

## **What Monetary Policy After the Crisis?**

**Philip Arestis (University of Cambridge) and Malcolm Sawyer (University of Leeds)**

**August 2009**

**Abstract:** The objective of this paper is to reflect on some of the implications of recent economic experience for the conduct of monetary and financial stability policies. It is our contention that the financial crisis and the upsurge in inflation in 2007-08 have shown that the policy model based on the new consensus in macroeconomics, which largely held sway over the past decade or more, is broken. It is argued that inflation targeting cannot deliver low inflation. We argue that fine-tuning through interest rates should not be attempted but rather a target of constant real interest rate based on the rate of growth of output should be adopted. The key objective of monetary policy should be shifted to financial stability, and the independence of central banks brought to an end and their decision-making co-ordination with other macroeconomic policy initiatives.

**JEL classifications:** E43, E52, E61, E62

**Keywords:** Interest rates, monetary policy, financial stability, independence of central banks

**Address for correspondence:**

Economics Division,  
Leeds University Business School,  
University of Leeds,  
Leeds LS2 9JT,  
UK  
Email: [mcs@lubs.leeds.ac.uk](mailto:mcs@lubs.leeds.ac.uk)

## **What Monetary Policy After the Crisis?**

### **1. Introduction**

This contribution seeks to look at the options for monetary policy after the financial crisis on the risky assumption that the crisis comes to an end in say the next two years with some revival of economic activity<sup>1</sup>. It seeks to elaborate what role monetary policy could play in leading towards full employment.

Our thesis is that even before the financial crisis monetary policy was not an effective tool to secure the objective of low inflation which had been assigned to it. The spurt in inflation during 2008 was an indication that the policy was not able to deal with cost-push inflation. Further, and more significantly, we argue in section 3 that inflation targeting in the form of variations in interest rate to meet an inflation objective was ineffectual. The argument is developed in section 4 for the end of the independence of Central Banks and that monetary policy should be co-ordinated with other macroeconomic policies. We then, in section 5, argue for an interest rate policy geared towards achieving a constant real rate of interest close to the rate of growth of the economy. This leads us to advocate that the prime objective to be pursued by monetary and financial policies (often implemented through the Central Bank) is that of monetary and financial stability; this is discussed in section 6. Section 7 offers concluding remarks.

### **2. Some reflections on recent experience and the conduct of monetary policy**

It could be argued that the economic events associated with financial and economic crisis, which became evident around August 2007<sup>2</sup> and are on-going at the present time are a very rare occurrence, perhaps once in a century<sup>3</sup>, and that policy thinking and arrangements need not be changed for the 99 years when these type of events do not occur and take emergency actions (as now) when they do occur.

The period since around August 2007 will be remembered as one of financial crisis on a global scale, and will be associated with recession, sharp rises in unemployment and falls in output which in many cases will be at least as large as any such experienced since the 1930s.<sup>4</sup> It should also be remembered as one where inflation in many industrialised countries rose to around 5 per cent, well above the level in the (formal or informal) targets set for inflation. The burst of inflation could clearly be ascribed so far as individual countries were concerned as arising from cost inflation; as the world price of oil and some foodstuffs rose rapidly. The inflation soon subsided as the world price of oil fell rapidly.

The recession and inflationary burst brought to a halt claims of an ‘end of boom and bust’ (frequently made by Gordon Brown as UK Chancellor of the Exchequer)<sup>5</sup> and the period

described by Mervyn King (2003), Governor of the Bank of England, as the 'NICE', non-inflationary continuous expansion, which in the UK could be now dated as starting in 1992 Q2 and ending as far as inflation was concerned in Spring 2008 when annual rate of inflation rose above 3 per cent and continuous expansion in 2008(Q2). King (2003) ascribed four factors behind the success of the NICE decade, 'the new monetary framework - based on an explicit target for inflation, a high degree of transparency, and, since 1997, independence of the Bank of England ...Second, a substantial fiscal consolidation turned a deficit of 8% of GDP in 1993 into sustainable position for the public finances based on a set of clear rules for government debt. Third, a continuing programme of supply-side reforms, over a period of 20 years, made it possible to reduce unemployment without generating higher inflation' and shocks in the world economy which 'alternated between good one year and bad the next' (p. 3).

Similar claims were made in the USA. In the words of Bernanke (2004), prior to becoming Governor of the Federal Reserve, 'One of the most striking features of the economic landscape over the past twenty years or so has been a substantial decline in macroeconomic volatility. In a recent article, Blanchard and Simon (2001) documented that the variability of quarterly growth in real output (as measured by its standard deviation) has declined by half since the mid-1980s, while the variability of quarterly inflation has declined by about two thirds. Several writers on the topic have dubbed this remarkable decline in the variability of both output and inflation 'the Great Moderation'. Similar declines in the volatility of output and inflation occurred at about the same time in other major industrial countries, with the recent exception of Japan, a country that has faced a distinctive set of economic problems in the past decade' (p. 1).

The claim was then made that the economy (specifically relating here to UK and USA) was less volatile (as compared with particularly the 1970s) and to varying degrees this could be ascribed to the policy regime in place, and specifically to the monetary policy regime with emphasis on the control of inflation through monetary policy operated by a more or less independent Central Bank (in terms of its operational decisions are concerned). The point to be made here is that the experiences since mid 2007 destroy any notions of a new era of a stable economy, which can be ascribed to the macroeconomic policy regimes put in place over the past two decades.

A more Minskian view of these experiences would suggest that it was the perceived stability itself, which was a (partial) generator of the financial crisis. And as Minsky (1986) puts it, 'A history of success will tend to diminish the margins of safety that business and bankers

require and will thus tend to be associated with increased investment; a history of failure will do the opposite' (p. 187). In a Minskian setting there was also features of Ponzi style finance developing in the sense that growth of mortgages and the form they took depended on the continuing rise in house prices to validate them. This line of argument suggests that financial stability may be in a sense unsustainable.

In a different vein, Goodhart (2005a) argues that '[i]f inflation, and with it interest rates, is now likely to be more stable, this enables the private sector to assume more risk, in the shape of greater leverage and driving down risk premia in asset markets. If the authorities make the conjuncture safer, the private sector is bound to undo some part of that to restore their desired risk/return equilibrium. It is this kind of analysis that lies behind the argument that greater stability of goods and services prices will generate potentially greater instability in asset prices, and whether—and, if so, how—a central bank could and should deal with the latter' (p. 300).

It is also the case that the approach to macroeconomic policy itself was based on the presumed essential stability of the economy. The 'new consensus macroeconomics' (NCM) could be said to underpin the dominant approach to macroeconomic policy (monetary policy directed to inflation, downplaying of fiscal policy to that of at most automatic stabiliser), or at least that the 'new consensus' was formulated (e.g. in Mayer, 2001) as a reflection (justification?) for the prevailing policy orthodoxy. The thrust of that 'new consensus' approach (for critique see Arestis and Sawyer, 2008a, Sawyer, 2008) is based on far-sighted optimising individuals interacting through competitive markets where there is an equilibrium rate of interest ('the natural rate of interest') at which the rate of inflation will be constant and output at the capacity output level (and implicitly full employment of labour). The 'new consensus' model carries with it no hint of instabilities, recessions etc., and the only mechanism, which could generate instability would be a misbehaving Central Bank that sets the wrong interest rate (or an interfering government which was tempted to run unsustainable budget deficits). The invocation of Taylor's rule (whereby the setting of interest rate depends on the deviation of inflation from target and the size of the output gap) ensures that the Central Bank acts in a stabilising rather than destabilising manner. But in this context, a misbehaving Central Bank would be one which followed rules other than something along the lines of Taylor's rule and/or which did not have accurate information on the 'natural rate' of interest (or that such a rate does not exist).

The NCM framework, widely accepted not only in the academic sphere but also by policy makers (see, for example, Bank of England, 2005), underpins Central Bank independence and

the inflation targeting policy implication. But the NCM is based notoriously on an absence of banks (as often remarked, banks are not mentioned in the index of Woodford, 2003). Yet it is banks, which transmit changes in policy interest rate through to lending and borrowing interest rates, and more significantly it is banks which create credit bubbles. The NCM has also virtually eliminated by diktat any role for fiscal policy, and relies on monetary policy to ensure the economy operates close to the supply-side equilibrium. Any hint on instability, such as that which could come from the cumulative causation processes analysed by Wicksell (1898), is notable by its absence.

In macroeconomic policy debates most of the focus of attention had been on monetary policy (and specifically monetary policy with the single policy instrument geared towards the objective of low inflation), and little attention was paid to fiscal policy. This is sharply reflected in the NCM in which fiscal policy is notable by its absence in the conventional representation of that approach. The (policy) rate of interest is in effect given two roles within that framework. First, variations in the rate of interest are viewed as having effects on the level of economic activity in the short run, which in turn influences the rate of inflation in the long run; no impact of the change in the rate of interest on output prevails in the long run. Second, the rate of interest on average would (in real terms) be equal to an equilibrium rate of interest ('natural rate of interest'), which is consistent with an equilibrium rate of economic activity (often represented as a zero output gap) as well as a constant rate of inflation this being the targeted inflation rate by the central bank.

In light of this brief review of recent experience and its relationship with the dominant approach to monetary policy, we now discuss how that policy regime is effectively broken and what should replace it.

### **3. The end of inflation targeting?**

Until recently, many would have claimed that inflation targeting had been able to provide a nominal anchor for the economy. After a number of other policies designed to provide nominal stability – notably control of the money supply, fixed exchange rates – had largely failed, inflation targeting appeared to have delivered. The experience of 2008 with inflation rising well above the target levels should raise considerable question marks against inflation targeting as it proved impotent in the face of cost-push inflation. At present, inflation targeting (an independent Central Bank with the objective of achieving a stated target rate, or band, of inflation using the policy interest rate as the instrument) remains nominally in place. Although whether decisions made by Central Banks during 2008 and 2009 (or even before)

could be said to be made independently of central government or directed towards inflation is rather doubtful.

We have cast doubt in previous writings on inflation targeting along five lines (see, for example, Arestis and Sawyer, 2008b). First, the difference in inflation performance between inflation targeting and non-inflation targeting countries appears small in a general environment where inflation had been declining, and that inflation targeting was often introduced after inflation had been reduced (see, also, Angeriz and Arestis, 2007a, 2007b, 2008, 2009). Roger Ferguson, then Vice Chairman of the Board of Governors of the Federal Reserve System argues that ‘Unfortunately, the empirical evidence for industrial countries available to date generally appears insufficient to assess the success of the inflation-targeting approach with confidence. For example, it is unclear whether the announcement of quantitative inflation targets lessens the short-run trade-off between employment and inflation and whether it helps anchor inflation expectations. In addition, some research, controlling for other factors, fails to isolate the benefits of an inflation target with respect to the level of inflation or its volatility over time, and output does not seem to fluctuate more stably around its potential for countries that have adopted numerical targets’ (Ferguson, 2005, p. 297). A similar conclusion is reached by Dueker and Fischer (2006) when they conclude that ‘on the heels of a decade of low global inflation, it has been hard to argue that formal inflation targets have led to any divergence between targeters and non-targeters in terms of inflation performance.’ (p. 448)<sup>6</sup>

Second, variations in the rate of interest appear to have little effect on the rate of inflation (though rather more on the level of output). The evidence on this is typically obtained from econometric estimation results undertaken within Central Banks or by those closely associated with them. A 1 per cent hike in policy interest rate leads to a significant drop in output but reduction in inflation of the order of 0.1 to 0.2 per cent (Arestis and Sawyer, 2004, 2006). Goodhart (2005b) drawing on his experience on the Monetary Policy Committee and the work done within the Bank of England commented that ‘unless the shocks hitting the system were really quite small, the extent of policy-induced demand management, even if perfectly calibrated, could not be responsible for the achievement of the stability and successful growth that we have enjoyed’ (p. 169). A number of words of caution: the interest rate change is applied for a year, but this may be because the nature of the model is such that a departure from the equilibrium interest rate within the model would eventually cause the model to explode. And second, inflation in these models is tied down by expectations, and with assumption of some form of forward-looking ‘rational expectations’ and that the

inflation target is met. This does though point to the notion that the success or otherwise of monetary policy with respect to inflation comes not from variations in the policy rate of interest but through generation of low inflationary expectations; and specifically that expectations are 'locked down' even in the face of changes in actual inflation.

Third, there is the attempt at a form of ultra fine tuning in the sense that Central Banks (such as Federal Reserve, Bank of England, European Central Bank) make decisions on the policy rate of interest on a frequent basis (for example monthly) which are seeking to target inflation up to two years ahead. It is implicitly assumed that relatively small changes in the perception of inflation can bring forth small changes in the policy instrument, and that issues of instability through lags in the system can be ignored.

Fourth, there is lack of strong theoretical link running from interest rate to economic activity to inflation. The argument is that a change in the nominal rate of interest would change the real rate of interest in view of price and wage rigidities. The change in the real rate of interest would influence the output gap, which in its turn would influence the inflation rate (for which the empirical evidence as cited above is weak). To the extent that the Central Bank is credible, expectations of inflation would also change, so that the change in the nominal rate of interest would hit the target inflation rate set by the Central Bank. The Phillips' curve is assumed vertical in the long run so that a change in the rate of interest could only affect inflation.<sup>7</sup> No impact of the rate of interest on real economic variables is evident in the long run (see, for example, on all this Woodford, 2003). Sawyer (2009) examines a number of the proposed links. The essence of the argument is that the interest rate and the level of economic activity are in *levels* whereas inflation is a *rate of change* (of prices). It is more usual in economics to relate levels with levels, and specifically the rate of interest with the level of prices (as initially postulated by Wicksell, 1898), and the level of demand (or level of economic activity) with the level of prices. For example, theories of price behaviour by firms focus on the determination of the price-cost margin, and that margin and costs themselves may vary with the level of demand (but not with the rate of change of demand).

A higher level of demand may lead to higher prices, but that does not mean higher inflation, that is persistent rise in prices. There are two situations where this could lead to inflation. First, in the period when higher price occur there is inflation, and if expectations of inflation jump in line with the experience of inflation, then the initially higher price could set out inflation (in the sense of persistent rise in prices). Second, wages (or similar) also come into the picture and if higher output and employment means higher prices and higher wages, the intended increase in at least one of price/wage or wage/price cannot occur. In effect a wage-

price is set off. It can, therefore, be disputed whether monetary policy is an effective means to control inflation – with the exception of the argument that having a central bank with an inflation mandate somehow convinces people that inflation will be low and so it is.

Fifth, as argued in Arestis (2009), there is a serious problem with the long-run real ‘natural’ rate of interest, assumed to be known by the Central Bank; and yet even if such a notion exists it is not known with any degree of certainty. This raises the potentially serious problem that the Central Bank might be making mistakes in setting the rate of interest to hit the set inflation target. The discrepancy between actual and the equilibrium rate of interest has been termed the real interest rate gap and can be used to evaluate the stance of monetary policy. It is thereby a useful theoretical concept in the analysis of the relationship between the independence of monetary policy and economic fluctuations. But it is highly uncertain in terms of what it might be as Weber et al. (2008) have demonstrated.

#### **4. The end of independence of central banks**

There has, of course, been a worldwide move over the past two decades towards the adoption of an ‘independent’ Central Bank generally with the objective of achieving (or maintaining) low inflation. Ever since Kydland and Prescott (1977) and Barro and Gordon (1983), where the notion of time-inconsistent behaviour and the inflation bias syndrome are introduced, there has been a sustained trend towards Central Bank Independence (CBI) in the world economy. The arguments for a Central Bank with operational independence (specifically from politicians) were based on two interconnected propositions. First, that the single instrument (interest rate) affecting the single objective (inflation) was a viable one. This in turn rested on the Phillips curve type approach in that interest rate could influence the rate of inflation and that there is an equilibrium rate of interest, which is simultaneously compatible with constant inflation and with supply-side equilibrium (expressed in the form of either the ‘natural’ rate of unemployment or a zero output gap). The achievement of a constant rate of inflation would secure the achievement of supply-side equilibrium (which was assumed to be uninfluenced by the path of aggregate demand and to have some desirable properties). The ability of the equilibrium rate of interest, along with market flexibility, especially flexibility in the labour market, to secure the supply-side equilibrium was in effect sufficient to rule out any requirement for active fiscal policy.

Second, the short-run Phillips’ curve suggests that lower unemployment (higher output) comes with a higher rate of inflation, and that elected politicians at times will be tempted to boost demand with its benefits of lower unemployment and higher output at the cost of higher inflation. Central Bankers are then viewed as uniquely able to influence the level of demand

without falling to the temptation to raise demand at inappropriate times, to be more committed to low inflation and to avoid the problems of time inconsistency. The notion that the Central Bank has, or can acquire, credibility in terms of its commitment to the control of inflation, and that it is the Central Bank alone (the ‘conservative’ central bankers argument) that has this creditability with respect to the control of inflation are central themes in the central bank theoretical framework.

The course of interest rates, particularly in the USA, gives reason to think that Central Bankers may not always act in this ‘conservative’ manner. Taylor (2008), for example, claims to have been able to provide empirical evidence ‘that government actions and interventions caused, prolonged, and worsened the financial crisis. They caused it by deviating from historical precedents and principles for setting interest rates, which had worked well for 20 years’ (p. 18). This could suggest that the bankers were not ‘conservative’, at least as judged against Taylor’s rule. In this context such a judgement may be warranted in that an operational rule akin to Taylor’s rule would be needed to ensure the stability of the economy in terms of the NCM model.

The operational ‘independence’ of a Central Bank in any serious sense would preclude co-operation between the Central Bank and other public authorities. In a one instrument—one objective framework (bearing in mind the first point above, namely that constant inflation and the supply-side equilibrium are in effect two sides of the same coin) this could be acceptable. But once it is demonstrated, as shown in the previous section, that the impact of the rate of interest is not quite as robust as the proponents argue and consequently that the interest rate tool is not adequate to achieve the objective so that more tools are required, and that (at least intermediate) objectives such as the exchange rate and the level of and growth of output are on the agenda, then doubt must be cast on the independence of central banks in the Kydland and Prescott (1977) tradition. It can be argued that (as to some degree illustrated by the present crisis) there are ‘get out’ clauses, which enable co-ordination in times of crisis. But the argument would be that the institutional arrangements for co-ordination need to be in place, and further that the co-ordination is required at all times, not just in times of crisis.

There is also the question of the empirical evidence on CBI. Cornwall and Cornwall (1998) were very clear on the issue. They argued then that ‘Considering each foundation stone of the greater CBI argument, closer analysis fails to reveal convincing evidence to support the case for increased CBI. The econometric results offered by its advocates cannot withstand even the most elementary scrutiny, the theoretical models are based on implausible and internally inconsistent assumptions and the historical record gives little support for either the theoretical

base or for some key tenets of the neoclassical counterrevolution that we identified as the temper of the times' (p. 63). Forder (1998a) is also sceptical of the robustness of the CBI relationship (see, also, Forder, 1998b, in the case of the independence of the European Central Bank). Those sceptical arguments were summarized in Forder (2003), "The advocates of independence face three challenges: to advance a theoretical account of the benefits of independence; to provide evidence supporting it; and to make a persuasive argument that any restrictions on democratic decision-making are a price worth paying" (p. 41). In terms of the evidence it is questionable in this view whether CBI reduces inflation or produces other benefits. More recently Angeriz et al. (2008) reach similar conclusions. The results obtained therein suggest that CBI implementation has not been especially effective at the point of intervention. Also that CBI introduction has not produced a significant change in inflation persistence and volatility in most of the cases examined, developed and developing countries where CBI has been introduced.

## **5. Setting the policy interest rate**

Under the current monetary policy regimes, the attempt has been made to fine-tune the rate of inflation through frequent decisions on the policy rate of interest. In the previous section we have cast doubt on the effectiveness of that policy with regard to inflation. The changes in the policy interest rate have implementation costs. But the most significant argument here is that the policy interest rate will have effects on a range of variables, notably the exchange rate and asset prices. Indeed those variables are viewed as part of the channels through which changes in the policy rate of interest is supposed to influence the level of demand and thereby the rate of inflation (see, for example, BEQB, 2004). There are questions of the strength and reliability of those channels, but the point here is that there can be effects, and some of them may be adverse. For example, Goodhart (2005a) argues that a focus on domestic variables only in interest rate determination may provide 'a combination of internal price stability and exchange rate instability' (p. 301). In recent times, an important aspect of this can be the influence of low interest rates on asset prices, and whether the stimulus to asset price rises coming from low interest rates can be the spark setting off a price bubble. The argument of Wicksell (1898), and more recently by others (see, for example, Arestis and Karakitsos, 2009), could be seen as one that suggests interest rate policy has an effect on asset price inflation – or at least some sub-set of asset prices; asset prices develop a speculative element (meaning here purchase of asset to benefit from expected rise in price, rather than for income stream from asset); it is obvious to say that asset price bubbles have developed – dot.com,

house prices, etc. Current monetary policy arrangements are powerless to deal with those bubbles.

One of the curiosities of the present approach to monetary policy is that attention was focused on 25 basis point variations in the interest rate on a monthly basis, and little attention is paid to what in the NCM is the key, namely the average/equilibrium/ 'natural' rate of interest. There is virtually no discussion on whether this 'equilibrium' rate of interest is attained, yet it plays a key role in the NCM. There may be attempts to estimate 'natural rate' but those are little more than the average of what has been actually observed. There have been several attempts to estimate the natural rate or real equilibrium rate of interest but these have been marred by serious problems – see, for example, Weber et al. (2008) for a summary of the problems; see, also, Arestis and Chortareas, 2006, for an attempt at estimating this rate). Yet a number of arguments point to the average rate of interest being around the rate of growth. In Taylor's original formulation of the rule for setting the rate of interest, 'the 2-percent "equilibrium" real rate is close to the assumed steady-state growth rate of 2.2 percent' (Taylor, 1993, p. 202). The rule of 'rate of interest equal to the rate of growth' can be linked with other considerations. The 'golden rule of capital accumulation' in the framework of a neo-classical model with the marginal productivity of capital equal to the rate of interest generates such an outcome. Another is the 'fair rate of interest' (Pasinetti, 1981), which 'in real terms should be equal to the rate of increase in the productivity of the total amount of labor that is required, directly or indirectly, to produce consumption goods and to increase productive capacity' (Lavoie and Seccareccia, 1999, p. 544).

Smithin (2007) considers four alternative guidelines for monetary policy, namely '(1) stabilizing the real policy rate at a "low" level, (2) pegging the nominal policy rate, (3) employing a standard monetary policy reaction function (entailing *raising* real rates whenever inflation rises above some target level), and (4) invoking the notion of a "fair" rate of interest, which would imply real interest rate increases in response to improvements in productivity growth'. He argues that 'stabilizing the real policy rate at some low level, represents the best "rule of thumb" for the conduct of monetary policy. It is consistent with the Keynesian advocacy of "cheap money" ... as a means of promoting growth, prosperity, and full employment. Moreover, although it does not eliminate inflation, it will not lead to inflationary instability' (p. 115).

We concur with Smithin over the target of a constant real (policy) rate of interest and here advocate that rate would be in line with the rate of growth – in effect our interpretation of 'low' policy rate is the 'fair' rate. We differ from him in that we envisage that changes in the

nominal rate of interest to maintain the target real rate in the face of changing inflation could be undertaken less frequently than the current arrangements (as otherwise since any measure of inflation changes every month, albeit usually by a small amount, the policy rate would be changed every month).

The setting of the interest rate has some clear and obvious implications for the operation of fiscal policy. The sustainability of a budget deficit depends on the level of interest rates (and specifically the post-tax rate of interest on government bonds, labelled  $r$ . If  $r < g$ , then any primary budget deficit of  $d$  (relative to GDP) would lead to an eventual debt ratio (to GDP) of  $b = d/(g - r)$  (either both of  $g$  and  $r$  in real terms or both in nominal terms). If  $r > g$  then a primary budget deficit would lead to growing debt ratio. In a similar vein, a continuing total budget deficit of  $d$  (including interest payments) leads to a debt to GDP ratio stabilising at  $d'/g$  where here  $g$  is in nominal terms. This implies that  $b + rd = gd$ , i.e.  $b = (g - r)d$  and hence if  $g$  is less than  $r$  the primary budget deficit is negative (i.e. primary budget is in surplus). The case where  $g = r$  is of particular interest. Pasinetti (1997, p. 163) remarks that this case 'represents the 'golden rule' of capital accumulation. ... In this case, the public budget can be permanently in deficit and the public debt can thereby increase indefinitely, but national income increases at the same rate ( $g$ ) so that the  $D/Y$  ratio remains constant. Another way of looking at this case is to say that the government budget has a deficit, which is wholly due to interest payments' (p. 163).

The simplest way to implement such a policy would be to set the nominal policy interest rate at the beginning of the year, taking into account the expected rate of inflation for the coming year (with perhaps some adjustment based on difference between actual and expected inflation in the preceding year). Outside of crisis (and perhaps even then) the nominal policy interest rate would be maintained for the year, with avoidance of costs of further decision-making and implementation of interest rate changes. In some respects this could be seen as the equivalent of Friedman's constant growth of money supply rule to avoid problems of fine-tuning, but applied to the rate of interest!

There are some issues with such a policy approach to be resolved. The arguments for a constant real rate equal to the rate of growth relate to some market rate of interest, which is not equal to the policy rate, and which may bear a varying relationship with the policy rate. There can be international complications in so far as domestic interest rate relative to interest rates elsewhere can have implications for the exchange rate. This is neither to suggest some simple uncovered interest rate parity idea nor to suggest that the effects of interest rate differentials on exchange rate are firm and predictable.

We put forward two lines of argument here. First, to argue that the view against fine tuning apply to the setting of interest rates, and that such fine tuning should be foregone and rather the nominal rate of interest should be set to achieve a constant target real rate of interest. Second, there are a number of arguments to support the view that the target real rate of interest should be close to the underlying rate of growth of the economy.

## **6. The objectives of monetary policy and financial stability**

The argument made here is that financial stability, rather than inflation targeting, should become the central objective of the Central Bank (with the interest rate set as indicated in the previous section). Buiter (2008) indicates that ‘financial stability means (1) the absence of asset price bubbles; (2) the absence of illiquidity of financial institutions and financial markets that may threaten systemic stability; (3) the absence of insolvency of financial institutions that may threaten systemic stability’ (p. 10). It can be noted that the recent Banking Act 2009<sup>8</sup> in the UK establishes that ‘an objective of the Bank [of England] shall be to contribute to protecting and enhancing the stability of the financial systems of the United Kingdom (the “Financial Stability Objective”)', with the Bank working with other bodies such as the Treasury and the Financial and the establishing of a Financial Stability Committee. At present this is placed along side the monetary stability objective under the heading of inflation targeting. This could be seen a significant step away from the operational independence of the Bank of England and from the single inflationary objective. Our argument here is that the financial stability objective should be the prime objective and the operational independence of the Bank of England ended.

Current events and the general record on financial crises (see, Laeven and Valencia, 2008, for details of crises over the past three decades and their costs) indicate the substantial costs associated with a lack of financial stability (which would far out weigh any costs associated with inflation). In terms of the general multiple instruments—multiple objectives framework it may not be possible to uniquely assign each instrument to a specific objective. Nevertheless, it may be possible to link an instrument mainly with a specific objective, recognising that co-ordination in the use of instruments can be advantageous. In this context, the argument is that the main link should be monetary policy – monetary and financial stability. However, we have argued above for the policy of seeking to target a specified real rate of interest and to seek to maintain a constant rate of interest. A policy of a constant real rate of interest may have some beneficial effects on financial stability in that continuously changing interest rates can have effects of asset prices, and specifically lowering interest rates can be seen to inflate asset prices with the possibility of setting off an asset price bubble

which at some point will burst. Further, as recent experience suggests, asset price inflation may be inimical to financial stability given the interrelationships between asset price inflation and credit expansion.

One approach to financial stability was expressed by Greenspan (2002) when considering how to respond to asset price bubbles. He argued that ‘the degree of monetary tightening that would be required to contain or offset a bubble of any substantial dimension appears to be so great as to risk an unacceptable amount of collateral damage to the wider economy’ (p. 4). But further his general attitude was that policy should be directed towards cleaning up after a crisis rather than seeking to prevent a crisis. ‘Faced with this uncertainty, the Federal Reserve has focused on policies that would, as I testified before the Congress in 1999<sup>9</sup>, “...mitigate the fallout [of an asset bubble] when it occurs and, hopefully, ease the transition to the next expansion”’. The costs (in terms of lost output, unemployment and fiscal costs) as well as the sheer difficulties of propping up the financial system following the financial collapse indicate that this approach should not be one to be applied in the future.

The argument here is made more relevant by Goodhart (2007), who suggests that ‘[i]n so far, therefore, as the central bank has a prime concern for systemic financial stability, it should want to promote a program of counter-cyclical prudential regulations, where these latter become restrictive during asset price bubbles and relax during asset price downturns. Unfortunately the system of financial regulation is developing in a manner which will have exactly the reverse proclivity. Under the Basel II accord for financial regulation this will become more pro-cyclical’ (p. 68). Goodhart (op. cit.) goes on to point out problems with national adoption of standards different from Basel II.

There are already in place a variety of regulatory policies, which are intended to develop financial stability, but it could be said that these are often focused on the stability and viability (or otherwise) of individual banking institutions rather than on systemic factors. As D’Arista (2009) argues in the context of the use of capital requirements, ‘As a strategy for ensuring that market forces rather than regulations and quantity controls would determine the volume of bank lending, capital requirements became the rationale for – and poster child of – deregulation. But they have subsequently been seen as its Achilles heel because of their focus on the individual institution rather than the system as a whole. William R. White describes this “fallacy of composition” as one that can exacerbate a system-wide problem when recommendations for a sale of assets by one institution in a stressful situation could reduce prices and the value of remaining assets, leaving other institutions weaker (White 2007, p. 83)’ (p. 10).

The argument here relies on the removal of inflation targeting as the main stabilization instrument and instead worry about unemployment and other macroeconomic goals. It also emphasises the following aspects:

(i) monetary and financial stability should be adopted as an objective of macroeconomic policy. This is argued in part on the basis of the relative frequency of financial instability and the significant costs associated with financial crisis.

(ii) the objective relates to the whole of the financial system and not, as has generally been the case, to the banking system. It is now generally recognised that the financial system has evolved and changed such that the banking system has become a (relatively) smaller part of the overall financial system. The key point here is to bring to the forefront a form of monetary and financial policy, which is focused on financial stability. The key elements of such a policy would be tools to influence and control the activities of financial firms as they bear on the issue of financial stability. This firstly suggests that such a policy, financial regulation, has to be comprehensive in its coverage, and this applies to the range of financial institutions, which are covered and also to its international coverage. It may further suggest that the policy would need to act in a counter-cyclical manner and to be potentially differentiated. This points away from the capital adequacy ratios of the Basle II system in light of its pro-cyclical nature of operation and the way in which the required capital depends on risk assessment. In contrast an asset based reserve requirement (see, for example, D'Arista, 2009, Palley, 2004 for proposals) system has counter-cyclical features and can apply differential reserve requirements against different classes of assets.

There is an element here of what could be seen as the end of monetary policy, and its replacement by (or incorporation into) financial stability policy. The term monetary policy suggests that it concerns money and involves banks since they are those financial institutions whose liabilities are regarded as part of the stock of money. Monetary policy in the simple IS-LM type framework is viewed in terms of the (policy) rate of interest and the stock of money and the notion that Central Bank could set one of the variables and then had to accept the consequential value of the other variable. In the endogenous money framework the Central Bank sets the policy interest rate as the terms on which it will supply reserves (monetary base). One of the key roles of the Central Bank has been viewed as the lender of last resort, which would involve supplying liquidity to the banking system as and when required. With an objective of financial stability, the Central Bank would become more like a Central Financial Agency (CFA). It would be responsible for policies, which seek to influence the credit and lending policies of the full range of financial institutions by, for

example, targeting private sector net wealth as one of us has argued in Arestis and Karakitsos (2009).

## **7. Concluding remarks**

It is our contention that the financial crisis and the upsurge in inflation in 2007-08 has shown that the policy model based on the new consensus in macroeconomics which largely held sway over the past decade or more is broken. It is argued that inflation targeting cannot deliver low inflation. We have argued that fine-tuning through interest rates should not be attempted but rather a target of constant real interest rate based on the rate of growth should be adopted. The key objective of monetary policy should be shifted to financial stability, and the independence of Central banks brought to an end and their decision-making co-ordinated with other macroeconomic decision-making.

## **Endnotes**

<sup>1</sup> We examine the role of fiscal policy in a similar context in a separate paper (Arestis and Sawyer, 2010a), and more extensive discussion of macroeconomic policy in Arestis and Sawyer (2010b).

<sup>2</sup> Signals such as the sharp rise in the LIBOR and the difficulties of Northern Rock and the first run on a UK bank in over a century can be dated to August 2007 though there could be said to have been some early signs.

<sup>3</sup> Greenspan (2008), speaking in October 2008, stated that ‘We are in the midst of a once-in-a-century credit tsunami’.

<sup>4</sup> In the case of the UK, the current forecasts for GDP in 2009 would indicate the largest year on year fall since around 1930 and it is not possible to recall a financial crisis in terms of run on banks, partial nationalisation to avoid collapse on the current scale.

<sup>5</sup> For example, ‘That is why since 1997 we have rejected short-termist free for alls - the take-what-you-can irresponsibility - and have put faith in our values of economic responsibility, building from solid foundations and looking to the long term. With Bank of England independence, tough decisions on inflation, new fiscal rules, and hard public spending controls, we today in our country have economic stability not boom and bust, the lowest inflation in Europe, and long term interest rates - essential for businesses planning to borrow and invest - lower than for thirty five years.’ There will be no return to the short-term lurches

in policy that would put long-term stability at risk. No relaxing our fiscal disciplines as some would like.’ (Brown, 2002).

<sup>6</sup> See also Ball and Sheridan (2005), Lavoie and Seccareccia (2010)

<sup>7</sup> John Cornwall in contrast viewed those arguing for independent Central Banks were ‘arguing for stronger anti-inflation policies and therefore, in effect, for greater unemployment, while either ignoring the real costs of their policies or maintaining there are none.’

<sup>8</sup> Available on: [http://www.opsi.gov.uk/acts/acts2009/ukpga\\_20090001\\_en\\_1](http://www.opsi.gov.uk/acts/acts2009/ukpga_20090001_en_1)

<sup>9</sup> Committee on Banking and Financial Services, U.S. House of Representatives, July 22, 1999.

## References

- Angeriz, A. and Arestis, P. (2007a) Monetary Policy in the UK, *Cambridge Journal of Economics*, 31(6), pp. 863-884.
- Angeriz, A. and Arestis, P. (2007b) Assessing the Performance of Inflation Targeting Lite Countries, *World Economy*, 30(11), pp. 1-25.
- Angeriz, A. and Arestis, P. (2008) Assessing Inflation Targeting Through Intervention Analysis, *Oxford Economic Papers*, 60(2), pp. 293-317.
- Angeriz, A. and Arestis, P. (2009) UK Monetary Policy in Relation to the ECB and the Fed: An Assessment, *mimeo*, Cambridge Centre for Economic and Public Policy, University of Cambridge.
- Angeriz, A., Arestis, P. and McCombie, J. (2008) Does Central Bank Independence Affect Inflation Persistence and Volatility?, *CCEPP Working Paper*, Cambridge Centre for Economic and Public Policy, Department of Land Economy, University of Cambridge.
- Arestis, P and Sawyer, M. (2006) Interest rates and the real economy in C. Gnos and L-P Rochon (eds) *Post-Keynesian Principles of Economic Policy* (Aldershot, Edward Elgar), pp.3-20.
- Arestis, P. (2009) New Consensus Macroeconomics: A Critical Appraisal, Working Paper, Cambridge Centre for Economic and Public Policy, University of Cambridge
- Arestis, P. and Chortareas, G. (2008) Atheoretical and Theory-Based Approaches to the Natural Equilibrium Real Interest Rate, *Eastern Economic Journal*, 34(3), 390-405.
- Arestis, P. and Karakitsos, E. (2009) Subprime Mortgage Market and Current Financial Crisis, in P. Arestis, P. Mooslechner and K. Wagner (eds.) *Housing Market Challenges in Europe and the United States - Any Solutions Available?* (Basingstoke, Palgrave Macmillan).
- Arestis, P. and Sawyer, M. (2004) Can monetary policy affect the real economy?, *European Review of Economics and Finance*, 3(3), pp. 9-32.
- Arestis, P. and Sawyer, M. (2006) Fiscal policy matters, *Public Finance*, 54, pp.133-153.
- Arestis, P. and Sawyer, M. (2008a) A critical reconsideration of the foundations of monetary policy in the new consensus macroeconomics framework, *Cambridge Journal of Economics*, 2008, 32 (5) 761–779.
- Arestis, P. and Sawyer, M. (2008b) New consensus macroeconomics and inflation targeting: Keynesian critique, *Economia e Sociedade*, Campinas, 17, Número especial, pp.629-654.

- Arestis, P. and Sawyer, M. (2008c) The intertemporal budget constraint and the sustainability of budget deficits in J. Creel and M. Sawyer (eds.) *Current Thinking on Fiscal Policy* (Basingstoke, Palgrave Macmillan).
- Arestis, P. and Sawyer, M. (2010a) The return of fiscal policy, *Journal of Post Keynesian Economics*, forthcoming
- Arestis, P. and Sawyer, M. (2010b) 21<sup>st</sup> Century Keynesian Economic Policies, *International Papers in Political Economy*, (Basingstoke, Palgrave Macmillan).
- Ball, Laurence, and Niamh Sheridan (2005) Does Inflation Targeting Matter?, in Ben S. Bernanke and Michael Woodford (eds) *The Inflation-Targeting Debate*, Chicago: University of Chicago Press, pp. 249-82.
- Bank of England Quarterly Bulletin* (BEQB) (2004) The New Bank of England Quarterly Model, 44(2) 188-193.
- Bank of England (2005) *The Bank of England Quarterly Model*, London: Bank of England.
- Barro, R.J. and Gordon, D. (1983) Rules, Discretion and Reputation in a Positive Model of Monetary Policy, *Journal of Monetary Economics*, 12(1) 101-121.
- Bernanke, B.S. (2004) The great moderation, Speech at meeting of Eastern Economic Association, Washington, DC, February 20, 2004, <http://www.federalreserve.gov/BOARDDOCS/SPEECHES/2004/20040220/default.htm>
- Bernanke, B.S. (2009) The economic outlook, Statement Before the Joint Economic Committee, U.S. Congress, Washington, D.C., May 5, 2009
- Brown, G. (2002) Speech by the Chancellor of the Exchequer at the TGWU Conference - manufacturing matters, 28 March 2002; [http://www.hm-treasury.gov.uk/speech\\_chex\\_280302.htm](http://www.hm-treasury.gov.uk/speech_chex_280302.htm).
- Buiter, W.H. (2008) Central Banks and Financial Crises, Paper presented at the Federal Reserve Bank of Kansas City Symposium on Maintaining Stability in a Changing Financial System, Jackson Hole, Wyoming, August 2008.
- Cornwall, J. and Cornwall, W. (1998) Unemployment costs of inflation targeting in P. Arestis and M. C. Sawyer (eds.) *The Political Economy of Central Banking* (Cheltenham, Edward Elgar Publishing Limited), pp. 49-66.
- DARista, Jane (2009) Setting an Agenda for Monetary Reform, Political Economy Research Institute, University of Massachusetts, Amherst, *Working Paper series*, Number 190.

- Dueker, Michael J., and Andreas M. Fischer (2006) Do Inflation Targeters Outperform Non-Targeters?, *Federal Reserve Bank of St. Louis Review*, 88(5), pp. 431-50.
- Ferguson, R. W. (2005) Safeguarding good policy practice in Reflections on Monetary Policy 25 Years after October 1979, *Federal Reserve Bank of St. Louis Review*, 87(2, Part 2) pp. 293-98.
- Forder, J. (1998a) Central Bank Independence: Conceptual Clarifications and Interim Assessment, *Oxford Economic Papers*, 50(3) 307-334.
- Forder, J. (1998b) The Case for an Independent Central Bank: A Reassessment of Evidence and Sources, *European Journal of Political Economy*, 14(1) 53-71.
- Forder, J. (2003) Central Bank Independence: Economic Theory, Evidence and Political Legitimacy, *International Papers in Political Economy*, 10(2) 1-53.
- Goodhart, C.A.E. (2005a) Safeguarding good policy practice in Reflections on Monetary Policy 25 Years after October 1979, *Federal Reserve Bank of St Louis Review*, March/April 2005, 87(2, Part 2) pp. 298-302.
- Goodhart, C.A.E. (2005b) The experience of inflation targeting since 1993 in P. Arestis, M. Baddeley and J. McCombie, *The New Monetary Policy* (Cheltenham, Edward Elgar).
- Goodhart, C.A.E. (2007) The Future of Central Banking, in P. Arestis (ed.) *Is There a New Consensus in Macroeconomics?*, pp. 61-81, (Basingstoke, Palgrave Macmillan).
- Greenspan, A. (2002) Opening remarks in *Rethinking Stabilization Policy*, Kansas: Federal Reserve Bank of Kansas City, pp. 1-10.
- Greenspan, A. (2008) Testimony of Dr. Alan Greenspan, Committee of Government Oversight and Reform, October 23, 2008 (available at <http://oversight.house.gov/documents/20081023100438.pdf>).
- King, M. (2003) Speech given at East Midlands Development Agency/Bank of England dinner, Leicester, Tuesday 14 October 2003, available at <http://www.bankofengland.co.uk/publications/speeches/2003/speech204.pdf>
- King, M. (2009) Opening Remarks, Inflation Report Press Conference, 13 May, 2009, available at <http://www.bankofengland.co.uk/publications/inflationreport/irlatest.htm>
- Kydland, F.W. and Prescott, E.C. (1977) Rules Rather than Discretion: The Inconsistency of Optimal Plans, *Journal of Political Economy*, 85(3) 473-491.
- Laeven, L. and Valencia, F. (2008) Systemic Banking Crises: A New Database, *IMF Working Paper* WP/2008/0224.
- Lavoie, M. and Seccareccia, M. (1999) Interest rate – fair in P.A. OHara (ed.) *Encyclopedia of Political Economy* (London, Routledge), pp. 543-545.

- Mario Seccareccia and Marc Lavoie (2010) Inflation Targeting in Canada: Myth versus Reality in G. Fontana, J. McCombie, M. Sawyer (eds) *Macroeconomics, finance and money: Essays in honour of Philip Arestis* (Basingstoke: Palgrave Macmillan), forthcoming
- Minsky, H. P. (1986). *Stabilizing an Unstable Economy* (New Haven, Yale University Press).
- Pasinetti, L. (1981) *Structural Change and Economic Growth* (Cambridge, Cambridge University Press).
- Pasinetti, L. (1997) The social burden of high interest rates in P, Arestis, G. Palma and M. Sawyer (eds.) *Capital Controversy, Post-Keynesian Economics and the History of Economics: Essays in honour of Geoff Harcourt*, London: Routledge, pp. 161-168.
- Sawyer, M. (2008) Neither new nor Keynesian: A critique of the new Keynesian programme, *METU Studies in Development*, 35, no. 1 (June 2008) pp. 61-80.
- Sawyer, M. (2009) Interest rates and inflation: what are the links ?, *Intervention*, vol 6 (1), pp. 81 – 96
- Smithin, J. (2007) A real interest rate rule for monetary policy?, *Journal of Post Keynesian Economics*, 30(1), pp. 101-118
- Taylor, J.B, (2008) The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong (mimeo, November 2008).
- Taylor, J.B. (1993) Discretion versus policy rules in practice *Carnegie-Rochester Conference Series on Public Policy* 39 pp. 195-214 (Amsterdam, North-Holland).
- Weber, A., Lemke, W. and Worms, A. (2008) How Useful is the Concept of the Natural Real Rate of Interest for Monetary Policy?, *Cambridge Journal of Economics*, 32(1) 49-63.
- White, W.R. (2007) The Need for a Longer Policy Horizon: A Less Orthodox Approach. In: Teunissen, J.J. and Akkerman, A. (eds.) *Global Imbalances and Developing Countries: Remedies for a Failing International Financial System*. The Hague: Forum on Debt and Development (FONDAD).
- Wicksell, K. (1898) The influence of the rate of interest on commodity prices reprinted in K. Wicksell, *Selected Papers on Economic Theory* (edited with an introduction by Erik Lindahl) (London, George Allen & Unwin, 1958).
- Woodford, M. (2003) *Interest and Prices: Foundations of a Theory of Monetary Policy*, (Princeton, Princeton University Press).

