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## Monetary Policy and Central Banking after the Crisis: The Implications of Rethinking Macroeconomic Theory

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## **Monetary Policy and Central Banking after the Crisis:**

### **The Implications of Rethinking Macroeconomic Theory**

**Thomas I. Palley**

**June 2011**

# **Monetary Policy and Central Banking after the Crisis: The Implications of Rethinking Macroeconomic Theory**

## **Abstract**

The financial crisis and Great Recession have prompted a rethink of monetary policy and central banking. The *status quo* insider rethink focuses on the role of monetary policy in dealing with asset bubbles; making the central bank the banking system supervisor; and how to deal with the problem of the zero lower bound to nominal interest rates.

This paper presents an outsider reform program that focuses on central bank governance and independence; reshaping the economic philosophy of central banks to be more intellectually open-minded; major monetary policy reform that includes adoption of an inflation target equal to the minimum unemployment rate of inflation (MURI) and implementation of asset based reserve requirements; and regulatory reform that addresses problems of flawed incentives, excessive leverage, and maturity mismatch.

The proposed outsider reform program is rooted in a rethink of macroeconomic theory compelled by the crisis. There are some overlaps between the insider and outsider reform programs but they are more form than substance. That is dangerous because it can confuse debate if similarity of form is mistaken for similarity of substance.

The insider program makes no changes to macroeconomic theory and is uncritical of the Federal Reserve's past actions. From its perspective, any failings of the Federal Reserve have been unwitting sins of omission. The outsider program fundamentally challenges existing macroeconomic theory and is also highly critical of the Federal Reserve. From its perspective the failings of the Federal Reserve have included significant sins of commission rooted in political capture, cognitive capture and intellectual hubris.

The outsider critique can be taken even further. The Federal Reserve is already legally mandated to pursue maximum employment with price stability. However, it needs institutional transformation that makes it think of itself as an agent for helping realize the "American Dream". That means it should have a duty to shape the allocation of credit and the financial system in ways that ensure growth, full employment and a fair shake for all.

**Keywords:** Monetary policy reform, central bank independence, inflation targeting, asset based reserve requirements.

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## **I Competing visions of reform**

The financial crisis of 2008 and the Great Recession have prompted a retrospective on the conduct of monetary policy and central banking [Bernanke, 2010]. Before the crisis economists and central bankers were in a celebratory mode, with talk about the “Great Moderation” and praise for advances in monetary economics that had helped stabilize the economy [Bernanke 2004; Goodfriend, 2007; Blanchard, 2008]: now there is talk among policy insiders of need to rethink monetary policy.

The *status quo* insider rethink focuses on the role of monetary policy in dealing with asset bubbles; making the central bank the banking system supervisor; and how to deal with the problem of the zero lower bound to nominal interest rates.

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Finally, the paper’s critique of existing monetary policy and central bank practice and its recommended reforms are focused on the U.S. Federal Reserve. However, the principles that are articulated and many of the proposed reforms carry over to monetary policy and central banking everywhere, including the Bank of England and the European Central Bank.

## **II Insider rethinking of policy**

The starting point for the discussion is the current rethink of monetary policy and central banking among policy insiders. This rethink is reflected in a series of papers by Blinder [2010a, 2010b, 2010c] focusing on three principal areas: monetary policy and asset price bubbles; the role of regulation in monetary policy; and the policy implications of the zero lower bound to the nominal interest rate.

With regard to governance, Blinder [2010a] frames the issue in terms of “central bank independence” which he strongly supports. He is essentially content with the

current structure and rejects change, particularly regarding the FOMC and the private corporation status of the twelve district Federal Reserve banks. The argument is the existing structure has worked well so why change it now?

With regard to the role of monetary policy in dealing with asset bubbles, Blinder (2010b) frames the issue as whether monetary policy should “lean against” bubbles or “mop up afterwards”. The consensus has been mop up afterward. Now, there is an emerging argument for distinguishing between credit-led bubbles and equity-type bubbles in which credit plays only a minor role [Mishkin, 2008; Blinder, 2008], and leaning against credit bubbles and mopping up afterward equity bubbles.

The new approach to bubbles in turn motivates new thinking about regulatory supervision. Blinder [2010b] defends a generic tendency to caution about bubble activism on grounds that central banks have no information advantage, and they also lack targeted instruments so that costs of collateral damage from intervention may outweigh benefits. However, central banks might have the information and instruments to deal with bank based credit bubbles if they are also the banking system supervisor. That argument therefore recommends making the central bank the banking system supervisor, and the argument is further supported by adding a third goal for monetary policy of financial stability (in addition to the existing goals of low inflation and high employment).

The third issue is the zero lower bound (ZLB) to nominal interest rates that limits the Federal Reserve’s ability to lower interest rates. In a presentation at the FRB Boston conference of October 16, 2010 Blinder [2010c] argues for more safeguards against bumping up against the ZLB. Principal among these is a higher inflation target, a policy

proposal that has also been floated by IMF Chief Economist Olivier Blanchard and his co-authors [2010].

### **III The outsider case for more profound reform**

The Blinder [2010a, 2010b, 2010c, 2008] – Mishkin [2008] – Blanchard et al. [2010] proposals represent the “insider” program for reform of monetary policy and central banking. Blinder is a former vice-president of the Federal Reserve; Mishkin is a former governor of the Federal Reserve; Blanchard is chief economist at the IMF; and all three are leading academic economists holding positions at Princeton, Columbia, and MIT respectively. Their proposals leave both the institutional structures of central banking (the Federal Reserve) and the theory justifying policy essentially unchanged.<sup>1</sup>

This insider program can be contrasted with an outsider program that argues for more substantive reform. The starting point is the recognition that central banks are critically important institutions in today’s system of financial capitalism. Without the Federal Reserve, the U.S. government would have been unable to stop the financial crisis of 2008. And without it, the U.S. government would likely now be having considerable difficulty financing its huge budget deficit.

Central banks’ power is rooted in their ability to issue money and set interest rates. This is a constructive and vital power, which means the Federal Reserve must be part of the policy solution. But it is also a power that can be abused, which means the Federal Reserve can be part of the problem. The challenge is to see that the central bank’s powers are deployed properly on behalf of the public interest; are not abused via arbitrary

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<sup>1</sup> Having the Federal Reserve become the banking system regulator actually expands its powers, though balanced against this the Federal Reserve has surrendered its consumer protection role to the new Consumer Financial Protection Bureau established by the Dodd – Frank Act (2010).

or excessive use; and that others cannot force the central bank to use its powers on their behalf.

Right now that is not the case. The Federal Reserve failed to properly deploy its powers as evidenced by the policy failures that led up to the crisis. Its powers are also too much in the service of financial market interests, in part to save the economy from their destructive speculative activities. The clearest evidence of this is the new concern about the “too big to fail (TBTF)” problem whereby mega banks are too big to fail and are therefore subsidized in credit markets because lenders know the central bank will not let big banks fail for fear of the collateral damage failure will inflict. The TBTF problem surfaced during the crisis but a similar problem has been evident for a while in the form of the “Greenspan put” that protected the stock market against declines, again for fear of collateral macroeconomic damage.<sup>2</sup>

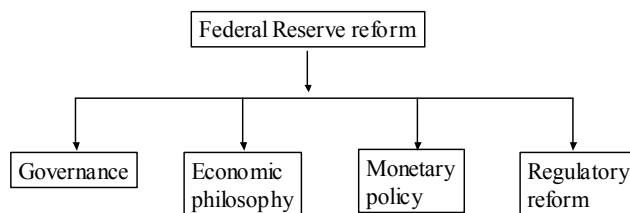
An outsider reform program involves four parts, as illustrated in Figure 1. Those parts are governance reform; change of economic philosophy; monetary policy reform; and regulatory reform. This outsider framing of the reform question is substantially different from the insider framing in two critical respects. First, insider reformers frame the problem of how to improve the Fed’s performance within the existing institutional and theoretical frame. There is no mention or indication of the possibility that the Federal Reserve may have contributed to the making of the crisis. For insiders there have been no sins of commission on the part of the Federal Reserve, only unwitting sins of omission.

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<sup>2</sup> The Greenspan put was the belief that under Chairman Greenspan the Federal Reserve would sharply lower interest rates to prevent large stock market declines.



Figure 1. A program to reform the Federal Reserve.



Second, insider reformers see no problem regarding political capture of the Federal Reserve by financial market interests. The theory of regulatory capture, whereby regulated interests capture their regulators, is well known among economists. However, from an insider perspective the theory is germane to other agencies but not the Federal Reserve, which explains the uncritical discussion about central bank independence (about which more below).

### ***Governance and central bank independence***

The financial crisis and the subsequent government rescues of banking systems has led to a rediscovery of political economy and its relevance for understanding monetary policy, regulatory policy, and the Federal Reserve. The argument is that in the 1990s and 2000s financial interests were able to capture the regulatory system and used this capture to their advantage to push unsound deregulation and block needed regulation. That capture was evident in the financial deregulation and lack of reregulation that characterized the period 1980 – 2008. The Glass – Steagall Act (1933), an iconic piece of New Deal legislation that barred firms from undertaking both investment and commercial

banking activities and barred banks from owning insurance companies, was repealed in 1999. Citigroup went so far as to complete purchase of Travelers Insurance a year in advance of Glass – Steagall’s repeal.

Another example of capture is from 1998 when Treasury Secretary Robert Rubin and Federal Reserve Chairman Alan Greenspan successfully blocked attempts by Brooksley Born, head of the Commodity Futures Trading Commission, to regulate the derivatives market. The Commodities Futures Modernization Act of 2000 exempted derivatives from regulation and allowed them to be traded almost entirely free of regulation in so-called “over-the-counter” markets. In 2004 the Securities Exchange Commission passed its net capital exemption rule that reduced the amount of capital Wall Street’s largest brokerage houses had to hold, and it also allowed investment banks to adopt self-regulation with regard to assessing the value of their capital at risk. An immediate consequence of the rule was a surge in investment bank leverage and debt-to-equity ratios rose from around 15 to 1 in 2004 to over 30 to 1 by 2008.

This process of regulatory and political capture is documented by Johnson and Kwak [2010] in their best seller, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*. Their thesis is bankers remain firmly in control of the political - regulatory process and have successfully blocked needed post-crisis reform and regulation.

The traditional focus of capture theory is microeconomic regulation. However, the logic of capture theory also applies to macroeconomic policy, something that is entirely missing from the little mainstream discussion about capture. Macroeconomic policy capture is particularly important for monetary policy and central banking as it can affect

the relative policy emphasis given to inflation versus unemployment. It will also affect the willingness to use regulatory tools (i.e. balance sheet restrictions, margin requirements, and reserve requirements) for purposes of enhancing macroeconomic policy. That is particularly germane to the issue of asset price bubbles and their macroeconomic impacts.

Epstein [1992] distinguishes between financial capital, industrial capital, and labor. Palley [1996 [1997]] argues financial capital is likely to have a strong preference for low inflation to protect financial wealth; industrial capital will have a preference for a stronger real economy and lower unemployment to boost demand and profits; and workers will want full employment to boost real wages. In that case, if financial interests dominate the Federal Reserve it will tend to produce macroeconomic outcomes characterized by higher unemployment and lower inflation (i.e. a point further down the Phillips curve).

The issue of policy preferences is also germane to the question of central bank independence. Insider economists argue that central bank independence is a mechanism for helping address politicians' incentive to push inflation too high. For instance, using a game-theoretic natural rate of unemployment model, Barro and Gordon [1983] show that policymakers will push inflation too high in an attempt to secure temporary real output gains. There are three features to note. First, the model assumes a vertical Phillips curve that only offers temporary output gains. Second, even those gains come from "fooling" private sector agents into making sub-optimal supply decisions. Third, the public is assumed to have a unified set of preferences that differ from politicians' preferences, and

it is this that causes politicians to impose sub-optimal outcomes on the public. Thus, politicians are effectively represented as the enemy of the public.

For insider economists central bank independence is viewed as a means of solving this preference conflict issue. The problem is the assumptions are false and central bank independence does not solve the preference conflict. The reality is that the public's preferences are divided according to economic interests. Consequently, central bank independence may simply entrench one set of interests – probably those of financial capital.

Palley [1996 [1997]] shows that in a model like that of Barro and Gordon [1983] a financially dominated central bank will choose sub-optimally low inflation. If the economy has a negatively sloped long run Phillips curve that causes permanent output losses and permanently higher unemployment.

In a sense, the frame of central bank independence is wrong. Instead, the frame should be establishing institutions that deliver best outcomes within the context of constitutional democracy. That is an enormously difficult challenge that mainstream economists evade *de facto* via two assumptions. First, they assume the public's preferences are unified. Second, they assume they have the “true” model of the economy as described by the theory of the natural rate of unemployment. These assumptions remove conflict about policy goals and conflict about how the economy works and what is economically feasible.

Neither of these two assumptions is true. The public's preferences are clearly divided as evidenced by contested politics. Second, there are lots of views about how the economy works, of which the mainstream view is but one – albeit a view that dominates

economics because mainstream economists suppress alternative views by denying them space. These considerations mean that poorly designed central bank independence may worsen the real world policy problem by giving dominance to particular interests. For instance, by entrenching financial interests it may lead to sub-optimal inflation – unemployment outcomes. Furthermore, it may also cause political damage by undermining principles of constitutional democracy.

That said there may still be a place for central bank independence as a means of restraining populist political pressures on monetary policy. However, any independence must always be granted subject to self-conscious awareness of the problem of conflicting preferences, the problem of conflicting views about the economy, and with absolute deference to constitutional democracy. That means central banks must be accountable to elected officials, fully represent competing interests, and avoid capture.

With regard to the Federal Reserve this suggests the following institutional reforms.

*Reform #1: nationalize the Federal Reserve System so that it is fully owned by the federal government.* The Presidents of the district Federal Reserve Banks are currently appointed by the boards of directors of those banks, which are fifty percent owned by private member banks. Instead, these district banks should be nationalized and their presidents appointed by the U.S. President subject to Senate confirmation. The rationale is to diminish the possibility for private influence within the system.

*Reform #2: change the Federal Reserve appointment structure so that every four years the incoming President gets to appoint his Federal Reserve Chairman subject to Senate confirmation.* The rationale is voters hold the President responsible for the economy and

the President should therefore have full opportunity to pursue his policy. This would strengthen democratic accountability of the Federal Reserve.

*Reform #3: the Federal Reserve should issue an annual social report that explicitly addresses the question of institutional capture.* The report would be presented to Congress and would address the social, commercial and political backgrounds of appointees and senior management with an eye to ensuring wide representation of points of view. The very requirement of a report would constitute public acknowledgement of the potential for capture and the report itself would be a focal point for annually considering the problem.

*Reform #4: rationalize the Federal Reserve System and reduce the number of district banks to four (New York plus three) plus the Board of Governors.* The rationale is the existing structure of twelve district banks is costly and outdated, reflecting the railroad economy of the 19<sup>th</sup> century. The current time of budget austerity provides an opportune and justified moment to prune and modernize the Federal Reserve System.

### ***Economic philosophy reform***

The financial crisis revealed a catastrophic failure of thought at the Federal Reserve. Despite employing hundreds of economists, the entire Federal Reserve System was taken aback by the crisis; failed to understand it as it was happening; and has been repeatedly surprised by the depth and duration of the Great Recession.

One explanation is that the Federal Reserve System succumbed to “group think” which was also part of a larger group think in the economics profession. That group think pushed an “intellectual cleansing” of all who disagreed with the new economic consensus.

It also created the conditions for the “black swan” event that blind-sided the Federal Reserve. Such a black swan event is not a statistical phenomenon concerning low probability distant tail outcomes. Instead, it is a sociological phenomenon produced by closed mindedness that blinded the Federal Reserve to the reality of economic developments.

Viewed in this light, the Federal Reserve’s failure reflects a lack of pluralism rooted in a fundamentally wrong-headed belief that it has access to truth, and its model is the true model. As the philosopher Karl Popper [1959] showed, that is epistemologically impossible. The best that is possible is to have a model that is not rejected by the facts. However, because of the coarseness of tests in economics, that means having to live with several theories and models.

It can be argued that the Federal Reserve’s intellectual failure is the root cause of its policy failure, and Buiter [2008] argues the Federal Reserve was subject to cognitive capture. Buiter represents this phenomenon as a purely intellectual failure, but the ideas that dominated policy supported the interests of finance. Viewed in that light, cognitive capture is simply the intellectual extension of conventional regulatory capture. That speaks to need for reform that protects against future intellectual failure.

*Reform #5: the Federal Reserve should be legally mandated to promote a pluralistic open-minded approach to economics and economic policy that self-consciously avoids the pitfalls of ideology and group think.* There is value in Congress debating intellectual pluralism and passing legislation both to provide instruction to the Federal Reserve and to change its intellectual frame, as happened with The Employment Act of 1946. As a first step in this direction, the Federal Reserve should commission an investigation into its

failure to foresee the crisis and its failed predictions about recovery.<sup>3</sup> Delivering on such a law requires ultimately having the right people in charge, which is why personnel change at the Federal Reserve is so important, but the first step is mandating action.

An example of the type of thinking that must make it into the Federal Reserve System is Hyman Minsky's [1992 [1993]] "Financial Instability Hypothesis". The crisis has boosted Minsky's standing and economists are making increased mention of him. However, that mention is token and the fundamental analytical framework remains unchanged. From a Minsky perspective "success breeds excess breeds failure" and finance has a genetic proclivity to instability. Palley [2009a [2011]] argues that a Minskyian perspective implies the following policy propositions:

*Policy proposition #1:* policymakers must exercise self-conscious skepticism toward euphoria (i.e. no more policymaker chatter of "Great Moderations" and "New Economies").

*Policy proposition #2:* capitalist economies always need significant regulation to contain financial speculation and financial excess. Milton Friedman is the philosophical advocate of a deregulated economy and the justification is provided by the first welfare theorem of competitive general equilibrium theory. Hyman Minsky is the philosophical advocate of a regulated economy and the justification is provided by his financial instability hypothesis. That is fundamentally different from, though also compatible with, the conventional market failure justification for regulation which is rooted in competitive general equilibrium theory. The policy implication is it undoes the presumption that regulation is guilty until proven innocent. Instead, some form of regulation is always needed.

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<sup>3</sup> The International Monetary Fund [2011] commissioned a similar report on its failure to foresee the crisis which was prepared by its Independent Evaluation Office.

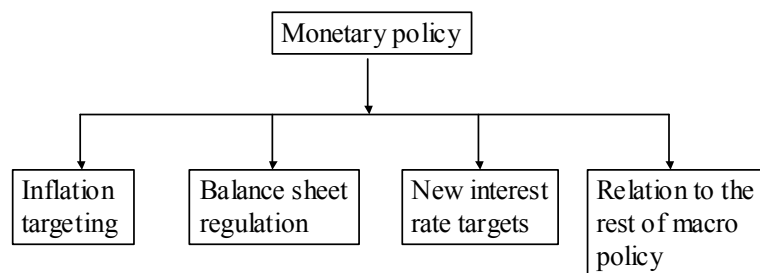


*Policy proposition #3:* Discretion dominates rules. Models, numbers and rules are always insufficient for policymaking, and there is always need for judgment because the economy is subject to an evolutionary dynamic that cannot be foreseen. That said policy should still aim to be credible and clear. As Keynes [1936] emphasized, uncertainty is costly in market economies. It can paralyze economic action, and it can also induce costly defensive actions. Policymakers should therefore look to reduce policy induced uncertainty by ensuring policy is credible and clear. This is a valuable policy lesson provided by new classical macroeconomics, and it is one that carries over to Keynesian and Minskyian macroeconomics.

#### ***Monetary Policy Reform<sup>4</sup>***

A third area of reform is the conduct of monetary policy, and here rethinking of macroeconomics prompts four reforms as illustrated in Figure 2.

Figure 2. Monetary policy reform

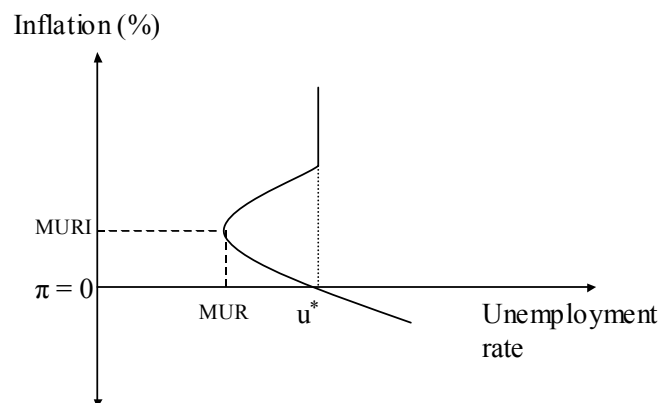


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<sup>4</sup> Many of the arguments presented in this sub-section were developed earlier in Palley [2006].

*Reform #6: Central banks should target inflation so as to hit the minimum sustainable rate of unemployment.* The Phillips curve (i.e. the trade-off between inflation & unemployment) is backward bending and central banks should aim for the inflation rate that minimizes the unemployment rate. In the U.S. that rate of inflation is probably between 3 and 5 percent and it can be termed the minimum unemployment rate of inflation - or MURI which is an acronym that can be contrasted with Milton Friedman's NAIRU. The backward bending Phillips curve and the MURI are illustrated in Figure 3.

Figure 3. The backward bending Phillips curve.



Blanchard et al. [2010] and Blinder [2010c] have both also suggested raising the inflation target but their reasoning is to push up nominal interest rates to avoid getting caught in the zero lower bound trap, as has happened in the Great Recession. That reasoning leaves unchallenged the theory of a natural rate of unemployment and its claim of a vertical Phillips curve. It also implies sticking with the flexible labor market agenda that is the implicit policy recommendation of Friedman's natural rate theory, and which has contributed so much to the worsening of income distribution.

According to that theory, the natural rate of unemployment is determined by labor market frictions including unions, high minimum wages, fringe benefits that raise labor costs, and employee protections. If policymakers want to bring down the natural rate, they should eliminate these features. The Blanchard – Blinder insider justification for a higher inflation target sticks with this thinking.

It is therefore important to get right the justification for a higher inflation target. The theory of the backward bending Phillips curve provides a justification, but here too it is important to get the right theory. Justifications for a backward bending Phillips curve have been provided by both Akerlof et al. [2000] and Palley [2003a]. Akerlof et al. [2000] identify near-rational expectations and the process of expectation formation as the cause of the backward bend. They argue that as inflation increases agents' expectations become fully rational, causing the Phillips curve to bend backward. Palley [2003a] identifies incomplete incorporation of inflation expectations into nominal wage settlements as the cause of the backward bend. The argument is that workers in sectors with unemployment are willing to accept some modest real wage reduction via inflation at low rates of inflation. However, they resist too rapid reductions by too high inflation and this resistance causes the Phillips curve to bend backward once inflation passes a critical threshold.

As argued in Palley [2009b, 2011], there is an important distinction between these two approaches. The Akerlof et al [2000] approach generates a Phillips trade-off by fooling workers into misperceiving inflation at low rates. It therefore lacks a welfare justification for non-zero inflation. The Palley [2003a] approach emphasizes the role of

inflation in greasing the wheels of wage adjustment in labor markets. It therefore has a welfare justification for non-zero inflation.

Furthermore, the extent of incorporation of inflation expectations into wage settlements reflects conditions of job market security and labor militancy. These conditions can change, in which case the backward bending Phillips curve will shift and the MURI will shift. Policy that fails to change in response to such shifts will be sub-optimal, but policymakers need the right theory if they are to recognize and respond to shifts. The bottom line is that it is important to have the right economic theory to arrive at the right policies and provide them with appropriate reasoning and justification.

Lastly, the rationale for targeting inflation should be absolutely clear. Here, the old distinction [Friedman, 1975] between “intermediate” and “ultimate” targets can help. Inflation is both an intermediate and ultimate target which is selected to help reach the other ultimate target that is the unemployment rate. At very low rates inflation is of minimal utility concern, and instead employment and unemployment are the real concerns. Given this, it is critical that inflation targeting (including MURI targeting) be lodged in a policy framework that explicitly states the monetary authority has a responsibility for real economic performance. Absent that, it is easy for policy to slip into thinking inflation is the only ultimate target. Once that happens, the natural tendency is to push for a lower inflation target so that policy ends up producing sub-optimal outcomes with regard to the real economy.

*Reform #7: central banks should adopt a system of asset based reserve requirements<sup>5</sup> that enables targeted discretionary counter-cyclical balance sheet controls on the financial sector. This system should apply to shadow banks and hedge funds.* A central lesson of the financial crisis and the last decade is that monetary authorities cannot manage the economy with just interest rates and an inflation target. Doing so leaves the economy exposed to build ups of financial excess. These build ups do not necessarily cause inflation, and therefore fly under the radar screen of an inflation targeting regime. However, they generate financial fragility that can undermine the economy and also leave a large “debt” footprint that retards economic activity and is difficult to escape.

That suggests inflation targeting should be supplemented by quantitative balance sheet controls that limit such build-ups. One such system of control that is both general and flexible is asset based reserve requirements (ABRR) [Palley 2000, 2003b, 2004, 2006, 2010a]. ABRR extend margin requirements to a wide array of assets held by financial institutions. Financial firms have to hold reserves against different classes of assets, and the regulatory authority sets adjustable reserve requirements on the basis of its concerns with each asset class.

ABRR provide a new set of policy instruments that can target specific financial market excess, leaving interest rate policy free to manage the overall macroeconomic situation. They can also help prevent asset bubbles by targeting over-heated asset categories, and they are particularly good for targeting house price bubbles since they can target issue of new mortgages. By requiring financial firms to retain some of their funds

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<sup>5</sup> The Federal Reserve has recently started paying interest on reserves of banks. A system of ABRR would require ending that as paying interest on reserves undermines ABRR by removing the penalty that ABRR seeks to impose on particular asset classes.

as non-interest-bearing deposits with the central bank, policymakers can affect relative returns on different categories of financial assets. If policymakers want to deflate a particular asset category they can impose higher reserve requirements on that category, thereby reducing its returns and prompting financial investors and firms to shift funds out of that asset into other relatively more profitable asset categories.

ABRR also increase the efficacy of monetary policy, especially by enabling central banks to target sector imbalances without recourse to the blunderbuss of interest rate increases. If a monetary authority is concerned about a particular type of asset bubble generating excessive risk exposure, it can impose reserve requirements on that specific asset without damaging the rest of the economy. Furthermore, an ABRR system also acts as an automatic stabilizer. When asset values rise or when the financial sector creates new assets, ABRR generate an automatic monetary restraint by requiring the financial sector hold more reserves.

Another benefit is they provide a policy tool that can encourage public purpose investments such as inner city revitalization or environmental protection by setting low (or no) reserve requirements on such investments [Thurow, 1972; Pollin, 1993].

ABRR increase the demand for reserves which will allow the Fed to exit the current period of quantitative easing and avoid future inflation. In a sense, they provide an alternative to the quantitative easing exit strategy proposed by Chairman Bernanke that involves paying interest on reserves. The latter is costly to government, and it effectively rewards banks for the crisis they caused since they now gain a new revenue stream [Palley 2010b]. In contrast, ABRR increase seignorage revenue for governments at a time of fiscal squeeze.

ABRR work best when applied uniformly to all financial firms and when linked to geographically specific assets that cannot evade the regulatory net. They are also consistent with the application of other balance sheet controls. For instance, they are a form of liquidity requirement, only they require liquidity be held against a specified asset class.

They are also consistent with capital standards that aim to discourage excessive risk-taking. However, capital requirements can be destabilizing because they are procyclical (capital is eroded in recessions, therefore potentially forcing lending cut backs that amplify the downturn). Capital standards are also less flexible in the sense of being more difficult to adjust as firms need time to raise capital.

ABRR can also stabilize exchange rates. For instance a country suffering undesirable exchange rate depreciation could impose ABRR requirements on foreign currency deposits of domestic financial institutions. That can complement Chilean style reserve requirements, designed to fight undesirable currency appreciation by imposing unremunerated reserve requirements on capital inflows.

Lastly, ABRR can help members of currency unions (e.g. countries using the Euro) to fill the policy instrument gap that arises from giving up their domestic currency and ability to determine local interest rates. Since ABRR can be implemented on a geographic basis by national central banks, domestic policy can be better set in accordance with the local conditions.

Philosophically, there is a significant difference between ABRR and insider chatter surrounding the possible need to deal with asset price bubbles. An ABRR system is designed to be part of normal standard everyday operation of monetary control, and it

is consistent with a Minsky's financial instability hypothesis that emphasizes tendencies to instability. Just as interest rate control is an ordinary policy measure, so too should be quantitative balance sheet controls. That ABRR are good at targeting asset price bubbles is a supplementary benefit. This contrasts with insider thinking which appears to frame the issue of balance sheet controls in terms of special and unusual circumstances of asset price bubbles rather than everyday management of the financial system. When it comes to everyday management of the economy the insider perspective is still stuck on interest rate control. This is reflected in the Federal Reserve's new focus on payment of interest on reserves that is designed to strengthen the Fed's control of short-term interest rate, but there is still nothing about quantitative measures aimed at controlling credit and financial asset creation.

*Reform #8: target more than just the overnight interest rate.* Over the past three decades monetary authorities have used interest rate policy to target the overnight rate. In the U.S. this rate is the federal funds rate. In the eurozone it is the European Central Bank's Lombard rate. There are both narrow technical reasons and broader reasons of macroeconomic theory for targeting additional interest rates.

To the extent that policy aims to affect long-term rates, current policy does so by shifting the entire term structure of interest rates up or down. It may also affect the term structure of interest rates via the expectations of future short term rates. Thus, according to the expectations theory of the term structure the current two-period interest rate is the product of the current short term rate and the current expected period two short term rate.

This can be expressed as follows

$$(1) i_{2,t} = [1 + i_{1,t}][1 + E_t[i_{1,t+1}]] - 1$$



$i_{2,t}$  = current two period rate,  $i_{1,t}$  = current one period rate and  $E_t[i_{1,t+1}]$  = current expectation of the next period short rate. The term structure and longer period rates are therefore managed indirectly by affecting expectations of future short period rates.

This indirect management is weak and rests on markets having the correct expectations about future period short rates. Yet, despite this weakness monetary authorities have until recently resisted targeting longer term rates. The reasoning for this is not clear, but it seems to be related to some belief that they cannot.

The Federal Reserve's policy of quantitative easing (QE) adopted after the crisis has shattered that fiction. It is now clear monetary authorities can target longer term rates and they should. Moreover, not only should they target longer term government bond rates with an eye to managing the risk free term structure, they should also target some private sector interest rates. In particular, the Federal Reserve should consider targeting mortgage backed security (MBS) interest rates because mortgage rates are so critical for the economy. One reason for targeting these rates is if the central bank feels the spread between MBS rates and government bond rates is inappropriate, suggesting the mortgage market is not working. A second reason is if the housing market is weak and threatens the economy, in which case intervention that lowers MBS rates can be a form of stabilization policy.

More generally, a Keynesian approach to monetary policy would justify going far beyond targeting just the overnight interest rate. A central message of Keynes' *General Theory* is that financial markets do not set interest rates (of which there are many) in a manner that ensures full employment. That is the Keynesian macroeconomic justification

for interest rate based monetary policy, but there is no reason to restrict policy to targeting just the overnight rate.

*Reform #9: use the bully pulpit to speak out on behalf of better overall economic policy.*

Blinder [2010a] also recommends using the bully pulpit and he proposes enlisting it as an anti-bubble weapon. What he terms “howling and scowling” can discourage behaviors by banks. Such use of the bully pulpit is entirely appropriate, but the insider take on the issue again casts it narrowly and as if the Federal Reserve’s failure to use the bully pulpit was exclusively a sin of omission.

The reality is the Federal Reserve has used the bully pulpit, but has used it asymmetrically. Chairmen Greenspan and Bernanke have in the past talked about the benefits of globalization; the need for budget austerity; the case for tax cuts, for case for social security cuts, and the damage done by the minimum wage. This is a one sided use of the bully pulpit that reflects the dominance of a particular economic ideology at the Federal Reserve.

That speaks to the need for intellectual balance, which in turn speaks for appointing some progressive Federal Reserve governors and district bank presidents who will use the bully pulpit to advocate a different economic agenda. The rationale for such an agenda is it would stabilize the economy, increase growth, and help the Fed meet its mandate.

For instance, the bully pulpit could be and should have been used to talk about the exchange rate, how an over-valued dollar makes the Fed’s job more difficult, and how China exchange rate manipulation has harmed the American economy. Similarly, the

bully pulpit should have been used to talk about the macroeconomic problems that come from worsening income distribution.

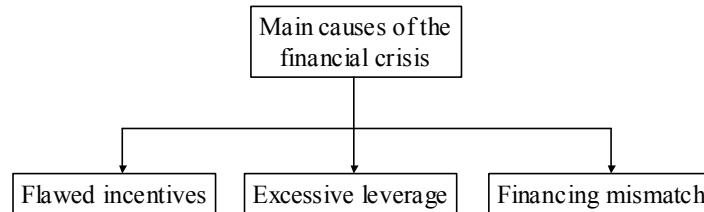
### ***Regulatory reform***

The final set of reforms concerns regulation. This is an enormous area and impossible to cover in detail, but the architecture of needed reform can be easily understood. Regulatory reform overlaps with the ABRR piece of monetary policy reform, revealing how ABRR play two roles: first as part of monetary policy that manages the level of economic activity, and second as part of the regulatory system that ensures financial stability.

The financial crisis revealed unambiguously that the financial system is currently unstable. That means regulatory reform is needed. Figure 4 identifies the three major causes of the financial crisis. The first was flawed incentives that promoted loan pushing and unsound lending. This was particularly true of mortgage lending and mortgage related products. The second was excessive leverage that created balance sheet vulnerability to small losses that wiped out equity, which in turn undermined willingness to lend to weakened firms. Excessive leverage was particularly extreme among Wall Street investment banks. The third was maturity mismatch whereby long term assets were funded with short term liabilities. This exposed the system to the equivalent of a bank run when the commercial paper (CP) market froze and lenders were unwilling to roll-over CP market loans. This problem was particularly acute among shadow banks and Wall Street investment banks. The combination of all three factors created a disastrously fragile system. Flawed incentives produced toxic loans that caused equity losses that wiped out equity owing to high leverage. That meant lenders were unwilling to roll-over CP market

loans which triggered insolvency and started a downward liquidation spiral that worsened equity losses and further reduced willingness to rollover CP loans.

Figure 4. Main causes of the financial crisis.



These structural failings can be significantly addressed by the following ten point plan (small parts of which have been implemented in the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010):

(1) Financial market regulation should be comprehensive, covering all financial institutions on the basis of function (what they do) rather than form (what they call themselves). This would create a level playing field in which the shadow banking system, Wall Street investment banks, and the structured investment vehicles (SIVs) of commercial banks would all be subject to regulation. Regulatory avoidance should not be tolerated as a means of gaining business competitive advantage.

(2) To remedy incentives to loan push lenders should be required to hold a “stub” ownership interest in all loans they originate. This would leave lenders exposed to future loan losses, thereby diminishing the “loan pushing” incentive that comes with the

“originate to distribute” lending model which has lenders selling loans they make in the secondary market.

(3) Additionally, a significant share of top management bonus pay should be in the form of long-dated stock options. This would also help remedy the “originate to distribute” model’s incentive to loan push because managers would bear some of the costs if loans subsequently went bad.

(4) To remedy the excessive leverage problem financial firms should be subject to strict leverage limits based on sharply higher equity capital requirements. This will help diminish insolvency risk by giving banks the capacity to withstand losses.

(5) To remedy the problem of bank runs, such as occurred in the CP market, lenders should be subject to reasonable liquidity requirements.

(6) It should be illegal for investors to purchase CDS insurance coverage on bonds they do not own. This would help prevent assassination of companies’ credit standings by speculators hoping to profit from a bankruptcy.

(7) The credit default swap market should be regulated and all CDS transactions should pass through market clearing arrangements. This would help prevent a repeat of the AIG situation in which the market was unaware of the extent of risk taken on by AIG that eventually rendered AIG’s insurance of no value.

(8) To reduce the maturity mismatch problem financial companies should be required to issue contingent convertible bonds (COCOs) as part of their capital structure. Such bonds automatically convert into equity when existing equity is eroded beyond a threshold by losses. The price of these bonds would also act as a “canary in the coal mine” by signaling in advance the riskiness of companies.

(9) As discussed earlier, monetary authorities should introduce a system of ABRR that supplements and reinforces interest rate policy. ABRR can be useful for both macroeconomic stabilization and stabilizing the financial system.

(10) There is need for political reform that limits political contributions from financial firms. Those contributions buy political influence and they helped drive the policies of flawed deregulation and light touch regulation of the past thirty years. That influence is also now blocking re-regulation [Johnson and Kwak, 2010].

#### **IV Conclusion: political economy and the difficulty of change**

The financial crisis and Great Recession have prompted a rethink of monetary policy and central banking among insider policymakers. The impulse to rethink is welcome, but it can also mislead because the suggested changes are small relative to the scale of monetary policy failure. In all important respects, the insider approach to reform leaves essentially unchanged both the theoretical paradigm guiding monetary policy and thinking about the institutional structures of central banking.

This lack of deep change reflects the entrenched nature of thinking that surrounds monetary policy and central banking, which in turn can be viewed as part of a larger political economy that blocks change. Politicians are disinterested in pushing for change because monetary policy and regulatory policy raise technical issues that have little resonance with the public. Voters do not lobby Congress about the Federal Reserve, and nor do they decide how to vote on the basis of Federal Reserve policy despite its critical impact on their lives.

The Federal Reserve is also protected by Wall Street and the banking and financial community whose interests it often identifies with because of institutional

capture, a tendency to a shared intellectual outlook among those working in finance and banking, and a revolving employment door between Wall Street and the Federal Reserve. Lastly, the Federal Reserve is also protected by its patronage of academia, which includes its own revolving door with university economics departments. That buys the Federal Reserve intellectual cover and legitimacy.

These political and sociological structures make it very difficult to change monetary policy and central banking, but the scale of the policy failure in connection with the financial crisis creates an historic opportunity. Not only should change alter technical policy, it should aim to transform the identity of the Federal Reserve. The Employment Act of 1946 and the Full Employment and Balanced Growth Act of 1978 charged the Federal government with securing maximum employment with price stability. However, since the appointment of Paul Volcker as Federal Reserve Chairman in 1979, the Federal Reserve has retreated from these obligations. From an outsider perspective, not only does the Federal Reserve need to recover a commitment to full employment, it needs a transformation that makes it think of itself as an agent that helps realize the “American Dream” vision of society. Not only is it entrusted with monetary policy and regulatory responsibilities, it should have a duty to shape the allocation of credit and the financial system in ways that ensure growth, full employment and a fair shake for all.

## References

- Barro, R.J., and Gordon, D.B. [1983], “A Positive Theory of Monetary Policy in a Natural Rate Model,” *Journal of Political Economy*, 91, 589 – 610.
- Bernanke, B.S. [2004] “The Great Moderation,” Remarks at the Meetings of the Eastern Economic Association, Washington DC, February 20, available at <http://www.federalreserve.gov/boarddocs/speeches/2004/20040220/default.htm>.
- [2010], “Monetary Policy and the Housing Bubble,” Speech presented at the annual meeting of the American Economic Association, Atlanta, Georgia, January 3, available at <http://www.federalreserve.gov/newsevents/speech/bernanke20100103a.htm>.
- Blanchard, O.J. [2008], “The State of Macro,” MIT Department of Economics Working Paper, August 12, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1235536](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1235536).
- Blanchard, O., Dell’Arica, G., and Mauro, P. [2010], “Rethinking Macroeconomic Policy,” Research Department, IMF, Washington DC, February, available at <http://www.imf.org/external/pubs/ft/spn/2010/spn1003.pdf>.
- Blinder, A. [2008], “Two Bubbles, Two paths,” The New York Times, June 15, available at <http://www.nytimes.com/2008/06/15/business/15view.html>
- [2010a], “How Central Should the Central Bank Be?” *Journal of Economic Literature*, Vol. XLVIII (March) 1, 123 – 133.
- [2010b], “Commentary: Rethinking Monetary Policy in Light of the Crisis,” Comments at a symposium sponsored by the Kansas City Federal Reserve Bank, August, available at <http://www.kansascityfed.org/publicat/sympos/2010/blinder-remarks.pdf>.
- [2010c], “Revisiting Monetary Policy in a Low Inflation and Low Utilization Environment” powerpoint presentation at a conference sponsored by the Boston Federal Reserve Bank, October 16, available at <http://www.bos.frb.org/RevisitingMP/presentations/Blinder.pdf>.
- Buiter, W [2008], “Lessons from the North Atlantic Financial Crisis,” paper presented at a conference on “the Role of Money markets” jointly organized by Columbia Business School and the Federal Reserve Bank of New York, May 29 – 30 and available at <http://www.nber.org/~wbuiter/NAcrisis.pdf>.
- Epstein, G. [1992], “A Political Economy Model of Comparative Central Banking,” *Review of Radical Political Economics*, 24, 1 – 30.



Friedman, B.M. [1975], "Targets, Instruments, and Indicators of Monetary Policy," *Journal of Monetary Economics*, 1, 443 – 473.

Goodfriend, M. [2007], "How the World Achieved Consensus on Monetary Policy," *Journal of Economic Perspectives*, 21 (4), 47 – 68.

International Monetary Fund, "IMF Performance in the Run-up to the Financial and Economic Crisis: IMF Surveillance in 2004 - 07," prepared by the Independent Evaluation Office of the IMF, Washington DC, February 2011, available at [http://www.ieo-imf.org/eval/complete/eval\\_01102011.html](http://www.ieo-imf.org/eval/complete/eval_01102011.html).

Johnson, S., and J. Kwak [2010], *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*, New York: Random House Inc.

Keynes, J.M. [1936], *The General Theory of Employment, Interest, and Money*, Macmillan: London.

Minsky, H.P. [1992 [1993]], "The Financial Instability Hypothesis," Working paper No. 74, The Jerome Levy Economics Institute of Bard College, New York, and published in Arestis P. and Sawyer M. (eds), *Handbook of Radical Political Economy*, Aldershot: Edward Elgar.

Mishkin, F. [2008], "How Should We Respond to Asset Price Bubbles?" Speech at the Wharton Financial Institutions Center and Oliver Wyman Institute's Annual Financial Risk Roundtable, Philadelphia, PA, May 15 available at <http://www.federalreserve.gov/newsevents/speech/mishkin20080515a.htm>

Palley, T.I., [1996 [1997]], "The Institutionalization of Deflationary Policy Bias," *Monnaie et Production*, Vol.X of *Economies et Societes*, 247-68. Republished in H. Hagerman and A. Cohen (eds.), *Advances in Monetary Theory*, Kluwer Academic Publishers.

----- [2000], *Stabilizing Finance: The Case for Asset-Based Reserve Requirements*, Report issued by the Financial Markets Center, Philomont, VA, August, available at [http://www.thomaspalley.com/docs/articles/macro\\_policy/stabilizing\\_finance.pdf](http://www.thomaspalley.com/docs/articles/macro_policy/stabilizing_finance.pdf).

----- [2003a] "The Backward Bending Phillips Curve: Wage Adjustment with Opportunistic Firms," *The Manchester School of Economic and Social Studies*, 71 (1) (January), 35 – 50.

----- [2003b], "Asset Price Bubbles and the Case for Asset Based Reserve Requirements," *Challenge*, 46 (May – June), 53 – 72.

----- [2004], "Asset Based Reserve Requirements: Reasserting Domestic Monetary Control in an Era of Financial Innovation and Instability," *Review of Political Economy*, 16 (January), 43 – 58.

----- [2006], "Monetary Policy in an Endogenous Money Economy," in Arestis and Sawyer (eds.), *A Handbook of Alternative Monetary Economics*, Edward Elgar: Cheltenham, U.K., p.242- 257.

----- [2009a [2011a]], "A Theory of Minsky Super-cycles and Financial Crises," IMK Working paper 2/2009, Institute for Macroeconomics, Dusseldorf, Germany and *Contributions to Political Economy*, 29, 1 – 16.

----- [2009b]. "The Backward Bending Phillips Curve: Competing Micro-foundations and the Role of Conflict," *Investigacion Economica*, LXVII (20), October/December 2009, 13 – 36.

----- [2010a], "Asset Price Bubbles and Monetary Policy: Why Central Banks Have Been Wrong and What Should Be Done," *Intervention*, 7(1), 91 – 107.

----- [2010b], "The Politics of Paying Interest on Bank Reserves: A Criticism of Bernanke's Exit Strategy," *Challenge*, 53 (May/June), 49 – 65.

----- [2011b], "The Economics of the Phillips Curve: Formation of Inflation Expectations versus Incorporation of Inflation Expectations," IMK Working paper 4/2011, Institute for Macroeconomics, Dusseldorf, Germany, available at [http://www.boeckler.de/pdf/p\\_imk\\_wp\\_4\\_2011.pdf](http://www.boeckler.de/pdf/p_imk_wp_4_2011.pdf).

Pollin, R. [1993], "Public Credit Allocation Through the Federal Reserve: Why it is Needed; How it Should be Done," in Dymski, G.A., Epstein, G., and Pollin, R., (eds.), *Transforming the U.S. Financial System: Equity and Efficiency for the 21st Century*, Armonk, NY:M.E.Sharpe.

Popper, K.R. [1959], *The Logic of Scientific Discovery*, New York: Basic Books.

Thurow, L. [1972], "Proposals for Rechanneling Funds to Meet Social Priorities," in Federal Reserve Bank of Boston, *Policies for a More Competitive Financial System*, conference proceedings, June, 179-89.

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