LIMITING THE FISCALISATION OF CENTRAL BANKS

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Since 2007, and especially during the Covid pandemic, central banks have expanded both the scope and scale of their interventions in unprecedented fashion, blurring the lines between monetary and fiscal policy. This *fiscalisation* endangers central bank independence, thereby weakening monetary policymakers' ability to deliver on their mandates for price and financial stability. To find a way back to the pre-2008 division of responsibilities, governments must establish clearer limits on what central banks can and cannot do.

Recalling the world before the 2007-2009 financial crisis may seem quaint, but it provides a useful benchmark against which to measure how far the role of the central bank has evolved over the past dozen years. We start from the commonly agreed premise that, to meet its price stability (and employment) objectives, the central bank seeks to influence financial conditions. An easing or tightening of these conditions brings higher or lower growth and employment, influencing both inflation and inflation expectations.

In a conventional pre-crisis framework, policymakers' lever for control is the supply of the central bank's own liabilities. These com-

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This essay is based in part on Cecchetti and Schoenholtz (2021a). The authors thank Paul Tucker for helping them improve their understanding of the role and structure of central banking.

mercial bank reserves are the safest and most liquid assets in the financial system with the shortest maturities, so their scarcity determines the banks' opportunity cost for holding other liquid assets. That opportunity cost indirectly influences the value of all other financial instruments. By focusing on this one policy instrument, the central bank lets financial markets determine the price of maturity, liquidity, and credit risk.

This conventional policy approach relies on well-functioning markets so that arbitrage can operate. For example, long-term nominal government interest rates reflect market perceptions of expected future short-term real interest rates, future inflation, and risks concerning both. Pricing of private debt uses the equivalent-maturity government bond yield as a benchmark, adding a credit-risk premium that reflects investors' views of default and recovery rates. Corporate equities and real estate add further risk premia to the calculations. Absent financial frictions, when monetary policymakers adjust the target interest rate on their reserve liabilities, the change ripples through the system influencing financial conditions, growth, and inflation.

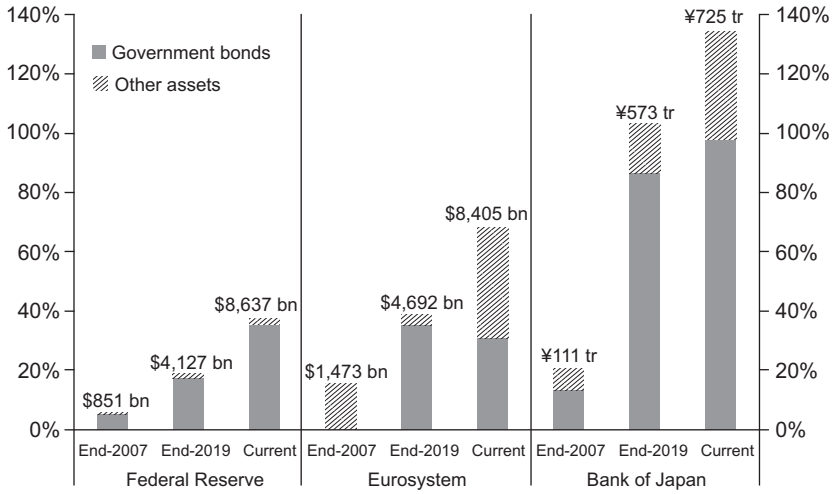
Starting in 2007, the world changed dramatically. First, frictions clogged the transmission mechanism from safe to risky assets as banks lost faith in their counterparties. Frozen interbank markets more broadly undermined the link between the central bank's policy tool and financial conditions, reducing its ability to meet its objectives. Even lowering (close) to zero the opportunity cost of holding central bank reserves left financial conditions too restrictive to steady prices and restore normal use of resources in a reasonable time frame. How could policymakers further ease financial conditions when their conventional tool was no longer available?

Major central banks responded by intervening directly in a wider array of asset markets. They began large-scale purchases of both long-term sovereigns and quasi-public fixed-income securities. (Following the lead of emerging market central banks – like the Hong Kong Monetary Authority in August 1998 – some jurisdictions went so far as to acquire equities and real estate-linked securities). And, where private intermediation became dysfunctional, policymakers substituted the central bank balance sheet (at least temporarily) for that of private financial intermediaries and markets.[1] Serving as market makers of last resort, policymakers remained able to influence financial conditions in order to stabilize prices and activity.

Reflecting the recent stages of central bank expansion, in Chart 1 (below) we trace the rise of central bank assets (as a percent of GDP) from 2007 to 2021 for the Federal Reserve (Fed), the Eurosystem, and the Bank of Japan. Looking at the progression over time, we

observe the dramatic increase in the overall size of balance sheets. For the Fed, current assets are 30 percentage points of GDP ($8 trillion) above their level at the end of 2007. Since the Fed can directly purchase only fully federally guaranteed securities, this increase has been almost entirely in the form of government bonds and mortgage-backed securities issued by federal agencies and government-sponsored enterprises. Looking at the Eurosystem's balance sheet, the expansion is similar in absolute size, having increased by €7 trillion (which is nearly $7.9 trillion at current exchange rates). Importantly, holdings of government bonds have gone from virtually zero to nearly €4 trillion (or about 31% of euro area GDP). The Bank of Japan is an outlier: in many ways Japanese central bankers were laying the path others would follow during the pandemic that began in March 2020.[2]

Chart 1
Central Bank Assets (end of year), 2007, 2009 and 2021



Notes: values for the Fed are for all federal government guaranteed securities, including mortgage-backed securities issued by federal agencies and GSEs. The 2021 observations are as of October.

Sources: Fed; Eurostat; Bank of Japan; FRED.

How should we think about these massive changes in the size of central bank balance sheets? Our answer is that they represent a dramatic shift in what central banks are doing and pose a considerable risk to their independence.

In the following section, we provide a brief description of the ways in which central banks employ their balance sheets. Then, we turn to a discussion of how central bank balance sheet actions since 2007 shifted from one objective to another. For example, market-making operations have at times been transformed into more traditional aggre-

gate demand stimulus. These shifts both mask policy risks and blur the lines between monetary and fiscal policy, a pattern that we label *fiscalisation*.

We distinguish between fiscalisation – where central banks take on roles more appropriately assigned to fiscal authorities – and fiscal dominance, where a government sets the volume of central bank issuance to finance its deficit. While fiscalisation is less extreme than fiscal dominance, it nonetheless threatens central bank independence. Regardless of whether central bankers act because they are the only ones with the tools or because of direct political pressure, fiscalisation involves unelected technocrats setting policies that are primarily distributional in nature.

We conclude with proposals for limiting fiscalisation. Anticipating our conclusion, authorities can do two things: commit to structural distinctions between fiscal and monetary policy; and articulate a *balance sheet reaction function* (analogous to a policy interest rate reaction function) that includes the reversal of crisis interventions when market functionality is restored. Having engaged in fiscalisation more than once, either by choice or by circumstance, central banks need to establish a framework that prevents further repetition.

How central banks use their balance sheets

There are various ways in which central banks can and have used their balance sheets. Cecchetti and Tucker (2021) propose five broad areas:

– *monetary policy*: stimulating or dampening aggregate demand to achieve price stability while fully using the economy's productive resources;

– *lender of last resort*: lending funds to fundamentally solvent firms or entities facing liquidity needs that cannot be met via private markets;

– *market maker of last resort*: addressing liquidity problems in specific markets;

– *selective credit support*: steering the flow of credit to specific sectors, regions, or firms;

– *emergency government financing*: providing needed funds directly to governments.

We briefly consider each of these. The first is what most people associate with the term *monetary policy*. That is, to achieve their price stability (and possibly employment) objectives, monetary policymakers use their balance sheets to set the quantity or price of central bank money. In recent years, with policy rates stuck at their effective lower bound (zero or slightly below zero), the primary instrument of stabi-

lization policy has shifted from prices (overnight interest rates) to the quantities of central bank liabilities held by banks. Whether quantitative easing (QE) in this form works as intended is debatable.[3]

To put a stop to bank runs and avoid system-wide panics, the central bank traditionally acts as the *lender of last resort* (LoLR).[4] This means standing ready to lend funds to sound firms that are temporarily illiquid. Beyond solvency, a key question is what categories of financial intermediaries should have access to the central bank. When commercial banks were the dominant players in the financial system, LoLR facilities were designed for them alone. Today, there is a set of intermediaries (including broker-dealers, money market funds and others) that engage in bank-like activities offering demandable liabilities backed by less than completely liquid assets. While these entities usually lack direct access to the central bank, post-2007 experience indicates that in many cases they receive help when they come under stress.[5] Indeed, in the future, new financial instruments such as stablecoins may elicit analogous LoLR interventions.

The intention of the *market maker of last resort* (MMLR) is to catalyze activity, restoring liquidity in a market that is critical to the real economy. While central banks began acting as LoLR nearly 200 years ago, MMLR operations are (for the most part) less than 20 years old. In practice, an MMLR purchases securities, so its actions may resemble QE, especially when the intention is to restore the function of sovereign bond markets. It is, however, important to distinguish an MMLR purchase from QE. First, MMLR operations can occur at any level of the policy rate. Second, the restoration of normal market function can allow MMLR holdings to be quickly unwound.[6]

Next is *selective credit support*, where policymakers subsidize the provision of funds to favored users. While it is difficult to envision apolitical justifications for such actions, central banks engage in them, nevertheless. Indeed, politicians are tempted to use central banks – which have the tools and the resources – to micro-manage the allocation of credit. To limit that temptation and ensure public accountability, an effective central bank policy framework requires that central banks disclose what they are doing and provide a clear rationale.[7]

Finally, central banks can use their balance sheets to provide *emergency financing to governments.* There is a sense in which this brings us back to one of the origins of central banking – financing wars. In many jurisdictions there are legal restrictions designed to counter the temptation of fiscal authorities to use central bank financing. But it would be unwise to preclude this in absolutely all circumstances. And when existential threats to national security arise, such restrictions would be virtually impossible to enforce.

BLURRED LINES

The key risk that arises from the expanded role of central banks is the blurring of the lines that previously distinguished various balance sheet actions. Within this class of problems, the largest ones reflect the overlap of operations to implement QE, MMLR and emergency government financing.

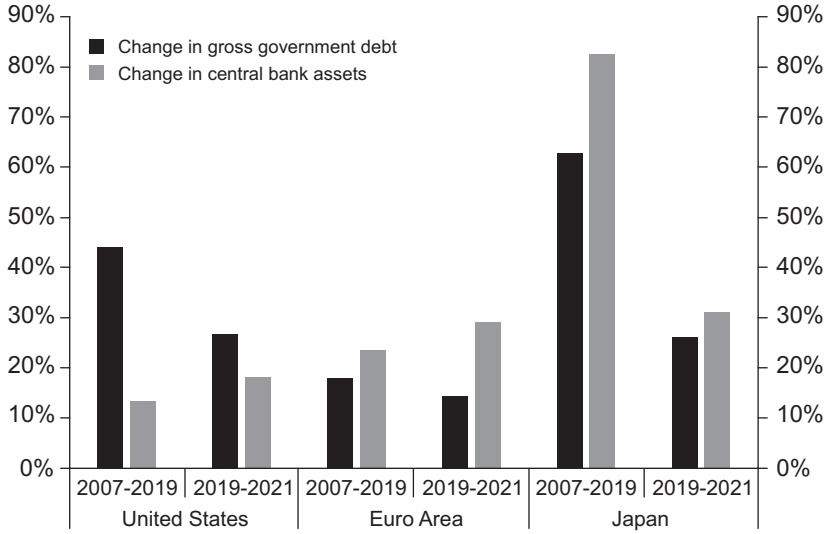
Before taking up this issue, it is worth mentioning that there also is a potential overlap between the LoLR and selective credit support. Bagehot's first rule of central banking is to never provide *unsecured* loans. Yet, to prevent runs in a period of stress, central banks need to announce in advance (and sustain in a crisis) policies on collateral valuation and haircuts. As a result, the stated willingness of the central bank as LoLR to accept assets on persistently better or worse terms can distort commercial banks' desire to engage in specific activities.[8]

There are two more serious problems: the blurring of lines between the MMLR and QE, and between QE and emergency government financing. The first arose in the United States during the early part of 2020. For at least a few weeks, the pandemic introduced dangerous new obstacles to policy transmission. Even the market for U.S. Treasury securities, thought to be the deepest and most liquid in the world, temporarily showed signs of severe stress.[9] To stabilize the market, from mid-March to early-April the Fed expanded its Treasury holdings by $1 trillion. The intervention worked and liquidity returned quickly to Treasury markets. Nevertheless, U.S. central bankers failed to unwind their extraordinary purchases. Instead, they continued to increase their holdings, acquiring an additional $1 trillion over the course of the next nine months, with the program continuing through 2021. What started as an MMLR operation became QE.[10]

Turning to the second major challenge, we need to distinguish monetary financing of the government from QE designed to stimulate aggregate demand. Unfortunately, during periods of overwhelming stress, this distinction may not be easy to make. For example, the extreme disruptions of the Covid pandemic gave rise to unprecedented peacetime coordination among fiscal and monetary policymakers. Chart 2 (below) highlights the resulting simultaneous (and ongoing) surge of gross government debt (in black) and central bank assets (in grey). Note that since 2007, central bank assets in the euro area and Japan have grown faster than the debt of the general government!

The time intervals shown in Chart 2 (below) make it appear that the United States is different. For example, Fed assets grew more slowly than U.S. general government debt over the period from 2019 to 2021. However, this pattern masks what occurred from April to July 2020.

Chart 2
Euro Area, Japan and the United States:
Comparison of Change in Central Bank Assets *vs.*
Change in Gross Government Debt , 2007-2019 and 2019-2021
(% of GDP)



Note: the values for central bank assets are from December 2007, December 2019, and October 2021. Debt values are for the full year, including projections from the IMF for 2021.

Sources: Fed; ECB; IMF World Economic Outlook Database; FRED.

Over this four-month span, the Treasury general account at the Fed increased by $1.4 trillion, an amount equal to the increase in the Fed's Treasury bond purchases. That is, the Fed was *pre-financing* the federal deficit, purchasing bonds on a scale sufficient to allow the Treasury to accumulate deposits at the Fed. Later, from February to August 2021, the Treasury ran this balance down.[11]

THE RISK OF FISCALISATION

Where does this lead us? What will happen if central banks continue down this road, expanding their direct efforts to influence an ever-wider range of financial markets and asset prices? The answer is that, as the central bank's balance sheet becomes larger and accounts for a growing share of intermediation, we will shift towards a world in which the state dominates credit allocation.[12] Should this happen, the dynamism of the economy and its ability to sustain even modest long-term growth would be called into question. Surely that is not what central banks intend as a goal of their stabilization efforts.

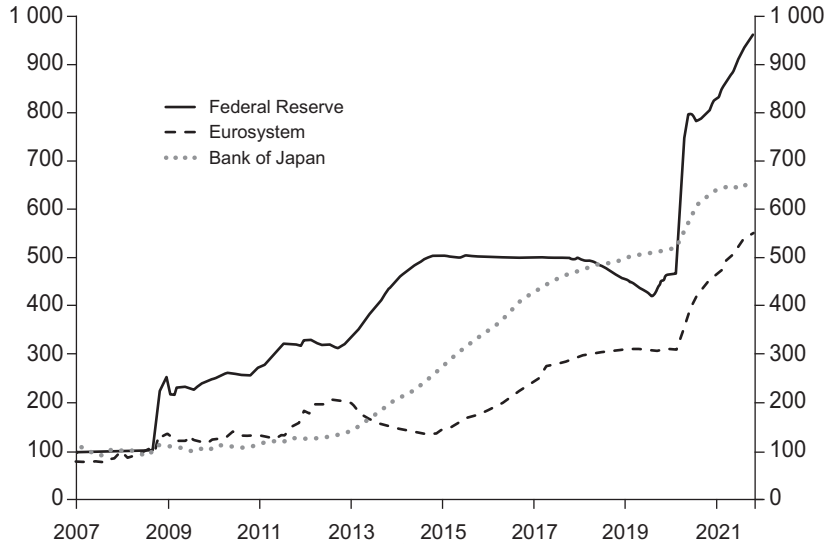
In fairness to central bankers, there are times such as the first months of the Covid pandemic when monetary authorities are under intense political pressure to expand their mandates, and may be the only policy agents with the appropriate tools. Not only that, but in a world of low interest rates, fiscal policy becomes the tool of choice for stabilization. Under these circumstances, it is extremely tempting (and very efficient) for the central bank to act as the fiscal agent for government finance. Such financing, however, is characteristic of the *fiscalisation* of the central bank.

To be sure, fiscalisation is considerably different from fiscal dominance, where fiscal policymakers control the volume of central bank money.[13] Some observers, however, may find this distinction disturbingly fine. In our view, the key danger from fiscalisation is that, when conditions become more serene, central banks will find it difficult to reverse the use of (or simply to stop using) the very politically sensitive tools that they introduced during crises. For example, how quickly will the Fed dispose of the liabilities of nonfinancial businesses and municipalities that it accumulated during the Covid pandemic? Will the ECB sell off government debt holdings that exceed pre-crisis norms?

The point is that – while fiscalisation need not lead to fiscal dominance and higher inflation – it undermines the market discipline that accompanies the private allocation of financial resources. History teaches us that such market discipline is key to the efficient use of labor, capital and other inputs in production, and to sustaining innovation and economic growth. Unsurprisingly, both theory and empirical evidence suggest that state-driven systems inefficiently shift resources away from their most productive use.[14] Indeed, we know of no advanced economies in which a state-controlled financial system has delivered rapid, broad-based economic growth over an extended period.

Unfortunately, as we write in late 2021, there are few signs that central banks will reduce the size of their balance sheets. Chart 3 (below) plots the level of assets for the central banks in the United States, the euro area, and Japan. To focus on the pattern of growth, we normalize each at their level at the end of 2007. For each central bank, the chart displays continuing increases. That is, after assets go up, they tend not to go back down. As former Bank of England Governor Mervyn King put it "[QE] tends to be deployed in response to bad news, but isn't reversed when the bad news ends. As a result, the stock of bonds held by central banks ratchets up, expanding their balance sheets into the longer term." Put slightly differently, there is a QE ratchet.[15]

Chart 3
Central Bank Assets, 2007-October 2021
(monthly, end-2007=100)



Sources: Fed; European Central Bank; Bank of Japan.

LIMITING FISCALISATION

How can central banks avoid fiscalisation and the QE ratchet? In our view, they need to do two things: commit to structural distinctions between fiscal and monetary policy and communicate what we think of as a *balance sheet reaction function* that includes undoing crisis-driven additions to central bank assets.

Starting with institutional responsibilities, it is fiscal authorities that ought to make the unavoidably political choices that directly influence resource allocation. Governments already have a myriad of institutions for that. For example, they might provide government loan guarantee programs for housing, farm, small business, and student loans. Unelected central bankers should not control the scale and mix of programs like these that include as a primary purpose their impact on distribution. And governments should not conceal such politically sensitive fiscal actions on the balance sheet of the central bank. In a democracy, doing so lacks legitimacy and will become unsustainable.

As Tucker (2018) notes in his excellent book, *Unelected Power*, legitimacy requires that appointed technocrats eschew activities which focus on distributional concerns.[16] Tucker also highlights the need to

concentrate central bank authority to where (because of the problem of time consistency) its use is essential to achieving policy success. This means restoring (as quickly as possible) a narrowly defined mandate that focuses central bank policy on the traditional goals of economic and financial stability. More specifically, crisis interventions should not only be temporary, but should be reversed as soon as the crisis recedes.

At this stage, to ensure that central banks can do what they are designed to do well, we need to impose boundaries on the scope of what central banks are authorized to do, limiting both what they can buy outright and to whom they can lend. Doing this requires a fine balance, as we need to make sure that monetary policymakers can still provide aid in a crisis. At the same time, it should not be easy for them to evade the restrictions. Most of all, we need a system in which central bankers are not left feeling that they are the only game in town, so that when monetary policy hits the limits of its effectiveness – as it is likely to do in periods of low inflation and modest long-run growth – policymakers are not obliged to act in quasi-fiscal ways that threaten their legitimacy.

Turning to the second part of our solution, central banks need to clarify their balance sheet policy. That is, under what circumstances will they buy securities and when will they sell them. We are thinking of something like an interest rate reaction function. In normal times, central banks explain their interest rate policy actions whith reference to a set of commonly understood indicators. These typically include the equilibrium rate of interest, deviations of inflation from the central bank's target, and measures related to growth or employment. While there is always an analytical framework underlying this, neither the policy actions nor the communication slavishly follows any specific algorithm. "Rule-like" policy is likely to be more effective because it is easier to make credible and easier to anticipate. But policy should never ignore circumstances where the underlying rules would be inappropriate or ineffective.

To avoid fiscalisation (and the QE ratchet), balance sheet policy needs to operate within an analogous framework. Not only should policymakers set out the contingencies under which they start and stop their purchases, or adjust the pace and breadth of asset accumulation, but there should also be clearly understood conditions determining when they will sell the assets they acquire. This second part bears a strong resemblance to the consensus that fiscal authorities need to ensure both sustainability and flexibility: namely, using boom periods to build up the space that allows policymakers to provide stimulus during recessions. In the case of central bankers, when markets are not in need of support and interest rates can be above their effective lower bound, they should seize the opportunity to reduce their asset holdings.

Importantly, providing clarity in advance regarding the circumstances of when and how this will occur is key to minimizing any disruptions that such actions might otherwise cause.

CONCLUSION

To conclude, the actions of many countries after 1980, delegating monetary policy to independent central banks, have led to a major improvement in economic performance, helping to preserve stable prices while enhancing long-run economic growth. Fiscalisation puts these important achievements at risk in two ways. First, it reduces the credibility of the central bank's commitments to economic and financial stability, making it less effective in today's world, where expectations of future policy are key to current behavior. Second, it undermines a principle critical to making the delegation of authority sustainable: namely, that unelected central bankers avoid actions which focus primarily on distributional concerns.

Our proposals for structural distinctions between fiscal and monetary policy, and for a transparent central bank balance sheet reaction function that allows for public accountability, would each contribute to reducing the threat of fiscalisation. While the first of these may require governments to establish limits for central banks, central bankers can implement the second on their own. In our view, the sooner the better.

NOTES

1. In the case of the Eurosystem, the TARGET system continues to substitute for interbank lending flows that never returned after 2010. See Eisenschmidt *et al.* (2017) for a general discussion.

2. While we focus on three large jurisdictions, the balance sheets of numerous other central banks exhibit similar patterns. For example, as a fraction of Canadian GDP, the Bank of Canada's assets rose from 3.4% at the end of 2007 to 5.1% at the end of 2019, and currently stand at 20.1%. For the Bank of England, the ratio of assets to nominal GDP rose from 6.5% at the end of 2007 to 26% at the end of 2019 and to 39.9% in October 2021. In both cases, government bond holdings account for the bulk of assets.

3. See Fabo *et al.* (2020).

4. See Tucker (2014) for an extended discussion.

5. Examples include numerous 2007-2009 and 2020 U.S. programs aimed at money market funds, commercial paper markets and primary dealers.

6. Examples of MMLR operations include the classic July 2012 episode – Mario Draghi's "whatever it takes" – when the ECB offered a backstop for euro area sovereigns but ended up buying nothing. A second is the Federal Reserve's Secondary Market Corporate Credit Facilities.

7. Examples abound of central banks steering credit to specific sectors, regions or firms. One is the Eurosystem's sequence of three targeted longer-term refinancing operations (TLTROs). Also in this category are the Federal Reserve's Municipal Liquidity Facility and the Main Street Lending Facility that aimed to provide credit to local governments and small businesses, respectively.

8. These distortions could be an enduring feature of a central bank operating framework. A classic example was the pre-2011 willingness of the Eurosystem to accept the sovereign debt of all euro area Member States as equivalent collateral. Even today, with over 25,000 securities and more than 100 haircut categories, the Eurosystem's complex collateral framework has the potential to distort the allocation of credit.

9. See Cecchetti and Schoenholtz (2020a).

10. The contrast with the Fed's corporate bond intervention during the pandemic is notable. While the Federal Reserve's Secondary Market Corporate Credit Facility was authorized to purchase up to $750 billion worth of private bonds, it never held more than $14 billion.

11. See Cecchetti and Schoenholtz (2020b) for a more detailed discussion of this episode, along with an explanation of the mechanics of the relationship between the Federal Reserve's balance sheet and the level of Treasury cash balances.

12. The issuance of central bank digital currency creates this same risk. See Cecchetti and Schoenholtz (2021b).

13. See, for example, Schnabel's contrast of fiscal dominance to "monetary dominance" (Schnabel, 2020). In our view, what some observers refer to as *helicopter money* is the classic example of fiscal dominance. See Cecchetti and Schoenholtz (2016).

14. See, for example, Shleifer and Vishny (1994), Sapienza (2004) and Xiao and Zhao (2012).

15. See Cecchetti and Schoenholtz (2021c) for a more detailed discussion of this ratchet effect.

16. See also Cecchetti and Schoenholtz (2018).

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