Central Banks as Trustees rather than Agents

John Driffill

Birkbeck College, University of London

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Abstract

1 Introduction

Back in the late 1980s and early 1990s, independent Central Banks were an idea whose time had come (Goodhart, 1995); and certainly they have enjoyed a long honeymoon period. But as we stand now, in July 2008, with things turning nasty on the macroeconomic front, and Mervyn King's nice decade in the process of being replaced by something completely different, the question seems to be arising in some people's minds: has their time been and gone?

Joseph Stiglitz has questioned the value of independent central banks[1] and criticised inflation targeting[2]. And Simon Jenkins in The Guardian (9th July 2008) concentrates intense fire on the independent Bank of England in his attack on economics as a whole. ("Where are the economists?....They said recessions were over. They told politicians to leave things to them and all would be fine. Yet they failed to spot the sub-prime housing crash, and now look at the mess..... We believed the Bank of England when it said that in its hands inflation was dead and prosperity was eternal..... The delegation of interest rates to the Bank of England worked when it ran in parallel with politics, but not any more. Now that reflation seems urgent for recovery,

[1] "The traditional argument for an independent central bank is that politicians can't be trusted to conduct monetary and macroeconomic policy. Neither, evidently, can central bank governors, at least when they opine in areas outside their immediate responsibility. Greenspan was as enthusiastic for a policy that led to soaring deficits as any politician; but the fig leaf of being "above politics" gave credence to that policy, engendering support from some who otherwise would have questioned its economic wisdom.

This, then, is Greenspan's second legacy: growing doubt about central bank independence. Macroeconomic policy can never be devoid of politics: it involves fundamental trade-offs and affects different groups differently. Unemployment harms workers, while the lower interest rates needed to generate more jobs may lead to higher inflation, which especially harms those with nominal assets whose value is eroded. Such fundamental issues cannot be relegated to technocrats, particularly when those technocrats place the interests of one segment of society above others.

Indeed, Greenspan's political stances were so thinly disguised as professional wisdom that his tenure exposed the dubiousness of the very notion of an independent central bank and a non-partisan central banker. Unfortunately, many countries have committed themselves to precisely this illusion, and it may be a long time before they take heed of Greenspan's most important lesson. Stressing the new Fed chief's "professionalism" may only delay the moment when this lesson is learned again. " J. E. Stiglitz, "Is Central Bank Independence all it's Cracked up to be?" 12 Nov 2005. Accessed at http://webdiary.com.au/cms/?q=node/958 on 15 july 2008

[2] The Failure of Inflation Targeting, J. E.Stiglitz, May 2008, accessed here http://www.project-syndicate.org/commentary/stiglitz99 on 15 July 2008

the system is biased against common sense, yet no politician dare tell the Bank to cut rates and risk inflation......Economics has long traded on being a science when it is not.....For a third of a century since the 1976 IMF crisis it has enjoyed great influence over British policy. Now it has met its Waterloo and a little humility would be in order. Once again economics must be rescued by that true master of all things, politics.")

Much of the theorizing about Central Banks has treated them as if they have an objective function defined over both inflation and output, and make policy by optimizing in a short-term discretionary way. Of course this tends to lead to an inflation bias or a stabilization bias, depending on what model of the economy they are assumed to be working within, and creates a role for incentives or contracts for central bankers. The predominant analytical framework has been the principal-agent model. Independent central banks are modelled as agents, with the government (the elected politicians) as principal, carrying out a task for the government, in response to some incentive scheme. Svensson, Walsh, and others have set out contracts for central bankers, which penalise inflation and induce them to set society's preferred inflation rates. The penalties are sometimes described as if they might affect the rewards the central bank governor gets. The other big idea is that governments may want to delegate to conservative central bankers, who will produce a smaller inflation bias, but at the expense of responding

less to shocks.

McCallum (1995, 1997) has criticised Central Bank Independence (modelled in this way, with Central Banks as agents) as not solving the time-inconsistency problem, merely relocating it. Why would an elected government, itself attracted by the short term gains of a burst of unexpected inflation, discipline a waywardly inflationary Central Bank? Actually McCallum goes on to say that central bank independence is a fine thing, but our models of it are rather poor. Why do Central Banks not make policy for the long term, rather than the short, even if there is no commitment mechanism. Why the fixation with time-inconsistency? He remarks:

> "Interesting and ingenious as this literature is, however, it is the contention of a recent paper of mine (McCallum, 1995) that it is significantly flawed (perhaps critically so) by two fallacies pertaining to fundamental conclusions of the analysis. The two disputed conclusions are that the absence of any precommitment technology makes it infeasible for an independent central bank to avoid an excessive inflation rate and that contracts imposed upon central banks by governments can solve the problem of dynamic inconsistency."[3]

[3] He goes on "It should be noted that the claim is not that the literature contains technical errors, but instead that it features inappropriate interpretive mappings between

McCallum's view is that just because it violates some incentive compatibility constraints, there is nothing to stop a CB from following the pre-committed policy (Woodford's optimal policy from a timeless perpective) They just have to realise that it is a waste of time to pursue short-term benefits.

> "What is needed for avoidance of the inflationary bias in (6) is for the CB to recognize the futility on average, over extended time spans - of continually exploiting expectations that are given 'this period' but reflect responses to actions of the CB taken in the past, and to recognize that its objectives would be more fully achieved on average if it were to abstain from attempts to exploit these temporarily-given expectations."

And he notes that if banks behave in this way, there is no trade-off between inflation bias and the responsiveness to shocks.

On the second point, the mere re-location of the time-inconsistency problem, he remarks that his criticism:

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analytical constructs and real world institutions. Consequently, some readers might object to my use of the term 'fallacies'. It is my belief, however, that the more creative part of economic analysis lies in the specification of a model to satisfactorily represent the phenomena under investigation, rather than in the manipulation of given models. And from that perspective, an inappropriate mapping between a model and reality can constitute at least as serious a mistake as an error in logic, so the strong term seems warranted, especially since the particular points at issue involve crucial features of the analysis of central bank independence."

"pertains to an ingenious result, developed by Walsh (1995) and utilized by Persson and Tabellini (1993), concerning contracts between a country's government and its central bank. In particular, the result indicates that if a country's government provides its CB with a contract (or incentive arrangement) that makes the latter's private rewards negatively dependent upon the inflation rate, then it is possible to induce optimal performance as in (13) even though the CB's behavior is of the discretionary type that would lead to (5) in the absence of this contract provision.

The unsatisfactory feature of this result is that such a contracting device does not actually eliminate the motivation for dynamic inconsistency, it merely locates it in a different place. Specifically, under the proposed arrangement, the government would have to enforce the contract - for instance, by reducing the CB's budget when inflation is high - but the government has exactly the same incentive not to do so as the CB has to be inflationary in the usual analysis. Or, in other words, if the absence of a precommitment technology is actually a severe problem, it must apply to a consolidated entity consisting of the CB and the government together, just as it would to an entirely independent CB. If a precommitment technology does not exist, then it doesn't

exist and no arrangement can entirely escape that fact."

(Insert more comments on conservative central bankers here. Perhaps make comments on Blinder's observations on central banks to lead into the stuff on transparency.)

Central banks themselves have made much of the words accountability and transparency in their plans for explaining their policies to the public and politicians. There has developed a large academic literature on the subject, comprehensively surveyed by Petra Geraats (2002), who sets out five aspects of transparency: political, economic, procedural, policy and operational. What does transparency do? What is it for? And Accountability? Can you have too much? Can public information be a bad thing? Much of the academic literature on the subject has represented transparency as an attempt by the CB to communicate information[4] to reduce asymmetric information between the CB and the public. This might be the CB's private information about the shocks hitting the economy or about variations in the preferences of the central bankers. While more information might generally

[4] Geraats offers this definition: "Central bank transparency could be defined as the absence of asymmetric information between monetary policy makers and other economic agents. This means that it reduces uncertainty and this is often believed to be beneficial (although it need not be). Furthermore, transparency may affect the incentives that policy makers face to manipulate private sector beliefs through signalling and reputation building."

thought to be better, several models generate results that it is not.[5] More information might increase the volatility of private sector inflation expectations, for example, or it might reduce the ability of the central bank to respond to information that it holds privately in such a away as to reduce fluctuations of the economy. Morris and Shin in a series of papers (for example, Morris and Shin, 2005) show that noisy public signals may lead to worse outcomes in a game with a strong element of coordination among players. Their ideas are taken up by Cornand and Heinemann (2008), who show that the dissemination of public information can in some circumstances be beneficially restricted. Should CBs keep something up their sleeves, and be able to pull out the occasional surprise? Some mystique (Geraats). But does much of the academic analysis of transparency miss the point? Posen (2002) emphasises very different aspects of it than does Geraats and reaches rather different conclusions.

Actual central banks – Taylor rules? interest rate smoothing. They do not find time-inconsistency a big issue. (Have Woodford and Gali made it old hat??) See Blinder.

[5]On the subject of too much transparency, Otmar Issing (2005) offers the following story: In 1860, Lady Wilberforce, wife of the Bishop of Worchester, learned of Charles Darwin's new theory. She is said to have exclaimed: "Descended from the apes! Us! How awful! Let us hope that it is not true, but if it is, let us pray that it will not become generally known!"

2 Rasmusen on Central Banks as Trusts

Arguably the model of Central Banks as agents does not reflect the position they occupy, and leads to some false conclusions. Eric Rasmusen has criticized this view of Central Banks. He observes that in an agency relationship, "One party, the principal, hires another, the agent, to act for him. The principal can issue orders of varying specificity and can compensate the agent in various ways. He can fire the agent at any time unless they have a contract that forbids it, and even if the contract requires him to keep paying the agent, he can end the status as agent by removing all the authority delegated to the agent." He goes on: "In economics, the main questions involve how the agent's compensation can be designed to make him follow orders properly rather than shirking. All of the problems economists usually study, though, would disappear if the principal had the same information as the agent, knowing the state of the world at every moment and knowing what actions the agent has taken". As an alternative, Rasmusen suggests they be regarded as trusts, like an independent judiciary. The key element in setting up a trust is commitment. The Settlor (the government in this case) and the Beneficiary (the public) cannot alter the terms of the trust even if both of them would like to do so. The Trustee is free to carry out his duties as set out in the terms of the trust. Rasmusen identifies the motivations of

Trustees as:

> So what do trustees want? I suggest a "Four P's" approach, hijacking a slogan from marketing. The "Four P's of Marketing" are Price, Product, Promotion, and Place. My "Four P's of Trustees" are Policy, Pride, Place, and Power."

Policy: they have preferences over what policies should be followed[6]. Pride: they wish to be seen as competent[7]. Place: they enjoy being trustees and want to keep their positions[8]. Power: they want to have discretion to do what they feel appropriate, and enjoy having freedom to follow a wide range of actions[9].

The institution to which the idea of trusts has been most extensively applied is the judiciary. Judges, and the legal system, in the US and other

[6] "POLICY refers to the trustee's desire to see particular policies in place, usually because of his political or moral principles. A central banker has a personal preference for the inflation rate. A judge has a personal preference for whether abortion is legal or not. A politician has a personal preference for the rate of income tax."

[7] "PRIDE refers to the trustee's reputation for competence. A central banker wants to be known as someone who understands the economy and the effects of the instruments at his disposal. A judge wants to be known to the legal profession as someone who can argue cogently for his positions and who knows the law. A politician wants to be known as someone who can get things done."

[8] "PLACE is the Trustee's job. He likes being a trustee, and does not like being fired, quite apart from the losses in the other variables. Central bankers, judges, and elected officials all are granted deference and perks based solely on their positions, and instantly lose most of this when they leave their positions."

[9] POWER is a different dimension than Place. A trustee can keep his position but have no discretion to do anything. Or, the trust could separate out position and power; the emperor is worshipped as a god, but the shogun makes all the decisions. Power is here considered as a good in itself, not as a means to influence Policy."

Western Democracies, and other pluralist societies believe they are acting the public interest, in applying the law fairly and in the way it was intended. They are not driven by any direct incentives such as the desire to exert low effort or to receive high incomes or other external rewards.

3 Implications of CBs as trusts

I think this view of Central Banks explains a number of things.

One is the alacrity with which CBs have accepted responsibility for controlling inflation as their sole objective, with output and unemployment clearly not part of their job. This follows from Pride: they want a reputation for competence, and hence are unhappy being judged on something they cannot control.

The view of independent CBs as Trustees explains also why monetary policy seems to have been more successful when it has had only one objective: controlling the rate of inflation. It is a paradox that, while all the macroeconomic models suggest that both monetary and fiscal policy should be optimally combined to address both inflation and unemployment simultaneously, in practice there has been greater success when monetary policy has been assigned to controlling inflation, and fiscal policy has been assigned to medium-term objectives, producing the appropriate level of public invest-

ments, spending on goods and services, taxes, transfers, with an eye on public debt levels, and maybe to some degree an eye on aggregate demand, as it has been in recent years.

When standard macroeconomic models, such as the 'New Keynesian' macro model with expected future inflation in the Phillips curve and expected future demand in the IS curve, or the simpler backward-looking models employed by Rudebusch and Svennson to analyse policy, are combined with an objective function in which both inflation deviations and output deviation from target are weighted together, they produce the implication that monetary policy should respond to both of them. In particular, supply shocks present a dilemma, as high inflation has to be used to partially offset low output. Demand shocks are trivial to deal with in such models. Those models in which there are forward-looking elements almost always produce a time-inconsistency issue.

Policy with a single objective is more successful because independent banks prosecute it with greater conviction when they have single achievable measure by which their success or otherwise can be judged.

The Trusteeship view thus answers MacCallum's criticism that the time inconsistency problem is merely relocated. As Trustees, the Central Banks have some protection from the government. The CBs discipline the government, not the way around. The CBs have an interest in fulfilling their

mandate successfully. The politicians may be able to set the goals, but they are restricted in what they can set. They could not impose goals that might seem politically expedient at short notice, for example. Effectively, time inconsistency is not a practical issue. The idea of giving Central Banks incentives to bring their preferences into line with those of society is misplaced, as is the idea of a conservative Central Banker as a partial solution to the time Inconsistency problem.

The trusteeship framework also addresses McCallum's second point. Much research on Central Banks as agents models them as setting policy in a discretionary fashion, re-optimising period by period. In some models there tendency to do this can be modified by suitable incentives so that they reproduce the behaviour of a 'precommitted' central bank. However, if Central Banks are viewed as Trustees with long-term objectives, there is no reason why they would behave in a discretionary rather than a pre-committed fashion. They do not go for short term gains that rely on 'already formed' expectations. Perhaps this explains why time inconsistency does not appear to have been a practical issue.

Another aspect of CB activity explained by the Trusts model is the vigour with which CBs have actively promoted their own status in the economy, and campaigned to increase public understanding of what they do and why, and promoted the idea that price stability is a good thing and a proper

goal of monetary policy. The agency view of Central Banks has them as rather passive servants of the government, dancing to the government's tune. CBs have in fact been very active. The Bank of Canada was very pro-active in getting inflation targeting introduced in Canada[10]. The Bank of England has been active in communicating its role to the public, explaining its understanding of the economy, its thinking behind policy decisions, and so on, in its inflation reports, minutes of MPC meetings, speeches, and so on. They seem very keen to persuade the general public that they are doing a good job. This can be explained by Place and Power. They want to keep their position. They also want to have discretion to do what they want without political interference. By creating popular support for the institution, they make it more difficult for elected politicians to interfere in their activities.

In this respect, it is interesting that those CBs with less well established positions of independence have been much keener to explain themselves. They have been much more 'transparent'. The ECB, taking over where the Bundesbank left off, and protected from interference by EU Treaties, has been famously opaque in its statements. The EU Parliament is able to scrutinise it only weakly, and the member governments hardly at all. The

[10] It is decribed like this in Bernanke et al's book on Inflation Targeting: "The adoption of inflation targetting in Canada followed a three-year campaign by the Bank of Canada to promote price stability as the long-term objective of monetary policy. ....." page 116.

ECB flourishes in the EU's 'democratic deficit'. The Federal Reserve, with a strong constitutional position, a long track record, and popular support, has also been relatively opaque. Its objectives, for example, are not clearly set out. Alan Greenspan famously tried to maintain the mystique. Much recent research on transparency has modelled it in terms of CB efforts to increase or reduce the public's uncertainty about its goals or models of the economy, in order to influence its ability to surprise the public with a policy action. But this seems too narrow a view.[11] Transparency is something CBs use to win popular support and protect themselves from political interference. The ECB and the Federal Reserve do not need it, so they do not make the effort.

In the trusteeship framework, efforts by the CBs to be transparent may or may not have the effect of raising or lowering the uncertainty of the public about CB objectives, policies, models of the economy, and so on. They may or may not reduce the CBs freedom to counter shocks to the economy. The main purpose of the transparency programme is to bolster support for the CB in the various interest groups in the economy – financial markets, businesses, the electorate – in order to enhance the CB's freedom of action – its discretion – to conduct monetary policy as it sees fit. I.e., to increase power and policy.

[11] See Posen (2002) for a broad survey of views of CB Transparency. Blinder at al (2002) also discuss transparency and make comparisons between different Central Banks.

How will policy evolve in the coming months and years if – or as – developed economies move into stagflation territory: high inflation, low growth, high unemployment? Will they stick to their mandates or accommodate the supply shocks with higher inflation aimed at mitigating the recession? What do CB objectives look like? Are they constant or will they evolve over time, and in what way? The trusts model would say that while CBs have their own preferences ('Policy') they are also interested in place and pride, and for these reasons are likely to bend with the views prevailing among the various interest groups that have views on their policies and economic outcomes. 'Policy' may lead CBs to campaign for their preferred policies, while pride and place will lead to accommodation to retain support and general approval.

What about bubbles in asset prices – share prices, houses, exchange rates – should Central Banks try to take these into account? Have they been stabilising too narrowly defined a price index, as has been argued? What does the Trusteeship model have to say about this

Thus I would argue that the view of Central Banks as Trusts can explain in general terms at least many of the paradoxes and puzzles that surround conventional analysis of CBs as agents.

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