are several possible justifications. First, if the MPC believed the kind of evidence reviewed by KS, then it would have recognized that the guidance could create financial stability risks. If so, acknowledging these risks would be an appropriate way to set the stage for breaking the guidance should they materialize. The conditionality could preserve the credibility of the MPC if it needed to give similar guidance in the future. Second, the decision to defer to the FPC over whether the condition had been met, gives further credibility to the announcement. In particular, if progress towards the unemployment goal had not been met, and inflation was still near target, the MPC based on its remit might naturally be expected to want continue the policy. In this case, MPC is spared the difficulty of having to balance its commitment to meeting its remit against the financial stability objectives of the FPC. Furthermore, given the overlap between the membership on the MPC and FPC, the MPC could be sure that its reasoning for turning to forward guidance would be shared with the FPC should financial stability concerns arise.

The second example is the decisions taken by the Federal Reserve’s Federal Open Market Committee (FOMC) in March 2020 at the onset of the Covid pandemic. As has been widely discussed, starting around the 9th of March there was a “dash for cash” whereby many different actors in the financial system found themselves forced to make payments or meet withdrawals. (see Bank of England, 2020). This led to exceptionally large sales of US Treasury securities and a substantial dislocation of Treasury prices. This led the Federal Reserve to expand its asset purchases in an unprecedented fashion. As can be seen from Figure 1, the Fed’s balance sheet grew much faster during this period than any time prior history. The initial surge in purchases was undoubtedly warranted, given the fragile nature of financial markets at the time.

The more interesting issue is the evolution of the way in which in the policy was described by the FOMC. The section of the FOMC post meeting statements related to the asset purchase over the next few months are collected in Table 1 – where I have added bold italics to highlight the key passages . At the initial unscheduled meeting on March 1 the FOMC slashed interest rates to the effective lower bound. It also announced that the additional asset purchases were being undertaken to support “the smooth functioning of markets” to assure “the smooth flow of credit to businesses and households.” The statement was open ended by virtue of only setting floors on the size of purchases. Also, there was no

conditions established for how outsiders could tell when the smooth functioning of markets would be deemed to have been restored.

In fact, the purchases quickly exceeded the thresholds of \$500 billion of Treasury securities and \$200 billion of agency mortgaged backed securities. When it next clarified plans regarding additional asset purchases at another unscheduled meeting on March 23, it added that it would continue purchases in “the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy.” So within a week, the financial stability rationale and monetary policy objectives had been explicitly tied together.

By the time of the next scheduled FOMC meeting on April 29, the language around asset purchases shifted subtly. Now the asset purchases were justified as in part because they helped in “fostering” the effective transmission of monetary policy to broader financial conditions. I read this as an assertion that the purchases were now viewed as essential for the efficacy of monetary transmission. This language was retained at the next two FOMC meetings in June and July. As of June, the description of the expected increase in holdings was shifted to be “at least at the current pace”.

The final important change in language comes at the September 2020 FOMC meeting. Here the language was adjusted to say the increase in the balance sheet was now in part needed to help “foster accommodative financial conditions.” By September, it is hard to argue that the market dislocations that had so evident in March were still present.

For instance, Flemming and Nelson (2022) review various indicators of Treasury market liquidity, including bid-ask spreads, the price impact of trades, and the volatility of prices over recent years. Figure 2 shows their estimate of how much buying \$100 million of different maturities would move the price and it is clear that by September conditions were back to the pre-Covid situation. The same is true for the other measures that they study. So the case that the purchases were needed to support market functioning was dubious at this point.

We know that asset purchases in the U.S. continued until March of 2022. By then, the U.S. was booming and many financial condition indices were indicating that overall conditions were as supportive as any time on record. See Carpenter et al (2022) for a review of this evidence.

As a counterfactual, consider what might have happened if the ongoing asset purchases had been reviewed by both a financial stability/macprudential committee and a monetary policy committee.² It seems likely that three additional considerations would have come into play. First, it’s highly likely that a financial policy committee would have decided at some point well before March 2022 that the market function rationale would have been discarded. Even in the Fall of 2021 when the FOMC started to signal that the size of the purchases would shrink, the committee retained the language that the purchases were fostering smooth market functioning. So the ambiguity about what was needed to really support market functioning was never resolved.

² See Kohn (2016) for a strong articulation of why having separate committees, as in the UK, is desirable, and why less formal arrangements as in the U.S. are not a substitute.

A second consideration that likely would have arisen in the counterfactual is that with the market functioning rational no longer present, the monetary policy setters would have needed to debate whether the pace of purchases could have been reduced. Perhaps they would have said the exact same amount was still needed, but it is also plausible that the tapering would have begun sooner.

Finally, a financial stability committee likely would have discussed whether purchases that were made to support financial markets could be reversed. With the monetary policy committee still seeking to grow the balance sheet, it is hard to know whether the Fed would have tried selling some securities while buying others. However, it is possible that if there had been a second committee, perhaps the FOMC would have tapered further in recognition that other committee would have preferred to be shrinking the balance sheet.³

Given the ambiguity over the relative weights placed on market functioning relative to easing financial conditions, it is very hard to know how any of this would have played out. Nonetheless, if one starts from the premise that the FOMC was behind the curve in tightening conditions, the possibility that the committee would have acted sooner if it had a companion financial stability committee merits consideration. Furthermore, even if the FOMC partly internalizes some of these observations, absent an institutional change to provide some structure, it is hard to be confident that a repeat will be avoided.

As a final example, and in strong contrast to the FOMC example, consider the events in the Fall of 2022 that played out in the UK related to the Gilt market. The basic facts are well-described by letters from Jon Cunliffe, Deputy Governor for Financial Stability at the Bank of England, to the UK Parliament's Treasury Select Committee and in Hauser (2023).⁴ In brief, following a fiscal announcement by the recently formed government on September 23, markets appear to lose confidence in the fiscal regime. Figure 3 (from Hauser (2023)) show that over the course of the next three days, 30 year gilt yields rose by 150 basis points, the sharpest move on record. These moves caused large margin calls for some pension funds that had set up special purpose vehicles (SPVs) to help hedge their interest rate risk. Lacking cash to meet the margin calls, the SPVs would have had to begin selling gilts into a market with few natural buyers; most of the universe of long dated gilts, and almost all of the inflation linked ones, are owned by pensions.

By September 27th, the FPC had become concerned that the potential of forced selling by the pension funds would lead to dysfunction in the gilt market and the instability would spread to the rest of the financial system. On the 28th FPC recommended that action be taken by the Bank of England to prevent this risk from crystalizing. That day the Bank announced plans for temporary and targeted purchases in the gilt market and the FPC welcomed that action.

The governance around this decision and the subsequent policy was very different from the FOMCs in March 2020 in three respects. First, the FPC drove the decision for the Bank to become effectively the market maker of last resort. The MPC was notified of the decision, but this was labeled as a financial

³ The FOMC seems haunted by the experience in 2013 around the so-called "taper tantrum". To the extent that some of the purchases had been made explicitly by appealing to financial stability considerations, at least those purchases could be anticipated as being reversed, thereby avoiding any signaling about the implications for monetary policy.

⁴ See <https://committees.parliament.uk/committee/158/treasury-committee/publications/3/correspondence/> for letters sent on October 5 and 18, 2022.

stability action from the start. Second, the period of intervention was limited to lasting 13 days from when the purchases began and was capped so that total purchases would not exceed £65 billion. The timing was chosen because that was the estimate of how long it would take the pension funds to get the support that they needed to avoid the forced-selling. Third, the intent from the outset was that any assets that were purchased would be disposed of once the market conditions normalized.

Judged against its objectives, the intervention was extremely successful. The Bank bought £19.2 billion of gilts during the 13 days when they were taking place. Yields in the market stopped rising and stabilized over the course of the program. More importantly, the pension funds used the time to secure the support they needed to meet their margin calls. The Bank was also successful in disposing of the assets that it bought. It sold all of the acquired securities by January 13, 2023 (reportedly making a profit on the sale).

Before this episode, the MPC had signaled that it intended to begin reducing the stock of assets that had been bought as part of its quantitative easing program. The onset of the sales was ultimately deferred by one day, but otherwise they proceeded as had been planned. So the intended monetary policy tightening was not impeded by the financial stability intervention.

To be sure, some of the success of the program hinged on factors outside of the control of the Bank of England, the FPC and the MPC. The government's fiscal policy was reversed. Although there were problems with crypto assets, there were no other big simultaneous problems in financial markets. There were also no further major changes due to the war in Ukraine.

On the other hand, there were many challenges that the Bank, the FPC and MPC did face in pulling this off. They had to calibrate the announced size of program and then execute the purchases. Most importantly, they had to navigate an unprecedented communications challenge of explaining how this financial stability intervention interacted with the plans for monetary policy. Even if the FPC and MPC could see why one committee might be supporting bond purchases, while the other was preparing to sell them, the public could easily have been confused.

There is some evidence that there was some initial confusion about the purchases. Notice in Figure 3 that upon the announcement of intervention yields plummeted, suggesting that perhaps market participants thought the point of the purchase program was to cap yields. Yet, within a few days the yields began rising and by the end of the program they were not that much lower than when it started. The market was in better shape and it seems that participants eventually understood that these market-making purchases were distinct from monetary policy choices. I expect this experience to be studied carefully and to possibly become the reference for how financial stability purchase programs should be conducted.

Summing up I take three lessons from the case studies. First, there is evidence, beyond the sort emphasized by KS, that monetary policy and financial stability can interact. Second, the interactions can come from both directions; monetary policy decisions can potentially threaten financial stability and financial stability actions can potentially interfere with monetary policy plans. Finally, navigating these interactions is much more manageable when there are separate well-defined groups with clear responsibilities looking after each task. The evidence from the U.S. shows how much trickier it is operate when responsibilities are blurred or the decision-rights are unspecified.

Aligning Monetary Policy and Macroprudential Policy

With this evidence in mind, I see three ways in which the institutional design in Australia could be reformed to help both make monetary policy more effective and to reduce the risk of financial instability. The first has to do with formalizing some existing arrangements. The second has to do with some governance decisions that would arise in light of the first set of changes. Finally, there are likely to be additional changes needed to support the new institutional structure.

Currently there is an incomplete macroprudential regime in place in Australia. There is a working group of the top regulators (the Council of Financial Regulators, CFR) that meet periodically and who can convene on short notice in a crisis. The Australian Prudential Regulation Authority (APRA) has some macroprudential responsibilities, but the ties between APRA and the CFR appear to be incompletely codified.

As an outsider, it is not exactly clear how this cooperation is supposed to work. Several examples illustrate my concerns. Suppose that the RBA wanted to undertake some monetary policy action that carried some financial stability risks. For concreteness, assume that the RBA wanted to include some knockout clauses similar to those proposed by the UK MPC in 2013. Would APRA or the CFR make the judgement regarding whether the financial stability risk was crystalizing? What would happen if the two groups disagreed? Does APRA have sufficient expertise and staff resources or the incentives to monitor risks through the entire financial system, in particular the areas that are outside its remit?

There are still issues even if APRA (or the CFT) were to identify financial stability issues. Suppose, for example that there were significant problems in the non-bank part of the financial system. Assume further that an asset purchase facility, or a lending facility, was needed to deal with the problems. APRA does not have a balance sheet so it could not do this unilaterally. Would APRA or the CFR have the power to direct the RBA to establish the required facility? Again, what happens if APRA and the CFR disagree about what is required or the RBA does not want to proceed?

Conversely, suppose the monetary policy committee saw some financial stability risks building that it thought could impair its ability to achieve its monetary policy objectives. For example, if the housing market were overheating and it would like to have lending standards tightened to deal with this risk. Being able to make a recommendation to a macroprudential regulator with the authority to act in this way could make the RBA's job with respect to monetary policy easier. Absent the macroprudential regulator, would the RBA have to change its monetary policy settings to address this risk?

Finally, suppose a lending facility had been established, and the recommending macroprudential committee subsequently deemed that the financial stability risks that justified the facility to have abated. How are the decisions about the subsequent evolution of the RBA balance sheet going to be made? Does RBA decide whether if (and how) it restores the balance sheet to its initial position? What happens if APRA, or the CFR, disagrees with the RBA's plans?

There are surely other situations in which there would be potentially complicated, and ambiguous, circumstances where even experts might not agree on how to proceed. In such cases, having clear decision rights and lines of authority are likely to lead to better policy choices; the alternative can lead to infighting, blame-shifting and/or paralysis in decision-making. The current arrangements in Australia do not seem well-suited to dealing with these cases.

My first recommendation is that the macroprudential responsibilities should be clarified. In particular, the roles of the CFR vis-a-vis APRA should be delineated for the kinds of cases described above. There should be one dominant macroprudential decision-maker which has the responsibility for taking the lead in handling these cases.

My second recommendation is that the relationship between the RBA and the new lead macroprudential decision-maker should also be resolved. The most important issue is what each committee can expect of the other and what each insist upon regarding the actions of the other.⁵ To facilitate information sharing and coordination, at least one representative from the RBA should be an observer, or member, of the macroprudential committee.

Finally, there ought to be an external review of whether the financial risks coming from the non-bank parts of the financial system, including crypto, can be adequately dealt with. The global push to reform bank regulation after the global financial crisis has greatly improved bank regulation. Unfortunately, activity everywhere has migrated out of the banking system and the financial system everywhere continues to evolve. It is important to make sure that the macroprudential authority continues to have its toolkit reviewed and updated. Some of the actions of central banks in March 2020 happened because they were effectively the only game in town. This kind of review could be undertaken by the government in parallel with any legislative initiatives that might be needed to implement the first two recommendations.

Conclusions

The observation that there are intimate connections between monetary policy settings and financial stability risks is now well-understood. It appears that the existing institutional arrangements in Australia are not well-suited to dealing with some of the interactions between the two. This paper explains why I reach this conclusion and offers some recommendations for how the arrangements could be improved.

⁵ I am presuming that the macroprudential regulator has the right tools and powers to address the risks it identifies.

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Table 1: FOMC Communications Concerning its Balance Sheet After the Onset of the Covid Pandemic

Date	Excerpts from FOMC Statements
<p>Unscheduled Meeting March 15, 2020</p>	<p>The Federal Reserve is prepared to use its full range of tools to support the flow of credit to households and businesses and thereby promote its maximum employment and price stability goals. To support the smooth functioning of markets for Treasury securities and agency mortgage-backed securities that are central to the flow of credit to households and businesses, over coming months the Committee will increase its holdings of Treasury securities by at least \$500 billion and its holdings of agency mortgage-backed securities by at least \$200 billion. The Committee will also reinvest all principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. In addition, the Open Market Desk has recently expanded its overnight and term repurchase agreement operations. The Committee will continue to closely monitor market conditions and is prepared to adjust its plans as appropriate.</p>
<p>Unscheduled Meeting March 23, 2020</p>	<p>The Federal Open Market Committee is taking further actions to support the flow of credit to households and businesses by addressing strains in the markets for Treasury securities and agency mortgage-backed securities. The Federal Reserve will continue to purchase Treasury securities and agency mortgage-backed securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions. The Committee will include purchases of agency commercial mortgage-backed securities in its agency mortgage-backed security purchases. In addition, the Open Market Desk will continue to offer large-scale overnight and term repurchase agreement operations. The Committee will continue to closely monitor market conditions, and will assess the appropriate pace of its securities purchases at future meetings.</p>
<p>Regularly Scheduled Meeting April 29, 2020</p>	<p>To support the flow of credit to households and businesses, the Federal Reserve will continue to purchase Treasury securities and agency residential and commercial mortgage-backed securities in the amounts needed to support smooth market functioning, thereby fostering effective transmission of monetary policy to broader financial conditions. In addition, the Open Market Desk will continue to offer large-scale overnight and term repurchase agreement operations. The Committee will closely monitor market conditions and is prepared to adjust its plans as appropriate.</p>
<p>Regularly Scheduled Meeting September 16, 2020</p>	<p>In addition, over coming months the Federal Reserve will increase its holdings of Treasury securities and agency mortgage-backed securities at least at the current pace to sustain smooth market functioning and help foster accommodative financial conditions, thereby supporting the flow of credit to households and businesses.</p>

Source: Federal Reserve

Figure 1: Federal Reserve Balance Sheet 2002 to 2022

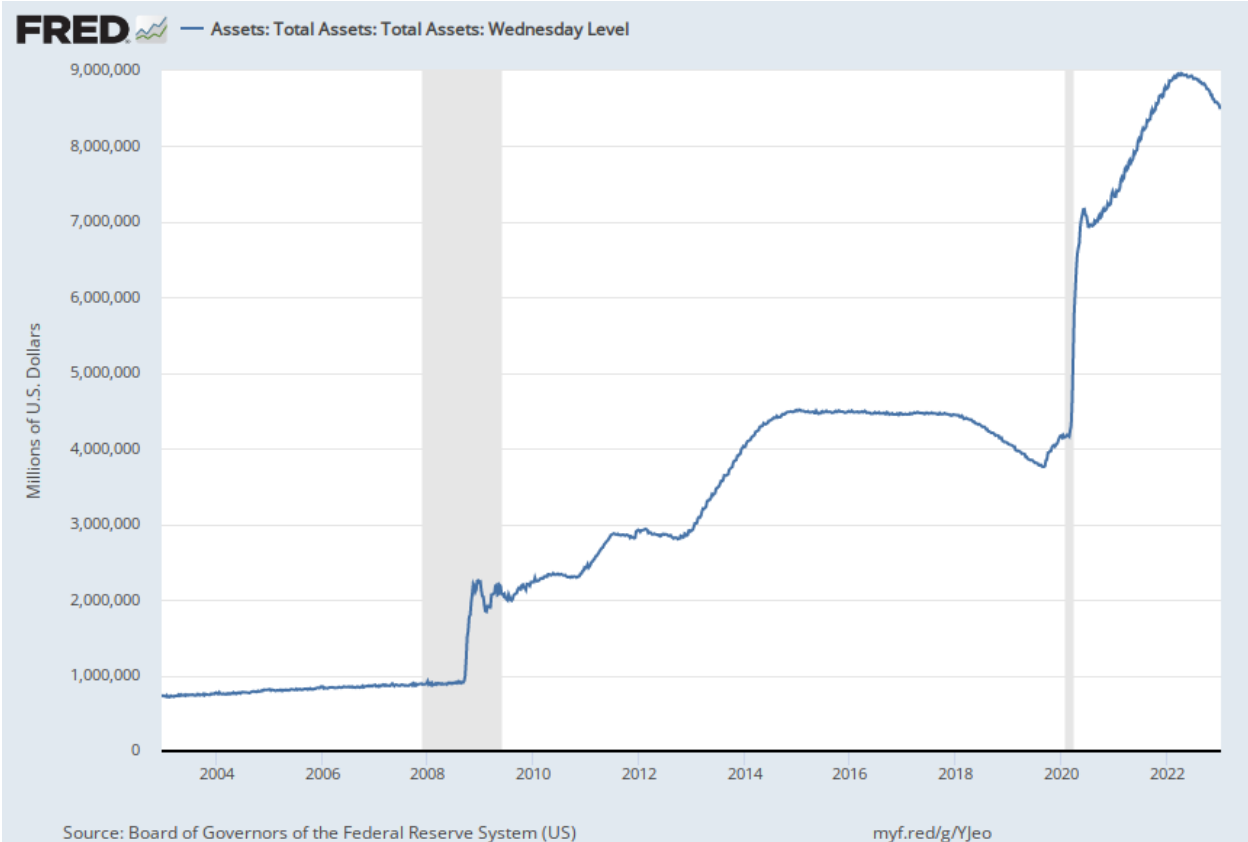
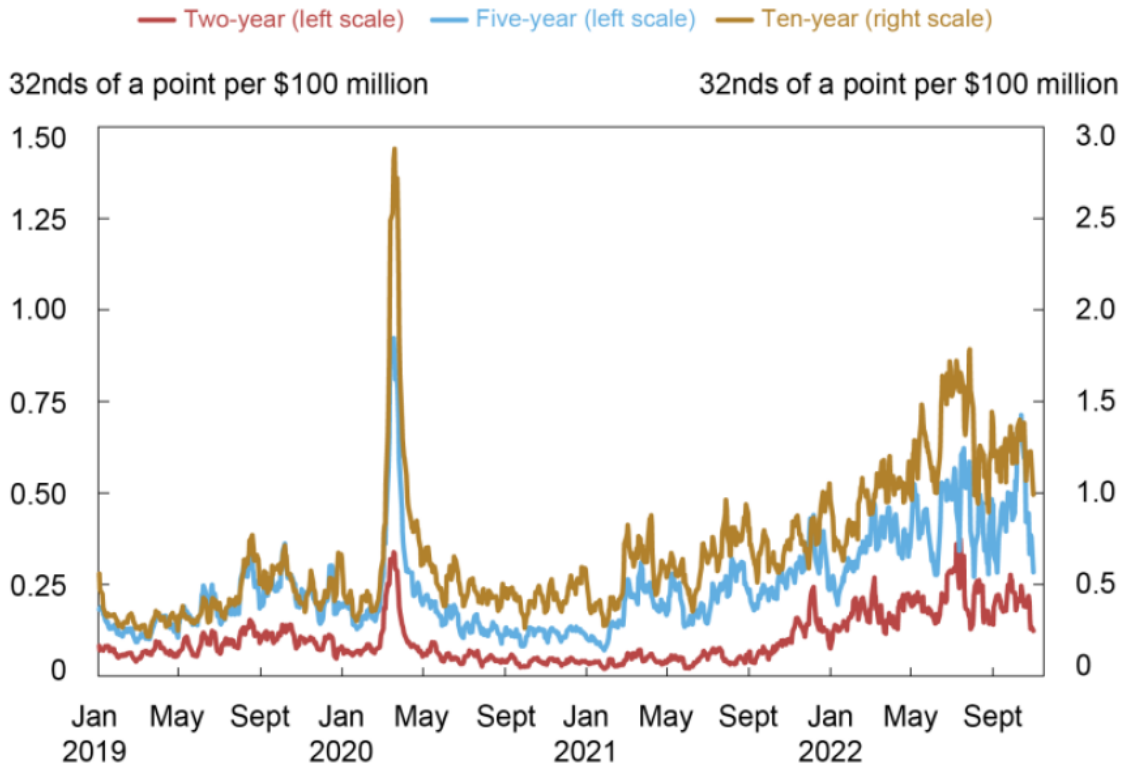


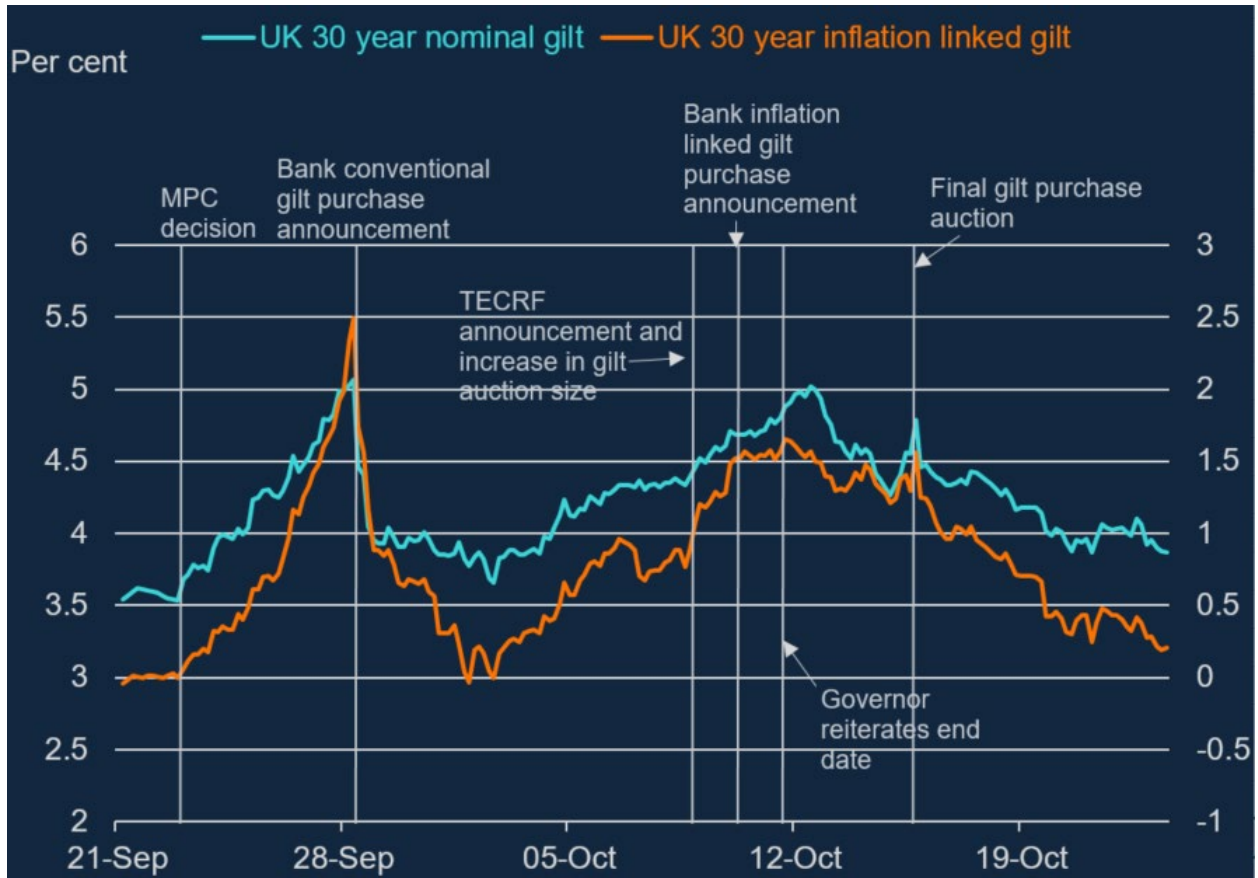
Figure 2: Price Impact In the US Treasury Market as Estimated by Flemming and Nelson (2022)



Source: Authors' calculations, based on data from BrokerTec.

Notes: The chart plots five-day moving averages of slope coefficients from daily regressions of one-minute price changes on one-minute net order flow (buyer-initiated trading volume less seller-initiated trading volume) for the on-the-run two-, five-, and ten-year notes in the interdealer market from January 2, 2019, to October 31, 2022. Price impact is measured in 32nds of a point per \$100 million, where a point equals one percent of par.

Figure 3: Gilt Yields in the UK



Source: Hauser (2022)