

THE FUTURE OF FINANCE

And the theory that underpins it



4 What mix of monetary policy and regulation is best for stabilising the economy?

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Chapter 4

What mix of monetary policy and regulation is best for stabilising the economy?

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We argue that the attempts to exonerate the conduct of monetary policy from a role in the crisis are unconvincing. We offer several reasons why macro-prudential policy may be less effective than monetary policy and suggest that the two policies need to be set jointly. Hence, the current plan to separate them in the UK should be revisited.

In contemplating regulatory change, it is also important to recognise that financial innovation has played a central role in economic growth over time, and to also be aware that mistakes made by regulators contributed to the crisis.

A more appropriate macroeconomic stabilisation framework may help reduce output volatility by more than regulatory micro-meddling. The latter may hurt growth or not work anyhow. Indeed, in some countries (e.g. China, India), more financial liberalisation would stimulate growth and help reduce global imbalances.

I. Introduction

Since the 2007-8 crisis, we have seen a plethora of proposals to change how we regulate the financial sector. Yet, we have seen surprisingly little change in beliefs about how we should run monetary policy.

For example, senior figures at the US Federal Reserve have continued to resist changes in how monetary policy should respond to asset price misalignments. In the UK, the incoming Chancellor has said he would create a new Financial Policy Committee (FPC) but also appears to have said that there was nothing the Bank could have done with interest rates to reduce the magnitude of the crisis.

In Section II.1, I discuss the respective roles of “macro-prudential” and monetary policy. I discuss several reasons why the use of monetary policy to “lean against the wind” (LATW) is critically important in its own right and to the success of the “macro-prudential” policy to be adopted by the FPC.

¹I am extremely grateful to Roy Cromb and Rohan Sakhrani for their help and advice.

I turn next (in Section II.2) to discussing some of the inadequacies of the arguments expressed by those who assert that inappropriate monetary policy did not contribute to the crisis.

Since there has been so much emphasis on changes in regulations and structure in the public debate after the crisis, I then discuss some of the mistakes made by regulators (Section III.1). Hence, at least some of our difficulties could have been avoided if these errors had not been made, and one should not neglect the possibility of “policy maker/regulator failure” when putting in a structure to deal with “market failure”.

I then turn my attention to the voluminous literature showing that financial innovation and development have been important to economic growth (Section III.2), and argue that we ignore this at our peril. Contrary to the oft-expressed view that recent financial innovation has not helped, I specifically cite evidence showing the contrary. It is important to recall that after the bursting of the South Sea bubble in 1720, this was followed by a ban on joint stock companies! Hence, we should not throw out the baby with the bathwater now.

Indeed, I assert that some countries (e.g. China) need more financial liberalisation, not less, (Section III.3). Moreover, such deregulation is likely to make the global economy less unbalanced and thereby reduce the risk of future crises.

As I witness the post-crisis debate, I worry that too many of the proposed regulatory measures will hurt growth. Moreover, unless accompanied by changes in how we run monetary policy, they may not even work.

Long ago, Keynes recognised that macroeconomic policy could deal with some of the very bad outcomes that can occur in capitalist economies. However, he argued that the use of such appropriate macro policy could help us preserve some of the considerable microeconomic advantages of capitalist economies. Similarly, with an appropriate monetary and fiscal policy framework, we should be able to deal better with the volatility associated with credit cycles, and this should reduce the need for changes in regulatory policy and structure that may be inimical to growth, or might not work anyhow.

II. Should the way we set monetary policy change after the crisis?

Over the last decade or so, we saw a vigorous debate about how monetary policy should respond to asset price bubbles ².

² See e.g. Bean (2003), Bernanke & Gertler (1999), Borio & Lowe (2002), Cecchetti, Genberg, Lipsky & Wadhvani (2000) and Wadhvani (2008).

I have long believed that monetary policy should react to asset price misalignments over and above fixed horizon inflation forecasts, (“lean against the wind” LATW hereafter) and that one should not rely, as per the Greenspan (1999) “mopping up” doctrine, on dealing with the fall-out of the bursting of the asset price bubble.

Since this crisis has amply illustrated the difficulties with “mopping up”, one might have expected a widespread change of heart regarding the use of monetary policy to LATW pre-emptively. To my surprise, this has not occurred. Hence, for example, Don Kohn (2008) argues that

“In sum, I am not convinced that the events of the past few years and the current crisis demonstrate that central banks should switch to trying to check speculative activity through tight monetary policy...”

We must thoroughly review the regulatory structure of the US and the global financial systems, with the objective of both identifying and implementing the comprehensive changes needed to reduce the odds of future bubbles arising...”

Similarly, Bernanke (2010) echoes this, in asserting that we primarily need to look at strengthening the regulatory system to prevent a recurrence of the crisis, though he concedes that monetary policy may be used as a supplementary tool if regulatory policy fails.

Turning to the UK, the Bank of England, in arguing for so-called “macro-prudential” tools, is also rather dismissive of the role of monetary policy in reacting to financial imbalances (see, for example, the discussion in Box 3 in Bank of England (2009)).

The recently incoming government in the UK also appears to have accepted this line of argument. Hence, in his Mansion House speech, Chancellor Osborne (2010), discussing the pre-existing monetary policy framework argued

“...the very design of the policy framework meant that responding to the explosion in balance sheets, asset prices and macro imbalances was impossible. The Bank of England was mandated to focus on consumer price inflation to the exclusion of other things”

and then used this argument to justify setting up the new Financial Policy Committee (FPC) at the Bank.

It is important to recognise that Chancellor Osborne’s assertion that the policy framework implied that the Bank of England could not respond to the explosion of asset prices and macro imbalances is wrong. As has been long recognised (see e.g. Cecchetti et

al. (2000) and Bean (2003)), the Bank of England's remit has required it to aim to meet the inflation target at all times. Since asset price misalignments were likely to jeopardise the central bank's attempt to do so because, say, the bursting of a bubble might threaten deflation at a later date, Cecchetti et al. (2000) argued a decade ago that the practical process of setting monetary policy on the basis of fixed horizon inflation forecasts needed to be amended so that interest rates could "lean against the wind" (LATW). Many others also argued along similar lines, most notably the Bank of International Settlements (see e.g. Borio & Lowe (2002) and White (2006)).

Furthermore, some other inflation targeting central banks (e.g. in Australia and Sweden) did actually "lean against the wind" (see e.g. Heikensten (2009) for a discussion of the Swedish experience). Similarly, in the UK and US, a 'LATW-style' monetary policy would have helped as the house price bubbles were emerging because it would have implied that policy rates would have been set higher than they were.

Unfortunately, the Bank of England and the Treasury argued against the need for such a change. For example, when Stephen Cecchetti, Hans Genberg, John Lipsky and I presented our report in 2000 recommending LATW, a representative of Her Majesty's Treasury (see O'Donnell (2000)), who was a discussant at the conference, vigorously defended the status quo. Subsequently, at the Treasury Select Committee, several MPC colleagues distanced themselves from the "LATW" proposal. In moving forward, it is important to recognise that it is not the framework that failed, but the failure to use the policy flexibility already implied by the framework³.

II. 1 The respective roles of macro-prudential policy and monetary policy

It now appears that the new FPC will be empowered to vary capital requirements over the cycle in order to deal with future asset price misalignments.

In some ways, this is a welcome development as it is useful to have an additional policy instrument to help hit the twin targets of price and financial stability that the Bank of England has always had. However, it is odd that the authorities have chosen to separate the FPC from the MPC. After all, standard economic theory suggests that when one has two instruments and two targets, then it is, in general, more efficient to set the instruments simultaneously to achieve the two targets than to have specific assignment.

Taking an example where these decisions were separated, recall that in Spain dynamic provisioning did not prevent a housing market bubble as interest rates (set by the

³ See also Wadhvani (2009) for a discussion of some of the issues here.

European Central Bank) were inappropriate to Spain's needs. We discuss other difficulties with the separation of the FPC from the MPC below.

Further, it is plausible that banks will attempt to find ways round the capital requirements. After all, regulatory arbitrage has, over the years, been a significant part of the financial sector's activities. It is less easy to avoid the effects of higher policy rates than that of higher capital requirements. There is a more general difficulty here. Diamond & Rajan (2008) point out that, in good times, because the costs of illiquidity seems remote, short-term debt appears "cheap" compared to longer-term debt, and the markets appear to favour a bank capital structure that is heavier with respect to short-term leverage. Hence, in the good times, one would expect the "market capital requirement" to prompt banks to engage in regulatory arbitrage.

In bad times, as the costs of illiquidity seem more salient, the markets are likely to hold bankers to higher capital norms than may be imposed by the FPC. Therefore, countercyclical capital requirements may prove to be relatively ineffective. In addition, it is widely recognised that in order to be effective, capital requirements will have to be coordinated internationally. This is not easy to achieve. An advantage of moving interest rates is that, given flexible exchange rates, each central bank then has policy autonomy.

Setting time-varying capital requirements (TVCR, hereafter) appropriately will require detailed knowledge of their impact on the economy. We do not have this, as has been amply illustrated by the recent debate about the impact of the new Basel capital and liquidity rules on the economy. For example, Ray Barrell (2010) of the National Institute has argued that equilibrium output would fall by 0.1% for each 1% increase in capital requirements. By contrast, there is other work he cites which points to an effect that is about ten times as big!

Moreover, there is disagreement about the shorter-term impact on output too. While Barrell argues that a rapid introduction "could induce a new banking crisis and cause a sharp reduction of output", the Chief Economist of BIS has been cited in the Financial Times as suggesting a much smaller effect⁴. Given our ignorance the FPC could set the level of capital requirements at an entirely wrong level. We have been here before. Romer (2009) reminds us that the 1937 recession in the US was, in part, precipitated by an accidental switch to contractionary monetary policy that was brought about by the doubling of reserve requirements for banks.

It behoves us to recall that the Bank of England did struggle with estimating the required capital (both quantity & quality) during the crisis. As late as August 2007, and therefore after a number of financial organisations had already succumbed to the sub-prime crisis, the Governor was still postulating that securitisation had made the global

⁴ See Cecchetti as quoted in Financial Times (2010).

banking system a safer place⁵. In September 2007 the Governor was still asserting that British banks were more than adequately capitalised⁶. Recall that, by then, the Banks sector had, since early 2006, already underperformed the FTSE All Share sector by over 20%, so the markets were scenting problems.

A significant advantage of using interest rates instead of TVCR to achieve greater macroeconomic stability is that we have years of experience of doing it and have a much better sense of the relevant elasticities. By contrast, remember the main Bank of England macro model, BEQM, has no explicit role for bankruptcy and its core implicitly assumes the Modigliani–Miller theorem whereby capital requirements do not even matter. Starting with those kind of assumptions is a sure recipe for a significant policy mistake.

A common argument against using interest rates to respond to asset price misalignments is that, to quote Bank of England (2009), “monetary policy would probably have needed to slow materially money spending in the economy below that consistent with meeting the inflation target...This would have generated lower output relative to trend...” Others go even further, e.g. Goodhart & Persaud (2008) say that “the level of interest required to prick a bubble might eviscerate the rest of the economy”.

However, I believe that this argument only applies to those who are actually using monetary policy actively to prick bubbles. As already discussed, this is not what a LATW-tilt to monetary policy involves. Such a tilt is directed towards improving macroeconomic stability, not to pricking bubbles *per se*.

Though a bubble may be damped if monetary policy reacts to it, the argument for LATW does not depend on this. LATW can help reduce volatility in output and inflation through the normal effects of monetary policy on demand by partially offsetting the macroeconomic impacts of the bubble. The simulation results in Cecchetti et al. (2000) suggested that the LATW tilt helped stabilise output and inflation relative to the no-tilt scenario even when monetary policy does not directly affect the bubble. The degree of the tilt imparted to monetary policy is designed to optimise macroeconomic stability, and is most unlikely to involve creating a recession to prick the bubble.

In any case, note that increasing capital requirements will primarily operate through changing the spread between the lending rate and the central bank’s policy rate. Hence, it will have a significant macroeconomic impact on output and inflation. If time-varying capital requirements are to make bubbles less likely they must impose some short-term macroeconomic costs that are similar to those imposed by higher interest rates (albeit somewhat more targeted). There is no “free lunch” that comes with using TVCR.

⁵ See Bank of England Inflation Report, Press Conference, August (2007).

⁶ See Treasury Select Committee (2007).

The Bank of England (2009) has also repeated another commonly expressed argument against LATW – which is that using interest rates to LATW might de-anchor the private sector’s expectations of inflation. In my opinion, this risk is easily exaggerated as it is not difficult to explain that one is, say, temporarily undershooting the consumer price inflation target because house prices are booming. Also, Carney (2009) argues that one can avoid threatening the monetary policy objective by ensuring that these deviations can be recovered over time in order to keep the economy on a predetermined path for the price level (i.e. so-called price-level targeting). However, the Bank asserts that one should use macro-prudential tools to target financial imbalances directly, given the risks of de-anchoring inflation expectations. This appears to imply that the Bank believes that the FPC can use its tool (s) (e.g. capital requirements) to affect a housing price boom without perturbing consumer price inflation because the MPC would set interest rates appropriately.

Is that credible? Let’s suppose that we have a house price bubble and the FPC increases capital requirements which leads banks to widen lending margins in general. The rise in actual borrowing rates then slows the economy and leads the MPC to forecast that consumer price inflation will undershoot the target. The MPC then lowers the policy rate to push inflation back to target. Can we be confident that the lowering of the policy rate accompanying the widening in lending margins does not keep the house price boom going? In this regard, Davies and Green (2010) are surely correct in warning that with the separate FPC and MPC, we have

“...a risk of “push-me, pull-you” policies within the Bank.”

When considering regulatory change, it is important that we recall that we have had financial crises associated with bursting asset price bubbles in many countries at many times in history. These episodes have occurred under different types of regulatory structures and banking systems. It would be unrealistic to expect that any regulatory or structural change would prevent a future crisis. It is therefore important to use monetary and fiscal policy to, at least, attempt to improve macroeconomic stability.

II. 2 The role of monetary policy in the recent crisis

It is unlikely that the recent crisis had a single cause. Therefore, if we are to attempt to reduce the amplitude of the next crisis, it is important that we work on improving performance in a number of areas. This is why it is disappointing that many central bankers have not been willing to accept responsibility for their errors. One can, therefore, have considerable sympathy for critics like Plender (2010), who assert that

“Yet, I cannot help thinking that central bankers are escaping very lightly in the post crisis bust-up. For while incentive structures in banking exacerbated the credit bubble, they were a much less potent cause of trouble than central bank behaviour across the world”.

In his defence of the Federal Reserve’s monetary policy record, Bernanke (2010) argued that interest rates had not seemed too low during the 2002-2006 period. He did so by modifying a version of the so-called Taylor rule. Using Bernanke’s preferred inputs, the Taylor rule prescribes a path for policy that is close to what actually occurred. However, this, to me, is to entirely miss the point. Many of us who had argued for LATW monetary policy (see e.g. Cecchetti et al. (2000, 2002)) had explicitly asserted that the Taylor rule was not an appropriate benchmark for monetary policy, but that it needed to be modified to include an additional term for asset price misalignments. Specifically, if say, house prices were significantly above their equilibrium value, then interest rates needed to be set above the conventional Taylor rule benchmark. Consequently, I would argue that, even using Bernanke’s preferred inputs into the Taylor rule, he would have to concede that interest rates were set lower than would have been implied by a Cecchetti et al. style interest rate setting rule that had incorporated a role for asset price misalignments.

Bernanke (2010) also argues that only a small portion of the increase in house prices during the decade could be attributed to the stance of US monetary policy. Instead, he asserts that the availability of alternative, exotic mortgage products is a key explanation of the housing bubble. Therefore, he concludes that regulatory and supervisory policies, rather than monetary policies, would have been a more effective means of addressing the run-up in house prices. One wonders whether the analysis that Bernanke relies on is sufficiently robust? Econometric models of house prices have not fared particularly well in recent years, and one should, therefore, be suspicious of any conclusions based on them.

Moreover, as Chancellor (2010) convincingly argues, the role of these exotic mortgage products is easily overstated. After all home prices soared in many other countries where monetary policy was also too easy, even though they did not have those new exotic mortgage products (e.g. Spain). Moreover, it would be a mistake to assert that the evolution of these exotic mortgage products in the US were, somehow, unrelated to the loose monetary policy regime. Diamond & Rajan (2009) provide a persuasive argument that the so-called “Greenspan put” whereby the authorities cut interest rates rapidly and deeply in “bad times” but were reluctant to raise interest rates above conventional benchmarks in “good times” may well have contributed to the illiquidity of assets and the excessive leverage of banks. Further, research at the BIS using a dataset for banks in sixteen countries does suggest support for the notion that lower interest rates

lead banks to take more risks (see e.g. Altumbas, Ganbacorta and Marquez-Ibanez (2010)).

Some have also argued that domestic monetary policy did not lead to house price bubbles. Instead, they blame the excess savings in other countries leading to low long-term real interest rates. Specifically, Bernanke (2010), in line with his global savings glut-hypothesis, shows that, in a cross-section, countries in which current accounts worsened and capital inflows rose also appear to have had greater house price appreciation. He then asserts that more accommodative monetary policies generally reduce capital inflows and that, therefore, the apparent relationship between capital flows and house price appreciation appears to be inconsistent with the existence of a strong link between monetary policy and house price appreciation.

However, Laibson and Mollerstrom (2010) suggest that it is the asset price bubbles that may have drawn in the capital flows. To the extent that accommodative monetary policy led to a house price bubble, it may actually have increased capital inflows, which contradicts Bernanke's assumption. Therefore, more research is needed with respect to the global savings glut hypothesis.

While many central bankers, (current and former) have tried hard to minimise the role of monetary policy in contributing to the house price bubbles we saw, one has to conclude that their attempts have, at best, been unconvincing.

III. Changing the regulatory framework to reduce the probability of future crises

While I have argued that changing the way we set monetary policy is important if we are to reduce the probability of future crises, we need to revisit the design and operation of our regulatory framework too. This crisis has many causes – it is important that we modify a variety of things. However, amidst the current popular clamour to 'hang the bankers' it is also important that we do not neglect the possibility that future growth may be hurt by inappropriate regulatory reform.

III.1 The regulators made mistakes too

Private sector bankers have got much of the blame for the crisis and it is striking that regulators have attracted much less attention. However, it is critically important that they absorb the lessons of the crisis too.

A sad aspect of this crisis is that there were many policymakers who understood what was going on and voiced concerns but, yet, our regulators did not respond. For

example, a former Governor of the Riksbank, Lars Heikensten (2009), writes of chairing a G10 working group which discussed provisioning in banks and measures to deal with the emerging housing price bubble. He reveals that political opposition from the US and Britain led to the report of this group not even being published as a G10 report! Heikensten also laments that public pleas for the Riksbank to amend European supervisory and crisis management practices were ignored.

Levine (2010) also resists the popular notion that, somehow, the crisis was an unpredictable accident – a view, for example, advanced by luminaries like Alan Greenspan, Robert Rubin and Charles Prince in their testimonies to the Financial Crisis Inquiry Commission. Instead, Levine asserts that

“The crisis did not just happen. Policymakers and regulators, along with private sector co-conspirators, helped cause it.”

He argues that in a variety of areas, US regulators incentivised financial institutions to engage in activities that generated enormous short-run profits but dramatically increased long-run fragility. Levine also claims that, in some cases, the regulatory agencies were aware of the risks associated with their policies but chose not to modify them.

It is therefore unfortunate that in the ‘blame game’ that was played out in the last two years, central bankers and regulators have typically attempted to pin all the blame on the private sector, without always admitting the need for them to learn their own lessons from the crisis.

Taking a more parochial view, the Bank of England and the overall regulatory system in the UK had a poor crisis. Little was done to deal with the bubble, despite public concerns about excessive risk taking, while the response to the crisis was slow. (This is something that was made most visible by the Northern Rock debacle). Yet, the absence of contrition from the BOE has been surprising. The BOE’s mistakes stemmed in large part from the prevailing doctrine that financial markets were efficient. Any attempt to question that was strongly resisted⁷.

In my time at the MPC at the Bank, I was surprised by the lack of interest in issues relating to financial markets. Indeed there seemed to be a deliberate policy to run down resource in the Financial Stability wing.

⁷ Even an attempt to amend the main macroeconomic model to incorporate the well-documented empirical finding that the so-called ‘uncovered interest parity’ hypothesis did not hold encountered significant resistance, on the ostensible grounds that we should not assume such a departure from market efficiency (see e.g. Wadhvani (1999)).

It is therefore odd that the new regulatory structure makes an unrepentant BOE even more powerful with respect to regulatory matters.

III.2 Some proposals to reform the financial sector may hurt growth

Since the 2007-8 crisis, we have seen a bewildering variety of proposals to reform the financial sector, including structural reform (e.g. ‘narrow banking’), changes in capital & liquidity requirements, and modifying the remuneration framework. Some of these proposals will be discussed in other chapters.

Given that the crisis had a huge negative impact on global welfare, the temptation to reform the financial sector is easily understood. Indeed, after financial crises, it is not uncommon to blame recent financial innovations. Recall that after the bursting of the South Sea bubble in 1720, this was followed by a ban on joint stock companies in 1720 and by the Barnard Act in 1734 that banned option trading (see e.g. Stulz (2009)). Clearly, not all post-crisis reform is sensible!

I have no difficulty with the notion that financial markets failed this time, as they have done before. For much of my professional career, I have been sceptical about the efficient markets hypothesis (EMH hereafter). Much of my early research as an academic⁸ questioned the notion of market efficiency at a time when the consensus view amongst policy-makers and academics alike was strongly pro-EMH. However, economists have long understood that ‘market failure’ does not, of itself, justify government intervention. Specifically, certain forms of intervention may not be justifiable in terms of standard cost benefit analysis because, for example, we may end up depressing growth significantly and/or ‘policymaker failure’ may be an important consideration.

The current understandable obsession with “bashing the bankers” neglects the theoretical and empirical literature documenting the highly significant contribution of the financial sector to growth (see, e.g. the masterly summary by Levine (2004)). For example, financial market development has allowed us to deal with liquidity risk, whereby it has facilitated the financing of some high return projects that require a long-run commitment of capital even though individual savers do not like to relinquish control of their savings for long periods. Financial market development enabled savers to hold liquid assets (e.g. equities, bonds, or bank deposits) while capital markets transformed these into longer-term capital investments.

The eminent economist, Sir John Hicks asserted that the products that were manufactured during the first decade of the Industrial Revolution had been invented much

⁸ See e.g. Wadhvani (1988).

earlier, but in his view, the critical innovation that had ignited growth in eighteenth century England was capital market liquidity (Hicks 1969). It is important that we do not lose sight of this important consideration when discussing proposals that may impede the maturity transformation undertaken by banks.

Historically, financial systems that are more effective at pooling savings are regarded as helping growth. Indeed, Bagehot (1873) argued that a major difference between England and other countries was that England had a financial system that could mobilise resources for “immense works” more effectively than other countries.

In a widely-cited study, King and Levine (1993) showed that the initial level of financial intermediation and its growth had highly beneficial effects on economic growth over the 1960-89 period. More recently, Aghion et al (2005) contended that financial development helped explain whether or not growth convergence occurred and, if so, the rate at which it did. Over a longer time-period, Rousseau and Sylla (2001) studied seventeen countries over the 1850-1997 period, and concluded that financial development stimulated growth in these economies. Further, Jayaratne, and Strahan (1996) compared 35 US states who relaxed restrictions on branch banking versus those who did not, and showed that bank reform was associated with accelerating real per capita growth rates. In another widely-cited study, Rajan and Zingales (1990) found that industries that were naturally heavier users of external finance grew faster in economies with better developed financial systems. Hence, using a variety of different types of statistical tests, the finance-growth nexus appears to be an important and robust result. It is therefore, critically important that we take the potential growth-retarding effects into account when recommending any reform of the finance sector.

In some circles, though, it has become fashionable to dismiss the voluminous academic literature documenting a significant link between financial innovation and economic growth. The argument advanced is that while it is accepted that financial innovation helped us during the Industrial Revolution or may help countries with less well-developed financial systems like India, it is asserted that the financial innovation over the last 30 years have NOT helped us ⁹.

However, this scepticism about the value of recent financial innovation is almost certainly unwarranted. First, Greenwood et al (2010) show that during the periods 1974-2004, about 30% of US growth can be accounted for by technological improvement in financial intermediation. Secondly, using data for the 1973-1995 period, Michalopoulos et al. (2010) show that financial innovation is an important determinant of the rate of growth convergence. They conclude that

⁹Turner (2010) cites Schularick and Taylor (2009) as providing evidence suggesting that innovation had no effect on trend growth. However, a more recent version of the latter paper distances itself from such a claim, which had, though, been made in an earlier version that Turner cites.

“Institutions, laws, regulations, and policies that impede financial innovation slow technological change and economic growth”.

Third, in terms of anecdotal evidence, many who have succeeded in the ICT sector point to innovation within the venture capital sector as contributing to their success. One hears similar things about the biotech sector.

Fourth, anecdotal evidence also points to a highly significant reduction in bid-offer spreads associated with a variety of instruments used by the corporate sector (e.g. interest rate swaps). Note that Greenwood (et al) showed that, on a cross-country basis, lower interest rate spreads go hand-in-hand with higher capital-to-output ratios and also higher total factor productivity (see Figures 1 and 2 respectively).

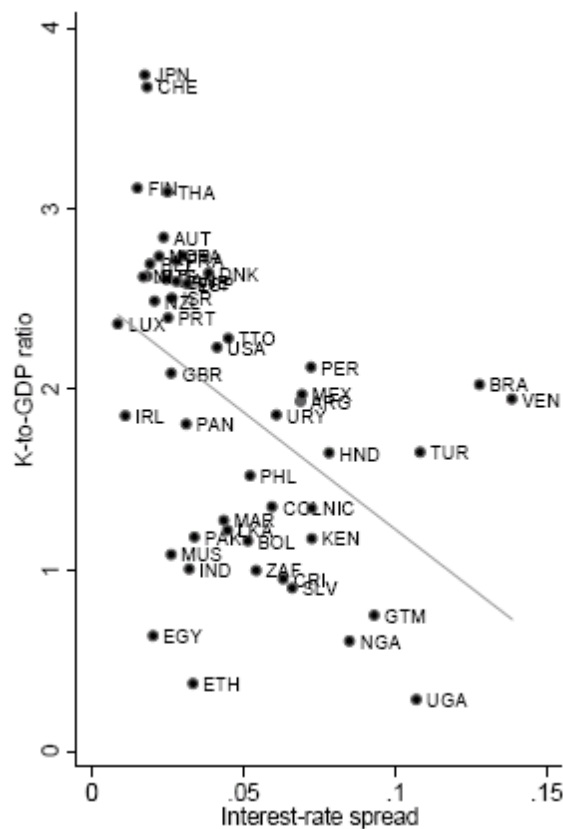


Figure 1: The cross-country relationship between interest-rate spreads, capital-to-output ratios and GDP.

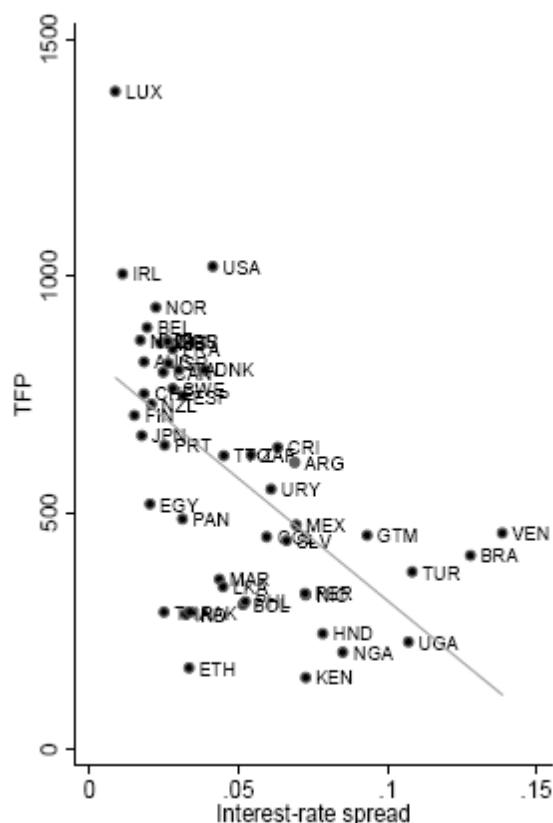


Figure 2: The cross-country relationship between interest-rate spreads, TFP and GDP

Increasing micro-intervention in our financial markets could plausibly retard financial innovation and hurt economic growth. Moreover, there is a substantial literature about how policy makers hurt growth through, for example, diverting resources for political or other non-economic reasons. This is another reason I believe that monetary (and macro) policy should play a more important role with respect to financial stability. Thereby, we can preserve the microeconomic advantages of financial innovation while simultaneously curbing the over exuberance of the financial sector by using macroeconomic tools like interest rates. The latter has the advantage that it does not require the degree of detailed knowledge which would be necessary for successful microeconomic intervention.

III.3 We need more, not less, financial liberalisation in some countries to reduce the probability of future crises

It is widely accepted that it will be difficult to achieve sustained growth in the US unless there is a significant “rebalancing” towards Asia. Of course, greater financial liberalization in Asia would make such rebalancing more likely.

This is best illustrated by considering the Chinese case more carefully. Note that the Chinese current account surplus shot up from around 1.6% of GDP early in the decade to as high as 11% of GDP in 2007. The increased saving which went hand-in-hand with the rise in the current account surplus was the rise in gross corporate savings, which went from about 15% of GDP in 2000 to around 26% of GDP by 2007.

According to conventional economic theory, in a world with perfect capital markets and no tax distortions, the level of total private savings should be invariant to corporate saving. However, IMF (2009) show (see Figure 3) that while this theoretically-predicted relationship holds outside Asia, it definitively does not hold in Asia. Recall that, in China, corporates are often state-owned or local government-led. Usually, the state does not receive dividends, and large companies either reinvest their profits or simply accumulate assets.

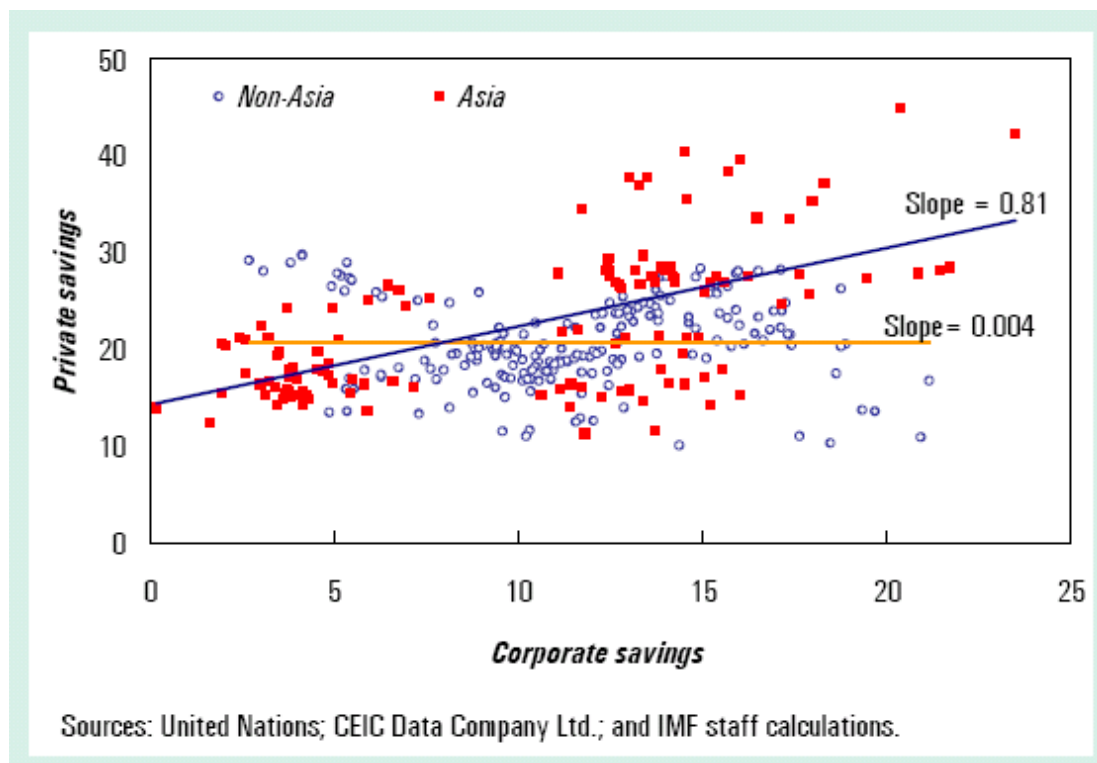


Figure 3: Private and Corporate Savings (in percent of GDP)

What China needs is financial liberalization. With a more market-driven system, firms are less likely to need to retain earnings (less reliance on self-financing). The IMF estimates that achieving the average level of financial liberalization in the G7 would reduce corporate savings by 5 percent of GDP. Similarly, improvements in corporate governance would help, as it would make it more likely that corporates would pay dividends.

There is an internal debate with respect to the merits of financial liberalization within China. The louder the critics of the finance sector within the G7 shout, the more they undermine those who would push financial reform in China.

III.4 Financial liberalisation, crises and growth

In an intriguing paper, which may have some applicability to the current conjuncture, Tornell, Westermann and Martinez (2004) show that :-

- i. Financial liberalisation leads to a greater incidence of crises
- ii. But, financial liberalisation also leads to higher GDP growth
- iii. A positive link between GDP growth and the negative skewness of credit growth (which is a correlate of crises)

They conclude:-

“Thus, occasional crises need not forestall growth and may even be a necessary component of a developing country’s growth and experience”

They illustrate their argument by comparing Thailand and India. India followed “slow and steady” growth – GDP per capita grew by 114% between 1980 and 2002. In contrast, Thailand experienced lending booms and crisis, but GDP per capita grew by 162% despite the effects of a major crisis.

With regards to the conjuncture, it MAY be that countries with more developed financial systems do have more “negative skewness”, but also higher growth. (We don’t know if their work carries over to the more developed countries).

Therefore, the recent crisis in the developed world might not, by itself, be a reason to “destroy the financial industry”.

Indeed, I wonder whether we need to secure the microeconomic advantages of financial liberalisation while using macroeconomic policy to deal with the over-exuberance that precedes the financial crises that do so much harm.

Conclusions

I have six key conclusions:-

- A. Monetary policy mistakes played a key role in the run-up to this crisis, and the arguments made in defence of the policy actually followed are unconvincing.
- B. Monetary policy needs to work “hand-in-hand” with time varying capital requirements (TVCR) in responding to asset prices misalignments. Moreover, monetary policy is likely to be more effective than TVCR and less likely to result in policy mistakes. This may imply that the current redesign of the policy making structure in the UK is inappropriate and there may well be a case for merging the MPC and the FPC.
- C. The regulators made many mistakes before and during the crisis. We need to be acutely aware of this before giving them even more power, and we need to ensure that lessons are learnt.
- D. Financial innovations, including some of the improvements in recent years, have played a central and important role in economic growth. While the current feeling of revulsion towards the financial sector is not uncommon after a crisis, we must be careful that we do not harm growth.
- E. Some countries (e.g. China) need more, not less, financial liberalisation. This would help rebalance the global economy which might reduce the probability of future crises. Anti-finance rhetoric in the developed markets weakens those who are arguing for financial reform in China and India.
- F. Macroeconomic policy (including monetary policy) needs to “lean against the wind” (LATW) so that we can deliver greater macroeconomic and financial stability without having to resort to a lot of micro-meddling that may hurt growth significantly.

References

- Aghion, P., & Howitt, P. and Mayer-Foulkes, D. (2005) “The Effect of Financial Development in Convergence: Theory and Evidence”, *Quarterly Journal of Economics*.
- Altunbas, Y., & Gambacorta, L., & Marquez-Ibanez, D. (2010) “Does monetary policy affect bank risk-taking?”, BIS Working Paper, no. 298, March.
- Bagehot (1873), W. Lombard Street, Homewood, IL: Richard D. Irwin.
- Bank of England (2009) “The role of macroprudential policy”, Discussion paper, November.
- Bank of England (2007) Inflation Report Press Conference, August 2007 Transcript on www.bankofengland.co.uk
- Barrell, Ray (2010) “Should we shut the stable door before the horse bolts again?”, Paper presented at the NIESR Westminster Economics Forum, June.
- Bean, C. (2003), “Asset prices, financial imbalances and monetary policy: are inflation targets enough?”, BIS working Paper no. 140.
- Bernanke, B. (2010) “Monetary Policy and the Housing Bubble”, speech at the American Economic Association, January 3.
- Bernanke, B. & Gertler, M. (1999), “Monetary Policy and asset price volatility”. In *New Challenges for Monetary Policy: A Symposium* Sponsored by the Federal Reserve Bank of Kansas City. Federal Reserve Bank of Kansas City, pp. 77-128.
- Borio, C. and Lowe, P. (2002). “Asset prices, financial and monetary stability: exploring the nexus”, BIS Working Papers, no 114.
- Carney, Mark (2009) “Some considerations on using monetary policy to stabilise economic activity”, symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 22 August, 2009.
- Cecchetti, S.G., Genberg, H., Lipsky, J. and Wadhvani, S. (2000) “Asset Prices and Central Bank Policy”, Geneva Report on the World Economy 2, CEPR and ICMB.
- Cecchetti, S.G., Genberg, H., and Wadhvani, S. (2002), “Asset prices in a flexible inflation targeting framework”, in Hunter, W.C., Kaufman, G.G. and Pomerleano, M. (eds), *Asset Price Bubbles: The implications for Monetary, Regulatory and International Policies*, MIT Press, pp. 427-44.
- Cecchetti, S. as quoted in Giles, C. (2010) “Bankers’ doomsday scenarios’ under fire”, *The Financial Times*, 30 May.
- Chancellor, Edward (2010) “Ben Bernanke has learnt so little”, *The Financial Times*, January 10.
- Diamond, D and Rajan, R. (2009a) “Illiquidity and Interest Rate Policy”, University of Chicago, mimeo.
- Diamond, D. and Rajan, R. (2009b) “The Credit Crisis: Conjectures about Causes & Remedies”, University of Chicago, mimeo.
- Davies, H. and Green, D. (2010) “Final touches for sensible regulatory reform”, *The Financial Times*, May 20.
- Goodhart, C. and Persaud, A. (2008), “A party pooper’s guide to financial stability”, *The Financial Times*, June.
- Greenspan, A. (1999), “Testimony to the Committee on Banking and Financial Services”, US House of Representatives, 22 July.
- Greenwood, J., Sanchez, S.M. and Wang, C. (2010) “Quantifying the Impact on Financial Development on Economic Development”, NBER Working Paper no. 15893.
- Heikensten, L. (2009) “Inflation Targeting 20 years on”, Presentation at Norges Bank conference, Oslo, June 12.
- Hicks, Sir John (1969) *A Theory of Economic History*, Oxford: Clarendon Press.

- IMF (2009) “Regional Economic Outlook: Asia”, October, Figure 3.7.
- Jayaratne, J. and Strahan P.E. (1996) “The Finance-Growth Nexus: Evidence from Bank Branch Deregulation”, *Quarterly Journal of Economics*, 111, pp. 639-670.
- King, I.R.G. and Levine, R. (1993) “Finance and Growth: Schumpeter Might be Right”, *Quarterly Journal of Economics*, 108, pp. 717-738.
- Kohn, D.L. (2008) “Monetary Policy and Asset prices Revisited”, Cato’s institute’s 26th Annual Monetary Policy Conference, November 19.
- Laibson, D. and Mollerstrom, J. (2010) “Capital Flows, Consumption booms and Asset Bubbles: A Behavioural Alternative to the Savings Glut Hypothesis”, NBER Working Paper no 15759.
- Levine, Ross (2004) “Finance and Growth: Theory and Evidence”, *Handbook of Economic Growth*.
- Levine, Ross (2010) “An Autopsy of the U.S. Financial System”, NBER Working Paper no. 15956.
- Michalopoulos, S., Laeven, L. and Levine, R. (2010) “Financial Innovation and Endogenous Growth”, Brown University, mimeo.
- O’Donnell, Gus (2000) “How Can Monetary Policy Deal with Asset Price Inflation”, in Cecchetti et al (2000).
- Osborne, George (2010), Speech at the Lord Mayor’s Dinner at Mansion House, 16 June.
- Plender, John (2010) “Blame the central bankers more than the private bankers”, *The Financial Times*, June 13.
- Rajan, R.G. & Zingales, L. (1998) “Financial Dependence and Growth”, *American Economic Review*, pp. 559-586.
- Romer, Christian (2009) “The lessons of 1937”, *The Economist*, June 20.
- Rousseau, and Sylla (2001) “Financial System, Economic Growth and Globalisation”, NBER Working Paper no. 8323, June.
- Schularick, M. and Taylor, A.M. (2009) “Credit booms Gone Bust: Monetary Policy, Leverage Cycles and Financial Crises, 1870-2008”, NBER Working Paper no. 15512.
- Stulz, Rene (2009) “Credit Default Swaps and the Credit Crisis”, Fisher College of Business, Working Paper Series, The Ohio State University.
- Treasury Select Committee (2007), Transcript, 20 September.
- Tornell, Westermann and Martinez (2004) “The positive Link Between Financial Liberalisation, Growth and Crises”, NBER Working Paper no. 10293.
- Turner, Adair (2010) “After the Crises: Assessing the Costs and Benefits of Financial Liberalisation”, 14th Chintaman Deshmukh Memorial Lecture, Reserve Bank of India, Mumbai, February 15, 2010.
- Wadhvani, S.B (1998) “On the Inefficiency of Financial Markets”, LSE Quarterly, March.
- Wadhvani, S.B. (1999) “Currency puzzles”, Speech delivered at the London School of Economics, September 16, www.bankofenglands.co.uk
- Wadhvani, S. B. (2008) “Should Monetary Policy Respond to Asset Price Bubbles? Revisiting the Debate”, *National Institute Economic Review*, no, 206, October.
- Wadhvani, Sushil B. (2009) “Inflation Targeting, Capital Requirements and Leaning Against the Wind”, Presentation at the Norges Bank “Inflation Targeting 20 years on” conference, Oslo, June 12.
- White, W.R. (2006) “Procyclicality in the financial system: do we need a new macro financial stabilisation framework?”, BIS Working Papers no.193.

