

Inflation Targeting and Asset Prices.

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1. Setting the scene

The framework of (flexible) inflation targeting was widely credited with facilitating or even causing the ‘great moderation’. In public perception, hubris has now been followed by nemesis - and the inflation targeting framework is increasingly blamed for the current financial crisis and the world recession. Many argue that the basis of monetary policy must change – especially in the direction of giving more weight to asset prices in setting interest rates. (Eg Wolf, FT, Wed. May 6, 2009). Common suggestions include the idea that the interest rate setting authorities should ‘lean against the wind’ of asset price movements, especially in the expansionary phase of a boom (Wadhvani, 2008) or that the authorities should adopt a sufficiently long horizon - so that they can take asset prices into account within their mandate (see, for example, Bean 2003). Others call for much more radical recasting of the objectives and procedures of monetary policy.

This paper argues that the debate is in serious danger of going off track. The hubris, if hubris there was, arose, not in thinking that interest rate setting policy was vastly improved, but in believing that flexible inflation targeting was (in macroeconomic policy terms) all that was needed – that other aspects of macroeconomic and prudential policy could be neglected. Clearly, the success of inflation targeting allowed the fiscal authorities to disengage from the traditional macroeconomic concerns of inflation control and stabilisation. It also allowed the regulators to concentrate on micro-regulation (as the macroeconomic consequences of regulatory failure seemed to be someone else’s responsibility). But it would be odd to blame the successes of the monetary framework for inadequacies elsewhere.

Of course, given what happened, the system was at fault. With systematic failure, it is particularly important to focus on what went wrong – before prescribing wholesale change. For example, it has long been taken for granted that a macroeconomic management system, such as flexible inflation targeting could not be expected to work with fiscal policy pulling in the opposite direction or out of control, (e.g. Dodge 2002). Similarly, regulation, including regulation to address externalities and other market failures within the banking and financial sector, is an essential part of the system, without which a regime of inflation targeting could not be expected to function well. To state the obvious, if the system needs to be fixed, a key question is what parts of it need to be redesigned, and what parts do not.

This means that the debate over the future of inflation targeting involves at least three areas of policy – broadly speaking, interest rate policy, fiscal policy and financial regulation. A key question is about *assignment* – the assignment of responsibilities, objectives and policy instruments to various institutions. A second question is about policy design within each area of responsibility/competence. A third question is about coordination between the three areas. This paper concentrates largely on the assignment issues and the role of interest rate policy.

2. What is inflation targeting and why was it a vast improvement?

A key problem in macroeconomic policy, arguably the key problem, is the reconciliation of two competing aims – the credible control of the price level/inflation in the medium term and the stabilisation of output and prices, especially output. The search for a stable financial framework that would deliver this complex set of objectives has been subject to a bewildering series of twists and turns (including U-turns) over the past decades. Cutting a very long story short, flexible inflation targeting eventually emerged as the preferred solution to the complex political and economic issues involved¹

What is now known as flexible inflation targeting evolved in different ways. In the US, after the great inflation of the 1970s, it was essentially established as a set of behavioural reactions which came to be understood by financial markets. Famously, the Taylor Rule (Taylor 1993), was originally put forward as a description of Fed behaviour. Even now, the Fed has not, formally speaking, adopted inflation targeting – though it is commonly taken as a model by many countries which have. By contrast, in many other countries, such as New Zealand and the UK, inflation targeting involved institutional change – regime change by design. By and large, the experience of inflation targeting has, until recently, been extremely positive.

There is, or was, an emerging consensus on what might be termed best practice inflation targeting. It normally involves delegation of responsibility for medium term control over inflation (or price stability) to an independent central bank using interest rates as its primary instrument to influence inflationary pressure. In practice, the interest rate policy reaction function is embedded in an institution, operating with constrained discretion. Formal mandates, such as those of the ECB and the Bank of England are, usually, hierarchical or lexicographic with the primary objective being price stability and *subject to that* (or *without prejudice to that*) a responsibility for stabilisation.

Theory played a role. At its simplest, the system can be represented by just three equations: an IS relationship, a Phillips type relationship and the interest rate policy reaction function. The reaction function needs to have certain properties – such as the Taylor principle. Variants abound, ranging from simple rules, such as the Taylor Rule, via set ups involving assumed loss functions to fully micro-founded forward-looking approaches. The connection between theory and practice is close enough to be highly productive, but it is not exact. Given the importance of expectations, it is widely argued that central bank behaviour should be ‘rule-like’ in the sense of Taylor, (1993) and ‘predictable’ in the sense of Woodford, (2003). Both of these require credibility and transparency.

I want to make a few points before addressing the problems posed by imbalances, by asset price movements and the recent crisis.

The first is about the system of flexible inflation targeting. At a high level of generality, it is about the management of demand to meet the twin objectives of price stability and

¹ Most policy intervention needs to be justified on the basis of some ‘market failure’. The need for policy to provide a ‘nominal anchor’ is more fundamental than that: without a nominal anchor, the price level is, in the standard paradigm, indeterminate. .

stabilisation. There is nothing in this that requires that the instrument of policy should be the short term interest rate or that the agent should be the central bank (or part of it). Both of these are pragmatic choices – though sensible ones. In principle, different control instruments could be used within a similar framework – for example, a fiscal instrument, or multiple instruments. In principle, other institutions could be assigned responsibility for the complex trade-offs in achieving inflation control and as much stabilisation as is compatible with it. To illustrate, Singapore uses the exchange rate effectively as an instrument within an inflation targeting framework²; fiscal policy committees have been proposed for countries within EMU (Wyplosz 2002), which, of course, are not part of the central bank. A broad perspective is needed given that many central banks are now using quantitative easing as an additional instrument and that, with interest rates close to or at the ‘lower bound’, fiscal instruments are being used to counter deflationary forces. I return to these issues below.

The second point can be expressed as a question: what accounts for the apparent success of flexible inflation targeting and – by revealed preference – its popularity? The story, as so often, is different for the US than for most other countries. In the US, the Central Bank was already ‘independent’ and already effectively responsible for managing the complex trade-offs between inflation control and stabilisation that we are concerned with³. (Their mandate, of course includes price stability and economic growth as well as financial stability). After some unsuccessful experiments with monetary targets, policy moved fairly naturally into a system which gave overriding priority to inflation control over the medium term (implied by natural rate versions of the Phillips curve) whilst delivering as much stabilisation as possible. This is a story of better policy supported by better theory and better empirical analysis (though for some time theory appeared to lag behind policy practice).

For most other countries, I would argue that the *assignment* problem was key. One of the problems historically was that different arms of government frequently appeared to pull against each other, and even where Treasuries were in overall charge, the tensions were unresolved. Given the increasing commitment to non-accommodating policies against inflation, and the failure of both monetary targeting and exchange rate targeting (which with hindsight look like particularly badly designed interest rate policy reaction functions) the time was – how shall I put it? – ripe for the delegation of these important aspects of macroeconomic policy to independent entities with clear mandates. There was also a powerful push from theory in the direction of delegation as a way of increasing credibility. In the ‘new consensus macroeconomics’ the assignment is also particularly simple: the delegation of responsibility for inflation control (and subject to that, stabilisation) to an independent institute or institution, with a single instrument of control – the policy interest rate. It is so simple that, given the mandate and a modicum of transparency, the (conditional) policy reaction function is easily discernable, and came to be anticipated by financial markets and the public.

The other important aspect of this assignment is that the inflation targeting authority *does not have* responsibility for other important economic variables, such as the current account

² It is quite sensible for a very open economy to see policy as working through the real exchange rate. Of course, interest rates are the most important way of influencing the exchange rate.

³ A major reason for this assignment is not the virtues of the Federal Reserve but the deficiencies of the fiscal system in the US.

deficit, household indebtedness, asset prices, or, for the purist, financial stability. Of course, central banks typically do have multiple responsibilities – but the inflation targeting arm needs to be effectively separate, even though it would obviously take into account what the other arm was doing. (In the UK system, for example, it is the Monetary Policy Committee that is independent. Also in UK practice, the MPC (qua MPC) does not comment on fiscal policy).

The contention here is that this clear and simple assignment of roles and responsibilities, which was hard won, is the thing that is most at risk in the political/economic debates over the future role of monetary (and specifically, interest rate) policy.

2. Monetary and other policies in the new consensus assignment

In the consensus, it is the job of the interest rate setting arm of the central bank (the MPC in the case of the UK, FOMC in the US) to take everything into account. This includes international shocks, the exchange rate, real estate prices, oil and other commodity price movements, regulatory changes and fiscal policy. (Practice may be faulty, but the principle is clear). In the case of fiscal policy, this means that fiscal actions are ‘internalised’ by the monetary policy reaction function (Allsopp and Vines 2006). In the case of the UK, the relationship between fiscal and monetary policy has been described as akin to ‘Stackleberg leadership by Bean (1998b). (See also Balls and O’Donnell, 2001). Before the recent crisis, the coordination between fiscal and monetary policy was described by the Treasury as particularly good – and as much better than in earlier decades. Again, a few points only – but see Allsopp and Vines (2006).

The adoption of inflation targeting implied, as far as the fiscal authorities are concerned, delegating the responsibility for the inflation control/stabilisation trade-off to the interest rate setting authorities. In many cases, this was greeted with relief. Treasuries could concentrate on ‘good housekeeping’, and on the traditional distributional and resource allocation functions of the fiscal system⁴. Under the new assignment, fiscal policy did not appear to ‘matter very much’ (Allsopp and Vines, 2006) for the traditional macroeconomic concerns of inflation control and stabilisation.

The assignment, or set up, did imply, however, that the fiscal authorities were constrained by the monetary policy reaction function. For example, a fiscal expansion would, predictably, lead to higher interest rates (and a higher exchange rate) than otherwise.

By the same mechanism, it was also the case that it was the fiscal stance that determined the medium term level of interest rates (the ‘neutral rate’) and the exchange rate. Thus, any concern over an external imbalance was essentially the responsibility of the Treasury, not of

⁴ In the UK, fiscal prudence and sustainability was supposedly ensured by adherence to the fiscal rules – especially the debt sustainability rule that net debt should not exceed 40% of GDP. Under the Maastricht Assignment in EMU (Issing xxxx) fiscal policy was the responsibility of the national authorities, but subject to the SGP. Alesina et al described the role of the fiscal authorities as practising ‘good housekeeping’ – i.e conforming to the SGP.

the monetary authorities. In practice, this responsibility, built into the assignment, was rarely admitted⁵.

In principle too, the fiscal authorities could intervene fiscally to offset shocks to the economy (e.g. to offset a savings shock, or to affect asset prices). There are certainly cases where a fiscal intervention might be preferred to an interest change which, under the new consensus assignment, would be a decision for the fiscal authorities. Such fiscal interventions would, however, be ‘internalised’ by the monetary authorities⁶.

Similar considerations apply to the assignment of responsibility for financial regulation – where there is, however, great diversity in practice⁷. The regulatory system is not the responsibility of the interest rate setting authorities, but the institution charged with inflation control and macro stabilisation needs to take the regulatory system and changes in it into account in their reaction function. Thus, if financial regulation is pro-cyclical, this should affect interest rate setting behaviour.

From the assignment perspective, most of the suggestions for changes to the inflation targeting system involve expanding the role of the interest rate setting authorities - giving them more instruments, more responsibilities, and more objectives. The danger is that the perceived institutional reaction function becomes less ‘rule-like’ and less ‘predictable’.

3. Does the framework of monetary policy need to change?

It may seem complacent to suggest that the answer is no. For the main, however, that is what I want to argue – with some important qualifications and caveats below. The perspective adopted is institutional rather than theoretical.

Could monetary policy have been better?

A first point to get out of the way is that policy practice could, I am sure, have been better (especially with the benefit of hindsight). I take that for granted – as well as the point that monetary policy makers need to learn from the past. But that is not an argument for regime change – simply an argument for doing things better if one can. As an illustration, Taylor has argued forcefully that a departure from his rule by the US was a major cause of the financial crisis (Taylor. 2009). He may be right – or not. Either way it is not an argument for changing the basis of inflation targeting.

⁵ In discussion of potential EMU entry however, the point was freely admitted: fiscal policy might need to alter to bring about an appropriate entry rate for sterling, were the UK to join the arrangements.

⁶ Interestingly, suggestions that the monetary authorities should be given an additional fiscal instrument to improve their armoury, see for example, Wren –Lewis (xxxx), did not suggest a change in the assignment of responsibilities. Clearly, however, the monetary authority’s reaction function would become more complicated. And, in pragmatic terms, there would be ambiguity over which institution was responsible for the fiscal/monetary mix.

⁷ In the UK, responsibility for financial stability is split between the Financial Services Authority and the Central Bank (the stability wing), with the whole being subject to a tri-partite agreement between the Treasury, the bank and the FSA. The system did not work well in the crisis.

An older argument that US monetary policy was too expansionary during the dot.com boom, noting that Greenspan himself had considered restraining it by margin requirements, is also not really relevant to the broader questions of inflation targeting. Regulatory restraint may indeed have been a good idea. If it had been applied, it would have been applied by the regulatory arm of the Fed – and would, presumably, have been taken into account by the interest rate setting machinery. It is not the same as an argument that interest rate setters, within a flexible inflation targeting framework, should ‘lean against the wind of asset price rises’ (see below).

Three related issues for inflation targeting

Broadly, there are three suggestions for change in the inflation targeting framework which would constitute a significant change in the ‘reaction function’. First, that interest rate policy should react to developing imbalances. Second, that interest rate policy should lean against the wind of asset price rises, and third, that interest rate setters should act to offset or quell boom bust type scenarios, including asset price drifts and ‘bubbles’. None of these are new – but all have increased salience given the credit crisis.

Economic imbalances

Concern over economic imbalances and ‘sustainability’ is certainly not new – but could or should an inflation targeting regime seek to do anything about them?

Generally speaking, the conventional answer is a resounding no. This follows directly from the limited mandate (and the limited number of policy instruments) in a flexible inflation targeting regime. Using the example of an external balance of payments deficit (presumed large enough to be problematic) diversion of policy away from a proper concern over inflation and stabilisation would simply destroy the regime and its credibility⁸. It is not clear that the interest rate would be an appropriate instrument for dealing with an imbalance, and even if it were, the costs to the other parts of the system would be great. A reaction to the build up of (say) household indebtedness would appear equally inappropriate.

This is not to imply that imbalances do not matter. The argument is that, if they do matter, then it should be the responsibility of other parts of the system to react. For example, a first best response might involve fiscal policy being used to affect the balance of payments - directly and indirectly via the (predictable) interest rate responses of the inflation targeting institution. In the case of housing, there are many ways the market could be affected other than by interest rate policy. We are back to the assignment problem.

That said, much of the practical concern with imbalances (which are not easy to define) is that they are harbingers of a major, destabilising future correction. To make the obvious point, the possibility/probability of boom and bust is of central concern to an inflation targeting institution. This issue, the most difficult one in practice and in theory, is discussed below.

⁸ There are endless examples from the past of policy swinging about between internal and external objectives with a loss of overall policy credibility.

Asset prices and leaning against the wind.

In many ways, the issue of asset prices is dual to the issue of imbalances. The big issue is about booms and busts, how to moderate them and how to formulate policy taking them into account.

The prevailing central bank consensus was well set out by Vickers (1999). He argues that (a) asset prices should not be part of the definition of the inflation target or of the loss function of the authorities; (b) that asset prices do contain considerable information relevant to forecasting the future state of the economy and (c) that in an inflation forecast targeting regime, 'it is neither necessary nor desirable for monetary policy to respond to changes in asset prices, *except to the extent that they help to forecast inflationary or deflationary pressures*' (Bernanke and Gertler, 1999, p115: emphasis added by Vickers). More recently, Bean (1993) reiterates the view that since the inflation targeting central bank is not targeting asset prices, and since it is their duty to take everything relevant into account, there can be no special place for asset prices in the procedures.

But there is a literature suggesting that inflation targeting institutions should take asset prices into account by 'leaning against the wind' (Cecchetti et al,(2002) Wadhvani (2008)). Wadhvani(2008) quotes, in support of his view, a speech by the Deputy Governor of the Swedish Central Bank stating that such a policy had been followed. A recent speech by Papademos (2009) also suggests that some ECB policy makers find the idea of leaning against the wind attractive (though he insists that such a policy could not be followed mechanically).

In his recent paper, Wadhvani (2008) revisits the debate. He accepts the theoretical case made by Bean (2003) that an optimising central bank would be taking everything into account, including asset prices. Essentially the core of the argument for 'leaning against the wind' is pragmatic: that imperfect procedures, limited time horizons and 'rules of thumb' give too little weight to asset prices and asset price dynamics and that performance would be improved by 'leaning against the wind'. The purist would reply that if that were the best policy the inflation targeting institution would be doing that anyway⁹. Moreover, comparing one simplified rule, including 'leaning against the wind' with other simple rules or procedures – such as a Taylor Rule, or inflation forecast targeting based on a 2 year horizon – is, arguably, not very helpful¹⁰.

The debate will no doubt continue. But there are some obvious and well known difficulties with any formal procedure for tying the interest rate decision to asset prices in a particular way (applying a 'tilt'). A general objection is that it does appear to violate the *raison d'être*

⁹ There are two aspects to how an inflation targeting institution takes asset prices into account. The first is in terms of forecasting (or more generally, assessment). There is no disagreement that asset prices (and their dynamics) are relevant to this process. The second is concerned with the reconciliation of the trade-offs between the nominal anchor function of the system and the stabilisation function. Asset prices *per se* are not relevant to this..

¹⁰ There is, however, a perfectly respectable argument, used by Wadhvani, that simple communicable rules have great advantages and are 'good enough'. The best may then be the enemy of good.

of the institutional set up - which is to assign responsibility for managing the trade-off between the nominal anchor function of monetary policy and stabilisation to a particular institution (operating with constrained discretion). The suggestion is that discretion should be used in a particular way. Similar objections apply to suggestions that central banks should operate according to, for example, a Taylor rule. If it were as simple as that, there would not be much point in seeking an institutional solution in the first place – central banks or monetary policy committees could be replaced by an automaton, with considerable savings on costs.

The argument for institutional discretion, in this area as in others, is that not all asset price movements have the same significance - which depends on what gave rise to them and the circumstances of the economy. The dynamic processes vary a lot. It is not easy to generalise. Anyway, why confine the debate to asset prices? Why not have ‘tilts’ applying to imbalances, or to investment or other variables which display cumulative processes?

This has considered only parts of the argument for ‘leaning against the wind’. The bigger question is whether the monetary authorities should use their discretion over interest rates to head off boom/bust cycles.

Booms and busts

There is a considerable literature on the importance of booms and busts, and the implications for stability. (See for example, Bordo and Jeanne, 2002, Borio and Lowe (2002), Borio and White, (2004); Borio, English and Filardo (2003); World Bank (2003)). As noted by Wadhvani, the World Bank suggests that the average stock market bust lasts for about 2 ½ years and is associated with a 4% decline in GDP and the financial/ housing crises last about twice as long with twice the effect on GDP. Prominent among the stories that condition debate are the ‘great crash’ of the interwar period and the ending of the late 1980s bubble in Japan, which was followed by deflation and slow growth. Housing market booms and busts were a feature of the financial crises in Scandinavia in the late 1980s, and in the UK. And, of course, it is the current crisis that has brought the framework of monetary policy to the top of the economic policy agenda. The stylised facts are well known.

The key questions for monetary authorities are how they should react in the face of boom/bust scenarios and whether they should use interest rates to moderate booms and busts (including by leaning against the wind) or to make them less likely to occur. There is a further question, which I postpone for the moment, as to whether successful inflation targeting makes asset price bubbles and other boom bust phenomena more likely? Does inflation targeting contain the seeds of its own destruction?

On the first, there is no doubt that cumulative processes pose problems for decisions makers. Wadhvani (2008) suggests that inconsistencies in approach are likely to arise – citing varying approaches within the MPC to issues of this kind. Thus, overvaluation of Sterling could be used to suggest heightened inflation risk (if there were a substantial fall) and thus higher interest rates. Such a policy could risk prolonging the overvaluation. Alternatively, ‘overvaluations’ could be used to suggest lower interest rates (the leaning against the wind strategy) in order to head off the prospect of future falls. The problems with asset prices, such as housing or the stock market are similar. Should interest rates be raised to choke off the boom; or should they be lowered to counter the downward skew to inflation prospects? To

me, these dilemmas are inherent in the situation. Booms and potential busts pose real difficulties for policy-makers, especially when the size of the boom and the timing of any bust are endogenous to the interest rate decision (and to anticipated future interest rate decisions).

Not surprisingly, the difficulties in reliably identifying bubbles and other persistent departures from the fundamentals led to a degree of consensus amongst central bankers that that the risks involved in an offsetting strategy were considerable (e.g. Greenspan 2002b) and that a sensible strategy was to react aggressively when or if a 'bust' occurred. It is this consensus that is increasingly being questioned.

Suppose we think of the problem, in stripped down terms, as involving the anticipation of a large positive shock followed by a large negative shock, with the negative shock roughly balancing the positive shock – so that the negative shock is larger the larger the preceding positive shock. (Such a pattern could result, for example, from some stock flow processes, or from bubble-type phenomena). The conventional position is that the consequences would be taken into account in the forward looking procedures of the monetary authority and that the consequences for output and price instability would be minimised in terms of some loss function. That is the end of the story as far as interest rates are concerned.

Clearly, however, if there were some other policy instrument capable of lowering the first shock (and therefore the second shock as well) it is desirable that that policy should be used. The task of the monetary authorities would be eased and, short of completely successful offsets by the authority, the instability of the economy would be reduced and welfare increased. The first best response - which of course might be unrealistic or costly for other reasons – is that the sources of instability should be tackled at source, removing or attenuating the magnitude of the negatively correlated shocks themselves. There are many examples of interventions of this type that have been suggested as ways of moderating boom/bust cycles, or other persistent, but unsustainable, processes. These include regulation of various kinds or fiscal interventions, e.g. to slow house price rises.

From an inflation targeting perspective, the interesting question is what should be done in the absence of alternative policies. As second best, should interest rate policy be diverted from its normal role, not to target an asset price, but to check some cumulative process early on – in effect to lower the magnitude of the correlated shocks under discussion? The argument for so doing would be that the variances of inflation and output would thereby be reduced – perfectly consistent with standard interpretations of the loss function. But there is a trade-off involved (Bordo and Jeanne, 2002). The reduction in the shocks takes the monetary authorities closer to their objective. But the diversion of the instrument from its normal role takes them further away (effectively imposing additional variability). The benefit from the first needs to be larger than the loss from the second.

Essentially, what is going on here is that the monetary authorities are using interest rates for two different purposes. The first is to meet their inflation targeting role. The second is to alter the shock structure hitting the economy (including particularly the extent and nature of endogenously generated shocks) to make their task easier. If asset price bubbles and other cumulative and persistent processes are very adverse then policy would swing towards mitigating the shock structure. Also, the more effective interest rates are in checking

cumulative processes, the more they are likely to be used for this purpose – since the costs of diversion are smaller.

It is not surprising that much of the discussion in favour of central banks using interest rates in this way is conducted in terms of heading off bubble type phenomena. There is an easy-to-make assumption that a timely, small and temporary upward movement in interest rates would prick the bubble, with large effects on both the upward and downward shocks to the economy. This is exactly the case where the cost benefit ratio in favour of this type of policy would be greatest. Opponents, such as Nickell (xxxx) suggest (in the context of the UK housing boom) that the costs would be large. A recent empirical study by Assenmacher-Wesche and Gerlach (2008) suggests that using monetary policy to offset asset price movements would have substantial effects on activity – implying that the use of such policies within an inflation targeting framework would be costly. Others have suggested much smaller costs. So far there seems little consensus.

Clearly, within this kind of cost benefit framework, there is scope for interest rates to be used in moderating asset price and other cumulative processes. Leaning against the wind may be consistent with the inflation targeting framework as commonly understood. It is not just a case of taking asset price movements and processes into account in forecasting and assessment. There may indeed be scope to improve performance by moderating the processes themselves.

But is this ‘cost-benefit’ way of looking at the issues the right way of framing the problem. I would suggest that it is not. Going back to the institutional framework of flexible inflation targeting, it is important that the behaviour of the institution is rule-like and predictable. A policy of acting against asset price movements even if directed towards meeting the mandate, may be hard to communicate. There may be a cost to the credibility and transparency of the system to be weighed in the balance. The essential purpose of the institutional framework, to reconcile the tensions between the commitment to price stability with as much stabilisation as possible, could be threatened. Put another way, it would be a challenge to policy makers to convince the public that the system had not changed whilst policy was redirected (in part) towards asset prices and the heading off of bubble-type phenomena.

4. Further development

This section does four things. First, the question of whether the success of inflation targeting is to blame for asset price booms and busts is briefly discussed. Second, the question of whether the monetary authorities could effectively split their reaction function into two is raised. Third, I look very briefly at the credit crisis in the light of the foregoing. Finally, it is suggested that the real challenge for policy – including monetary policy – has been (and may well be again) low real interest rates, required by the global savings ‘glut’ (Bernanke, xxxx).

Does successful inflation targeting contain the seeds of its own destruction?

Borio and White (2004) give a comprehensive account of much of the history of boom bust cycles. Many of them occurred in non-inflationary circumstances. Any idea that the adoption of inflation targeting would solve all economic problems, including financial stability, is falsified by experience. The asset boom in Japan, for example, occurred without strong

inflationary consequences. This is what is to be expected. There is no obvious reason why successful inflation targeting should stop bubbles and other persistent processes. (Of course, inflation may cause financial instability, but surely for different reasons).

The more interesting question is whether successful inflation targeting facilitates or encourages asset price misalignments and bubbles. There are many reasons why it might. The principle one is that if interest rates are assigned to inflation control, they are not available to head off bubble-type phenomena. And a common argument for 'leaning against the wind' is that asset price misalignments might thereby be discouraged. (Wadhvani, 2008, for example). There is a further reason. A predictable response by an inflation targeting regime to the consequences of the bust provides insurance and lowers risk – possibly prolonging the period of misalignment – the Greenspan 'put', for example.

The obvious 'first best' response to the possibility of additional asset price instability is to address the source of the problem – to address the 'market failure' by enhanced regulation or other means. That said, low interest rates (lower than real growth rates) may be a problem not easily addressed by either the monetary authorities or by regulation.

Could the authorities develop a two part reaction function?

The possible need for the monetary authority to trade off financial stability (lower shocks) for the purity of an inflation targeting regime has been discussed above. What is really needed, however, is two different reaction functions – hence the attractiveness of the first best solution of assigning responsibility to two different institutions using two different two different instruments. The inflation targeting reaction function needs to be predictable, but it is also strategic. There is a commitment that policy will do whatever turns out to be necessary to keep inflation under control. Ideally, the authorities, it might be argued, need also a threat strategy against asset price misalignments and bubble type phenomena. With a highly credible inflation targeting institution it is not impossible to think that a mixed strategy of inflation targeting in normal times could be combined with occasional punishments to 'speculators'. Not an easy trick to carry off, perhaps – but some central banks have tried something like it in the past.

On a more practical note, Borio and White suggest that indicators of imbalance and stress are good predictors of future 'busts'. Triggers, such as leverage ratios above some reference level could be used to improve forecasting and assessment. If publicly known, such trigger points could perhaps lead to changed perceptions about likely future policy. It is not quite clear how this would work in practice.

The credit crunch and its aftermath

One way of accounting for the change in mood towards giving greater weight to asset prices is simply that the perceived cost benefit ratio has changed due to the crisis. The consequences of failing to control asset prices now seem very much worse than they did before. But to go down that route would be a mistake. The key failure has been regulatory failure – and the behaviour of the banks. Tempting as it may be to change the monetary policy regime, this is a classic case where the first best solution – to deal with regulatory failure – is the right one. The question of what institutions should ideally be in charge of regulatory policy is not discussed here. I subscribe to the conventional view that macro prudential policy must be

made anti-cyclical and that market failures within the financial sector, leading to positive feedback loops, must be addressed. (On regulatory changes, see the Geneva Report on the World Economy and, for an eclectic view on the issues, Haldane 2009),

On asset prices and the build up of imbalances, the first best response is still for a combination of regulatory and fiscal policy to take responsibility – leaving the role of the inflation targeting regime much as before.

A more tricky question concerns quantitative easing and the use of fiscal policy to support demand. In a crisis, a change in policy regime and a move to coordinated policies is to be expected. Clearly, the independence of central banks is much compromised during a crisis. Looking beyond the crisis, with quantitative easing unwound, there is little reason to change the underlying basis of inflation targeting.

International imbalances and the savings/investment balance

Finally, I turn to the question of whether central banks should have had higher interest rates during the boom – since the inflation targeting system is widely blamed for the asset price rises that occurred. Interest rates were well below growth rates – an invitation to speculation and excess.

The difficulty here is that it is hard to discern what other policies could have been followed. Higher interest rates would have tended to lead to low growth and falling inflation unless balanced by larger fiscal injections. The simple fact is that, with very high world savings (reflected in the world imbalances) interest rates may have to be dangerously low. The situation is all-too-likely to recur as the world returns to normality. There seems to be no solution to this - short of major changes in Asian savings and international rebalancing (including in China). This is the real challenge to policy makers, which goes far beyond the narrow question of whether central banks should pay more attention in their procedures to asset prices. There is a real danger that misdiagnosis of the underlying problem may lead to damaging changes in a monetary policy framework that does not need fixing.

5. Conclusion

This paper has suggested that a key virtue of the flexible inflation targeting system adopted by many countries was the assignment of the task of reconciling the complex trade off between inflation control and stabilisation to a single institution charged with managing that trade-off as well as possible. The success of that framework was not, however, the end of history, or the end of macroeconomics. There remain extremely important roles for fiscal policy (e.g. in determining the 'mix and addressing imbalances which threaten sustainability') and for regulatory policy, especially in the areas of macro-prudential regulation and in dealing with the market processes that lead to instability. The chief danger for monetary policy is that it will be asked to do too much, weakening the credibility and predictability of the inflation targeting system.

One reason for the build up of unsustainable imbalances and financial fragility is interest well below growth rates in the global economy. It would be a mistake to see low interest rates as arising from a failure of inflation targeting. The lesson instead is that global imbalances need to be addressed, which raises issues that go far beyond the design of monetary policy making institutions.

[MORE TO BE ADDED]

(Don't throw the baby out with the bath water).

References

[NOTE – SERIOUSLY INCOMPLETE IN THIS DRAFT]

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