On the equivalence of capital adequacy and monetary policy

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3 December 2010

Abstract

Prudential instruments are commonly seen as the tools that can be used to deliver the macroprudential policy goals of reducing the frequency and severity of financial crises. And interest rates are traditionally viewed as the means to deliver the macroeconomic stabilisation goals of low, stable inflation and high, stable growth. But, at the macroeconomic level, these two sets of policy tools have quite a bit in common.

We use a simple macroeconomic model to study when capital adequacy requirements and interest rates are substitutes in meeting the objective of stabilising the economy. We find that in our model both are substitutes for achieving conventional monetary policy objectives. In addition, we show that, in principle, they can both be used to meet financial stability objectives.

This implies a need to coordinate the use of macroprudential and traditional monetary policy tools, a need that has clear implications for the construction of the policy framework designed to deliver the joint objectives of macroeconomic and financial stability.

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1. Introduction

The transatlantic financial crisis of 2007–09 has served as a reminder of the importance of financial stability. And, as former BIS Economic Adviser William R White observed so presciently in 2006, price stability is not enough.\(^1\) Low, stable inflation does not necessarily deliver financial stability. In order to try to understand how to deliver both, over the past two years many of us have had a crash course in how financial markets and institutions operate, how prudential regulation is structured, and what a central bank can do with its balance sheet.\(^2\)

At the same time as policymakers have been working to resolve the crisis, they have been striving to build a more stable financial system that will make the next one both less likely and less severe.\(^3\) And, as the discussion about appropriate tools, their implementation and the even more difficult task of defining an operational financial stability objective continues, a number of jurisdictions have put in place new frameworks to improve financial stability policies.

Some countries have created new institutions, while others have revamped old ones. For example, the United Kingdom has created a new financial stability committee parallel to its monetary policy committee, putting both in the same institution, the Bank of England. At the same time, the United States, with the Federal Reserve responsible for traditional monetary policy, has created a Financial Stability Oversight Council. And in the euro area, the ECB is responsible for monetary stability, while financial stability has been put in the hands of the European Systemic Risk Board. But the differences in framework imply different degrees of coordination. Can economic theory help us to understand the degree of coordination that is needed? Should we prefer one model over another? The purpose of this paper is to shed some light on these questions.

We start with a brief discussion of the relationship between financial stability and monetary stability. Following this, in Section 3 we present a simple macroeconomic model to demonstrate the close relationship between interest rates and capital requirements. This leads us to the following conclusion: while prudential instruments are commonly seen as the tools that will deliver macroprudential policy goals, and interest rates as those that deliver monetary stability, at a macroeconomic level they have quite a bit in common. That is, they can both be used for macroeconomic stabilisation purposes. In Section 4, describe how, if both instruments are used to achieve monetary policy and financial stability objectives, a coordination problem arises.

\(^1\) See White (2006).
\(^2\) For an overview of balance sheet policies during the crisis, see Borio and Disyatat (2009).
\(^3\) For an overview of the initiatives under way, see BIS (2010), Chapters I and VII.
2. Monetary stability and financial stability

The ultimate goal of (macro-)economic policies is to increase welfare, providing the foundations for maximum sustainable and stable real growth. This means that monetary stability and financial stability are really complementary – efforts to reduce the amplitude of business cycles and the variability of inflation are of little relevance if financial cycles are both frequent and violent. That is to say, financial stability policy is about avoiding the damaging effect that financial crises will have on the real economy. But while it may ultimately be impossible to eliminate crises, we can work to reduce both their likelihood and their severity.

Systemic risk – the risk that the entire economic and financial system breaks down catastrophically – affects society as a whole, and no individual can responsibly insure it. Insofar as there is insurance, it must be provided by public authorities. In the pre-crisis world, there was a clear distribution of labour. Regulators and supervisors worried about financial instruments, markets and institutions; monetary policymakers focused their efforts on price stability and (possibly) cyclical fluctuations in output and employment; and fiscal authorities concerned themselves with long-run growth and the distribution of output among its final uses (consumption, investment, government purchases and net exports), next to redistribution of income and the provision of public goods. This division of responsibility has not survived the crisis. Today, this policymaking triumvirate must work together to answer the question: What can we do about systemic risk?

Ensuring financial stability means addressing externalities – costs that, through its actions, one institution imposes on others but does not bear itself. Two externalities are central to systemic risk. The first is joint failures of institutions resulting from their common exposures and interlinkages at a single point in time – common exposures due to shocks that come from outside the financial system or interlinkages among intermediaries. The shocks may take a variety of forms, including both credit and liquidity shocks and their interaction, while the linkages arise from the complex web of daily transactions. The second externality is what has come to be known as procyclicality: the fact that, over time, the dynamics of the financial system and of the real economy reinforce each other, increasing the amplitude of booms and busts and undermining stability in both the financial sector and the real economy. The basics of the procyclicality problem are straightforward. As the economy booms, lending tends to become cheaper and easier. Banks are flush with funds and capital, borrowers are more creditworthy, and collateral is more valuable. In a downturn, these conditions are reversed. Banks are forced to absorb unexpected losses, which makes them less well capitalised, so they cut back on lending. Borrowers become less creditworthy. And collateral values fall. This is exacerbated by financial institutions’ tendency to become less prudent during cyclical upturns and more prudent during downturns. 4

For many reasons, including governance issues, conflicts of interest between debt holders and equity holders, and moral hazard arising from explicit and implicit government guarantees, financial institutions have a natural tendency to accumulate assets that are too risky and to hold too little capital (both relative to the social optimum). One solution is for authorities to both impose restrictions on asset holdings and require minimum levels of capital. Among policymakers, there is agreement that the level of capital, for a given balance sheet, has to rise above its pre-crisis level. Moreover, in order to address the procyclicality of the financial system, there is a clear desire on the part of policymakers to go beyond existing tools and create new policy instruments to ensure that financial institutions adjust their capital

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4 See Adrian and Shin (2008) on the procyclicality of leverage.
(and other tools, such as loan provisioning, liquidity standards, etc) cyclically, building up defensive buffers in good times when capital is relatively plentiful and inexpensive and drawing them down in bad times when capital is relatively scarce and costly.\(^5\) This could be a rule-based measure, in which the buffer is based on macroeconomic variables such as credit growth, or banking sector-specific measures such as earnings. Or, it could be done in a discretionary way.

The debate about which tools to use to address financial stability concerns has largely focused on macroprudential tools – instruments typically used in the prudential regulation and supervision of institutions that are then adapted to limit risk in the financial system as a whole.\(^6\) But we should not forget that fiscal and monetary policies are already designed to either exploit or mitigate the reinforcing feedback between the real economy and the financial system. Through automatic stabilisers and discretionary stimulus, countercyclical fiscal policy works to sustain income and employment, lowering the probability that borrowers will default (as well as increasing the value of what is recovered if they do) and raising the value of assets on financial institutions’ balance sheets. Monetary policy, too, acts countercyclically. Seeking to head off a cyclical downturn, policymakers lower policy rates and, in so doing, improve the state of balance sheets of both financial institutions and borrowers in general. Similarly, central bankers increase policy rates to moderate an upturn, slowing credit growth and leaning against asset price booms. And through their interest rate targeting procedures, central banks work to keep financial sector shocks from affecting the real economy. Put another way, by reducing cyclical fluctuations in the real economy, countercyclical fiscal and monetary policies naturally (and intentionally) reduce the procyclicality of financial institutions’ capital.

### 3. Capital adequacy and interest rates: substitutes?

Discussion about the design of a policy framework for delivering macroeconomic stability sometimes assumes that the two objectives of monetary stability and financial stability can be delivered using two instruments: interest rates and capital requirements. But, as the discussion in the previous section suggests, monetary (and fiscal) policy can be used to address financial stability concerns. With that in mind, we now construct a small macroeconomic model to show how capital requirements could, in principle, be used to address conventional macroeconomic stability concerns.

#### 3.1 The transmission process of monetary policy and capital requirements

Regardless of the technicalities of implementation, it is interesting to think about the relationship between dynamic capital adequacy requirements and traditional measures of monetary policy tools. Our contention is that these are very similar, so we cannot, and should not, think about them separately.

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\(^5\) See, for example, Financial Stability Forum (2008) and (2009).

\(^6\) For a discussion, see, for example, BIS (2010), Chapter VII and CGFS (2010).
To understand this correspondence, it is useful to review of the channels of monetary policy transmission which underpin many macroeconomic models:

- **Interest rates**: Lower interest rates reduce the cost of investment, making more projects profitable.
- **Exchange rates**: Lower interest rates reduce the attractiveness of domestic assets, depressing the value of the currency and increasing net exports.
- **Asset prices**: Lower interest rates lead to higher stock prices and real estate values, which, through collateral value and household wealth effects, fuel an increase in both business investment and household consumption.
- **Bank lending**: An easing of monetary policy raises the level of bank reserves and bank deposits, increasing the supply of funds.
- **Firms’ balance sheets**: Lower interest rates raise firms’ profits, increasing their net worth and reducing the problems of adverse selection and moral hazard.
- **Household net worth**: Lower interest rates raise individuals’ net worth, improving their creditworthiness and allowing them to increase their borrowing.

This textbook list may seem varied, but in an important way it is not. Remember, commercial banks are is the central bank’s point of contact with the financial system. It is by changing banks’ ability and willingness to issue deposits and make loans that monetary policy has any impact at all. At a very technical level, the starting point for monetary policy is to change the interest rate on reserve deposits at the central bank. It can do this directly, by announcing the level of remuneration for reserve balances, by controlling the supply of reserves so that the market price is at or near its target, or by some other means. Regardless, by adjusting this riskless short-maturity interest rate, monetary policymakers influence banks’ cost of doing business, which then changes all other interest rates and asset values in the economy. Particularly relevant here is that interest rate changes influence the value of banks’ own assets and liabilities, affecting the level of bank capital and the bank’s risk-taking capacity.

Now consider the impact of changes in capital adequacy requirements. By changing the amount of capital a bank is required to hold, regulators are again influencing banks’ cost of doing business.

Once you start to think about the correspondence between interest rate policy and capital adequacy policy, it is clear that there are a variety of ways to explain it. We will introduce an alternative policy tool into a simple macroeconomic model with bank capital.

But before we do, we note that several years ago Kashyap and Stein (2004) suggested the creation of what they called “capital relief certificates”, the idea being that a bank can meet its capital requirement by either holding real capital or through the purchase of the certificates. If, as those authors suggest, there were a market for the certificates, their price would be related to the shadow cost of capital in the banking system. A variety of arguments can be marshalled for and against this proposal. Our interest here is not to debate the efficacy of these certificates, but rather to note that if they existed, the authorities could choose to control their price, thereby providing another channel through which authorities can influence the cost of lending.

With this as a motivation, we now turn to the simplest macroeconomic model that allows integration of capital requirement policy and then a financial stability objective.
3.2 A simple, static, linear model

Following Cecchetti and Li (2008), consider the following aggregate demand-aggregate supply model that includes a banking system, written as log-linear deviations from the steady state. In the manner of Bernanke and Blinder (1988), write aggregate demand $y^d$ as:

$$ y^d = -\alpha (\rho - \pi^e) - \beta (i - \pi^e) - \delta \pi + \eta; \quad \alpha, \beta, \delta > 0 $$

where $i$ is the short-term nominal interest rate, $\rho$ is the nominal loan rate, $\pi^e$ is expected inflation, $\pi$ is inflation, and $\eta$ is a white noise random variable. The interest rate $i$ is set by policymakers, while the loan rate $\rho$ is determined by equilibrium in the lending market.

For simplicity, assume that bank lending is constrained by the capital that banks hold. Then, loan supply is given by

$$ L^s = -\kappa \cdot k + \tau \cdot B \quad \kappa, \tau > 0 $$

where $k$ is the capital requirement and $B$ is the level of bank capital. Furthermore, assume that the real value of bank capital rises with the level of real output, so

$$ B = b y; \quad b > 0. $$

Next, loan demand depends on the level of both the real loan rate and real output, so

$$ L^d = -\phi (\rho - \pi^e) + \omega y; \quad \phi, \omega > 0. $$

And, finally, there is a standard aggregate supply curve in which output supplied, $y^s$, depends on unexpected inflation plus an additive white noise error $\varepsilon$ that is uncorrelated with the demand shock $\eta$:

$$ y^s = \gamma (\pi - \pi^e) + \varepsilon; \quad \gamma > 0. $$

The model is closed with the equilibrium conditions

$$ y^s = y^d = y \quad \text{and} \quad L^s = L^d. $$

To solve this simple, linear, static model, first assume that agents have rational expectations, so expected inflation and output can both be normalised to zero. That is, $\pi^e = 0$. Next, using the loan and goods market equilibrium conditions, solve for output and inflation in terms of the two shocks, $\eta$ and $\varepsilon$, and the policy interest rate $i$. This yields a solution for output and inflation that is linear in the shocks and the policy instruments:

$$ y^* = A_1 \varepsilon + A_2 \cdot \eta - A_3 \cdot i - A_4 \cdot k, \quad \text{where} \quad A_1, A_2, A_3, A_4 > 0 $$

$$ \pi^* = -B_1 \varepsilon + B_2 \cdot \eta - B_3 \cdot i - B_4 \cdot k, \quad \text{where} \quad B_1, B_2, B_3, B_4 > 0 $$

Note that the equilibrium values of output and inflation are also functions of the level of the capital requirement, $k$. For a higher capital requirement, equilibrium output and inflation are lower.

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7 Without loss of generality, we could make bank lending depend on a combination of the level of capital and the risk-taking capacity. This could be modelled by adding a random element to equation (2).

8 This is the linearised form of a loan supply function where $L^s = (1/k) \cdot B$. 

An increase in interest rates (red arrow) affects this economy through its effect on goods demand (lowering both consumption and investment) (Graph 1, left-hand side). The result is lower output and lower inflation. Lower output (black arrow) reduces bank lending (loan supply) through its effect on the value of bank capital, and it reduces loan demand. If loan demand falls by more than loan supply, the market clearing loan rate will be lower. This in turn leads to a second-round increase in goods’ demand (grey arrow), reversing some of the initial impact of the fall in output. In the end (red), interest rates will be higher, output and inflation will be lower, and lending and loan rates will be lower.

An increase in capital requirements (red arrow) will lead to a reduction in loan supply (Graph 1, right-hand side). Loan rates have to rise to reduce excess demand in the loan market, reducing goods’ demand (black arrow). Inflation and output will have to fall to reduce excess output. This in turn will lead to a second round (grey arrow), reducing both loan supply and demand. If loan demand falls by more than loan supply, loan rates fall and output rises (reversing some of the first-round effect). Ultimately (red), capital requirements will be higher, lending will be lower and loan rates will be higher; output and prices will be lower.

As is standard in monetary policy models, we assume that policymakers choose the optimal interest rate to minimise the sum of the weighted square loss of the inflation and output gap. Normalising the inflation target and potential output to zero, we write the policymaker’s problem as

\[ \min_i L_{MP} = \pi^2 + \lambda \cdot y^2 \text{ subject to (7) and (8), where } \lambda > 0. \]

This yields a policy rule

\[ i^*(k) = M_1 \cdot \varepsilon + M_2 \cdot \eta - M_3 \cdot k \text{ where } M_2, M_3 > 0. \]

That is, interest rates adjust to both demand and supply shocks. And, interestingly, the optimal interest rate depends on the capital requirement, \( k \), with the response decreasing in \( k \). That is, the higher the capital requirement, the smaller the optimal interest rate
adjustment for a given supply shock $\varepsilon$. In other words, the more capital requirements do, the less interest rates need to do.

Indeed, looking back at the derivation of the optimal interest rate policy rule (10), we can see that everything could have been done in terms of the capital requirement $k$ instead. Solving (10) for $k$ as a function of $i$, we get:

\[(11) \quad k^*(i) = N_1 \cdot \varepsilon + N_2 \cdot \eta - N_3 \cdot i, \text{ where } N_2, N_3 > 0.\]

The result is an optimal capital requirement policy rule, with $k^*$ responding to $\eta$ and $\varepsilon$ and the coefficient dependent on the level of the interest rate, $i$. The optimal $k$ is a decreasing function of the level of interest rates. So, the higher the interest rate level, the lower the optimal capital requirement needed to stabilise the economy after a given supply shock, $\varepsilon$. That is, the more interest rates do, the less capital requirements need to do.

Importantly, the equilibrium loss (the value of $L_{MP}$ in equation 9) is the same regardless of whether we use interest rate or capital requirement policy. This result follows because, in this simple macroeconomic model, interest rate policies and capital adequacy policies are full substitutes here. As a consequence, it is not possible to improve upon the equilibrium outcome by moving one instrument if the other instrument is already set at its optimal value.

The implication of all this is clear: interest rate policy and capital adequacy policy are substitutes in a number of cases. For a fixed capital requirement, interest rates can then be used as a stabilising tool, and for a fixed interest rate, the capital requirement can be used to stabilise inflation and output. It is, of course, possible to use both. As we describe above, the more one tool is directed to stabilisation, the less the other needs to be. But, importantly, in reaching the objective of low, stable inflation and high, stable growth, it is essential that interest rate policy and capital adequacy regulation be coordinated.

The simplicity of our model suggests a number of caveats; for example: we assume neither instrument faces a constraint, which is not the case when, for example, the interest rate is at the zero bound; the two instruments have other important channels of transmission such as exchange rates that are not explicitly modelled here; the structure of a national financial systems is likely to matter for the result; and richer modelling of the financial sector (and the addition of dynamics) may introduce a difference between financial cycles and normal business cycles. Nonetheless, other authors – using richer, more complicated models of both the general equilibrium and the partial equilibrium type – have found that there is some degree of substitutability also in those models (Stein (2010), Angelini et al (2010), Bean et al (2010)). This leads us to conclude that result from our simple analysis is likely to be carryover to larger, more complex macroeconomic models.

4. A broader objective: monetary and financial stability

While there is consensus that monetary policy objectives can be summarised by the two-part objective function equation (10), there is much less agreement about how to formalise financial stability objectives. One approach, followed by Angelini et al (2010) is to target/smooth the ratio of credit to GDP. However, in our model, the ratio of credit to GDP is constant, except when policy changes the capital requirement variable $k$. An alternative approach is to follow Cúrdia and Woodford (2010) and note that purely financial frictions

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9 The technical details of the results summarised in this section can be found in the working paper version of this paper, Cecchetti and Kohler (forthcoming).
result in welfare-reducing changes in credit spreads. In the same way that nominal frictions give rise to policy that responds to price changes, in the Cúrdia and Woodford setup, optimal policy strives to eliminate the deadweight loss created by the movement in the spread in the presence of financial frictions.

The simplest way to add this financial stability objective into our model is to amend the policymaker’s objective function in equation (10) and then solve the following problem:

\[
\min_{\rho} L_{\text{joint}} = \pi^2 + \lambda \cdot y^2 + \zeta \cdot (\rho - i)^2 \quad \text{subject to (7) and (8), where } \lambda, \zeta > 0.
\]

\((\rho - i)\) is the spread between the loan rate and the policy (or funding) rate; \(\zeta\) is the weight of the financial stability objective in the loss function.

As above, minimising the loss function with respect to either the interest rate or the capital requirement yields an optimal policy reaction identical to in form to (10) and (11). That is, each instrument is a linear function of the demand and supply shocks, as well as the setting of the other instrument.

The losses associated with these optimal policies are higher than in the simple monetary problem, except for the case where both instruments are set at their respective optima. This was not in the simpler case considered earlier, as the minimum losses could be reached with just one instrument, irrespective of the value of the other instrument.

The intuition for why losses are higher and why the instruments are potentially not substitutes is straightforward. While an increase in either instrument moves the first two objectives – inflation and output variability – in the same direction, the third, new objective creates a conflict. To see this, note that an increase in capital requirements naturally raises the loan rate \((\rho)\), thereby increasing the spread \((\rho - i)\). In contrast, higher interest rates, a rise in \(i\), decrease the loan rate \(\rho\) and decrease the spread. Unsurprisingly, adding a term to the policymaker’s objective function that creates a potential conflict like this increases minimum losses in most cases.

All of this brings up a number of questions: If we can use only one instrument, which should we choose? Or, if we can use two instruments, what would happen if we split the objective into two parts?

On the first, unsurprisingly we can show that the losses for interest rates as the instrument are not the same as those for capital requirements as the instrument. This leads us to ask whether one policy instrument is preferable to the other. While we are unable to answer this question definitively, what we can say is that for a large range of parameters the following pattern holds. When demand shocks dominate, losses are lower when interest rates are the policy instrument; while for supply shocks, capital requirements deliver the better outcome. And, if minimising output variability is important enough (that is, \(\lambda\) is large), interest rates deliver lower losses for both types of shocks.

The intuition for this result is as follows. A positive demand shock increases \(\rho\) and, for fixed \(i\), the spread \((\rho - i)\) [see Graph 1]. We know from our earlier discussion that, with the standard objective (9), interest rates or capital requirements would need to rise to stabilise the economy. Using capital requirements to do this, however, increases the spread since this

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10 They consider two types of friction associated with financial intermediation. First, financial intermediation requires real resources in the process of originating loans. Second, a certain number of borrowers take out loans without repaying them. Both frictions create costs for the financial intermediation process. Allowing these costs to shift over time introduces purely financial disturbances that will be associated with changes in credit spreads.

11 For \(i^*\) there is a unique \(k\) for which losses reach a minimum. This minimum is the same as in the simple monetary policy problem. Therefore, for all other \(k\) losses are higher.
increases loan rates further. In contrast, higher interest rates offset the initial widening in the spread in two ways: through higher funding (policy) rates and through lower lending rates. As a result, in a wide variety of cases interest rates deliver the better outcome.\footnote{If interest rates have to move by very much, the spread may widen enough in the other direction to overturn this result.}

Turning briefly to the case of two instruments, since the objective is complex, including terms representing both macroeconomic and financial stability, it is natural to examine the independent use of the policy instruments to meet possibly independent objectives.

There are three possibilities. In the first, each policymaker has his or her own objective, and optimises the instrument available to him or her independently. Regardless of which instrument is assigned to which objective – interest rates or capital requirements to macroeconomic or financial stability – the first-best cannot be achieved.

In the second, each policymaker has his or her own instrument and objective, but takes the other policymaker’s action into account. In other words, the externalities created by setting one instrument are taken into account when setting the other. In our framework, the second setup is equivalent to joint optimisation of the merged objective. In this case, it is possible to achieve the same minimum losses as in the simple monetary policy problem.

The third setup is one of partial coordination in which one policymaker moves first, ignoring the subsequent reaction of the other. The second policymaker then sets his or her instrument taking into account the policy decisions of the first mover. We see this Stackelberg game as particularly interesting, as it mirrors the case in which the capital requirement is set first by one authority (the leader) to achieve a financial stability objective, and then the monetary policymaker follows, setting the interest rate to minimise the traditional macroeconomic stabilisation objective knowing the outcome of the leader’s decision.

Not surprisingly, the loss function for the second mover is at the minimum, the basic trade-off for monetary stability in this case. The outcome for the first policymaker, however, could be further reduced by internalising the remaining externality. In the cases we consider (that is, parameters take non-zero values), financial stability losses are higher than in the case of joint optimisation. So, the Stackelberg outcome will always be inferior to the cooperative one. Not only that, but we are also able to show that the losses in this case can be larger than those in the non-coordinated one – the first case.

5. Implications for the design of a framework for macroeconomic stability

In this paper, we use a simple macroeconomic model to study the substitutability of interest rates and capital requirements. We find that in our model they are full substitutes for achieving a standard monetary policy objective of output and price stability. If ability to use one is limited, the other can “finish the job”. This result stems from the similarity of the transmission mechanism of the two instruments.

Introducing a financial stability objective affects the substitutability of interest rates and capital requirements. However, the fundamental linkages between these two instruments and any associated objectives remains. These relationships create scope for improving macroeconomic (and financial stability) outcomes through coordination of the instruments. Once fully coordinated, the substitutability reappears differently: it is not important which policymaker uses which instrument, but that their use be coordinated.

We find, however, that the type of coordination matters: if financial stability is important enough, a framework of partial coordination, where the policymaker responsible for financial
stability moves first, may deliver worse outcomes than one where both policymakers move simultaneously (as in this case they do not take each other’s reaction into account).

While we identify a coordination problem, its empirical relevance depends on a number of factors. Even for our simple model, there are parametrisations where the coordination gains are small. More importantly, however, our analysis is restricted to a specific type of financial stability: one based on financial frictions that can be measured by an interest rate spread. So, our discussion of financial stability is closer to that associated with the possibility of formulating cyclical capital requirements than it is with work aimed at modifying the structure of the financial system to increase its ability to withstand systemic shocks.

Another aspect of our findings concerns the appropriate choice of instrument for each policy objective. We should be open as to which instrument serves which objective, based on the best possible outcome and not on which system we inherited: interest rates may well be the better instrument to address financial stability, just as prudential instruments could be used for macroeconomic stabilisation.

If we think that financial instability is largely a result of idiosyncratic or sector-specific shocks, then capital requirements may well be the better tool to address it. On the other hand, interest rates can reach those parts of financial intermediation that are not bank-based, allowing policymakers to influence the behaviour of institutions that escape the regulatory perimeter. Building models that integrate more complex financial structures, helping build the policy infrastructure as well as inform policy actions, must be at the top of the research agenda for macroeconomists.

References


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