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## Article

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# Monetary policy and the punch bowl: the case for quantitative policy and wage growth targeting\*

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*Federal Reserve Chairman William McChesney Martin famously declared that the Federal Reserve 'is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up.' This paper uses the punch bowl metaphor to analyse how the Federal Reserve can improve monetary policy so as to deliver shared prosperity with greater financial stability. The problem is the party starts earlier on Wall Street than Main Street, so the Fed may remove the punch bowl before the party reaches Main Street. Ensuring Main Street attends the party requires a new recipe for the punch, new serving rules, and a new punch master. Additionally, there is a deeper problem that the current neoliberal growth model has the economy addicted to monetary punch. Resolving that requires a cure that goes beyond the punch bowl.*

**Keywords:** *monetary policy, punch bowl, quantitative regulation, asset-based reserve requirements, policy rules, wage targeting*

**JEL codes:** *E50, E52, E58*

## 1 MONETARY POLICY AND THE PUNCH BOWL

In a famous 1955 speech, William McChesney Martin, the legendary Chairman of the Federal Reserve, declared that the Federal Reserve 'is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up.'<sup>1</sup> Martin's characterization of the Fed and monetary policy is brilliant and enduring. It explains why the stock market celebrates when the Fed stays on 'hold,' and why the market is prone to a tantrum when the Fed raises interest rates. Staying on 'hold' means more punch, while raising rates may mean sobering up.

This paper uses the punch bowl metaphor to explore and illustrate monetary policy, to show what the Fed has been doing with the punch bowl, and to suggest how it might do things better in the future. The essence of the argument is that, for 30 years prior to the financial crisis of 2008, the Federal Reserve ran the economy with too much

\* This paper is a slightly more technical version of a working paper commissioned by *The Private Debt Project*. The less technical version is available at <http://www.privatedebtproject.org/view-articles.php?Monetary-Policy-and-the-Punch-bowl-The-Case-for-Quantitative-Policy-and-Wage-Growth-Targeting-29>.

1. Martin's speech was given to the New York Group of the Investment Bankers Association of America at the Waldorf Astoria Hotel, New York City, on 19 October 1955.

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unemployment and slack, contributing to wage stagnation and income inequality. That undermined the aggregate demand generation process, necessitating monetary policy fuel debt and asset price bubbles to fill the demand shortage. The combination of inequality and debt bubbles has proven disastrous, creating mountainous debt burdens. We need a new model for monetary policy (that is, a different way of managing the punch bowl) that delivers full employment with wage growth, while restraining excessive debt accumulation.

The structure of the paper is as follows. Section 2 discusses the Federal Reserve's monetary policy goals which determine who gets to attend the economic party at which the punch is being served. Section 3 discusses how the Fed should change the recipe for its monetary punch (that is, change its policy instruments). Section 4 discusses new rules for serving monetary punch (that is, new rules for setting interest rates). Section 5 discusses the significance of who serves the monetary punch (that is, central bank personnel). Section 6 concludes with a discussion of the dangers of monetary alcoholism (that is, reliance on monetary fueled boom–bust cycles to combat the contradictions of the neoliberal model).

## 2 THE CORE PROBLEM: WHO GETS TO ATTEND THE PARTY?

The punch bowl metaphor rests on the idea of an economic party. That raises the critical question of ‘who gets to attend the party’? The problem is the party tends to get started earlier on Wall Street than it does on Main Street. If the Fed decides to remove the punch bowl because of developments on Wall Street, Main Street may never get to attend. In practice, there are several different reasons why the current system operates to exclude Main Street from the party.

*Reason #1: Wall Street does not like full employment and works to obstruct it because full employment is associated with a lower profit share* There is good evidence (Nikiforos/Foley 2012) that the profit share is concave (shaped like an upside-down saucer) with respect to economic activity, as illustrated in Figure 1. When economic activity increases (that is, the unemployment rate decreases), the profit share initially increases as productivity increases and firms may also have a little bit more pricing power in goods markets. However, beyond a certain point, further increases in economic activity (that is, further decreases in the unemployment rate) cause a fall in the profit share. That is because the boot shifts to the other foot, and increased economic activity increases the bargaining power of workers.

This pattern generates three different economic zones. The first is a zone of misery where both Wall Street and Main Street would like stronger economic activity; the second is a zone of bliss for Wall Street where profits are at a peak and Wall Street would like the Fed to hit the brakes; and the third is a zone of bliss for Main Street that is associated with full employment. In the misery zone the stock market celebrates good economic news. In Wall Street's bliss zone, the stock market prefers weaker economic news that is strong enough to keep the economy expanding slowly, but weak enough to keep the Fed on hold. That combination generates the so-called ‘bad news bull’ phenomena. However, if the economy shows signs of surging into Main Street's bliss zone, Wall Street is willing to accept higher interest rates to block that outcome.

*Reason #2: The switch to low inflation targeting has locked-in Wall Street's zone of bliss* In the 1970s the economics profession switched to focusing on inflation on grounds that monetary policy could not affect employment and output in any systematic way

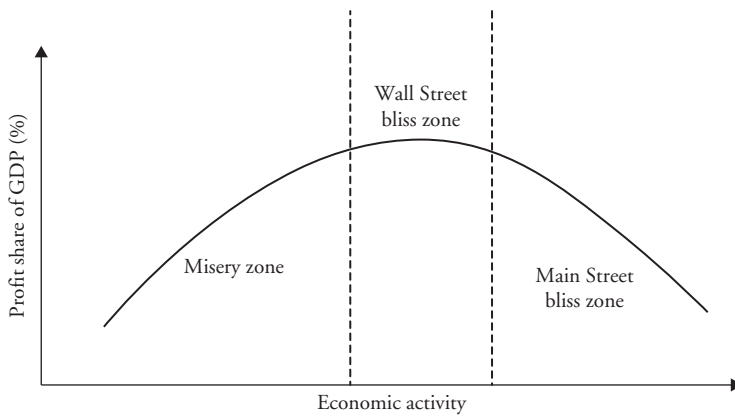


Figure 1 The profit share over the business cycle

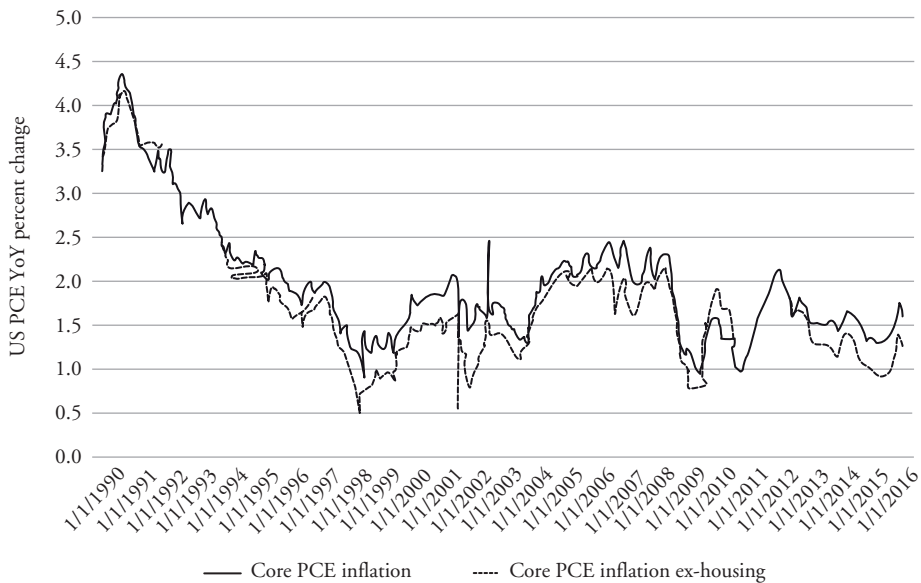
(Friedman 1968; Lucas 1972). Initially, that resulted in a new consensus that monetary policy should aim for price stability (zero inflation). However, a zero inflation target tended to land the economy in the misery zone, so the target was revised up and price stability was redefined as 2 percent inflation. That 2 percent target squarely lands the economy in Wall Street's bliss zone. Given the Fed's adoption of a 2 percent inflation target, that has institutionalized policy conduct whereby the punch bowl is left on the table until the economy is in Wall Street's bliss zone, and it is removed once the economy starts drifting into Main Street's bliss zone.

*Reason #3: Asset price inflation further locks-in Wall Street's target and amplifies the punch bowl problem* Financialization has promoted asset price inflation and credit booms, which further encourages the Fed to stop short of full employment in two ways. First, asset price inflation and debt-financed spending give the Fed reason to raise interest rates to guard against financial fragility and price bubbles that could do economic damage if they burst. Second, asset price inflation can contribute significantly to general inflation via the cost of 'housing,' which makes up 17.5 percent of the personal consumption expenditure deflator (PCE) – which is the Fed's preferred measure of inflation. When house prices go up, that tends to increase the cost of housing, raising general inflation. This is evident in Figure 2 which shows core PCE inflation with and without housing costs from 1990 to 2016.<sup>2</sup> Periods of house price inflation (1997–2008 and 2012–2016) are associated with core PCE inflation being higher than core PCE inflation ex-housing.<sup>3</sup>

We can now put the pieces together. First, asset price inflation raises general inflation, pushing the economy closer to the 2 percent target and triggering the Fed to remove the punch bowl. Second, asset price inflation creates financial fragility, which may also trigger

2. My thanks to Jakob Fiedler for this information and for pointing out this recurrent pattern.

3. The phenomenon is much more pronounced for the consumer price index (CPI) in which the housing component is larger and equal to one-third. The CPI refers to housing costs as the cost of shelter which consists of 'Rent of primary residence (Rent)' and 'Owners' equivalent rent of primary residence (OER)'. OER is an assessment of the rental value of homes occupied by owners. When house prices go up, that tends to increase both components of the cost of shelter, raising general inflation.



Source: Bureau of Economic Affairs and Jakob Fiedler.

Figure 2 Core PCE inflation with and without housing costs, 1990–2016

the Fed to remove the punch bowl. Third, because asset markets are speculative and forward looking, asset price inflation tends to show up earlier in the cycle. Consequently, because of its 2 percent inflation target and fear of financial excess, the Fed has reason to remove the punch bowl before the economy reaches Main Street's bliss zone.

*Reason #4: The Federal Reserve is captured by interests that favor Wall Street* The above policy bias is hardwired within the Federal Reserve's institutional governance structure which privileges commercial banks and the financial sector (Palley 2015). It is also embedded via the institutional culture and personnel make-up of the Board of Governors and the professional economics staff. Central bank culture is predisposed toward finance, while the professional economics staff consist almost exclusively of mainstream economists who have substantially abandoned the Keynesian idea that monetary policy can systematically affect long-run real economic outcomes.

In effect, the monetary policy framework of the past three decades has had the Federal Reserve pursue 'stop-go' interest rate policy, raising interest rates to tamp down Wall Street exuberance and slow the economy before it reaches full employment, and then lowering them again to escape recessions. That framework contributed to the accumulation of imbalances that generated the financial crisis of 2008 and the ensuing stagnation. Stopping the economy short of full employment contributed to wage stagnation and income inequality that undermined the aggregate demand generation process: lowering rates jump-started the economy by starting a new cycle of borrowing, that cumulatively led to the build-up of massive debt burdens.

That speaks to a need for a new policy framework which allows the economy to reach full employment, so that wages can grow and perform their historic role as the engine of demand growth. It must also tame Wall Street to prevent financial instability, but without putting the brakes on employment and the real economy.

In terms of the punch bowl metaphor, that requires a new policy recipe, new serving rules, and a new punch master. The economic party tends to start earlier on Wall Street, and also to get rowdy on Wall Street before it has even started on Main Street. The Fed's current serving rules have it taking away the punch bowl before Main Street gets to attend the party. The rules must change to enable the Fed to take away the punch bowl from different groups at different times. It should first take away the punch bowl from Wall Street, and only take away the punch bowl from Main Street when the party has reached Main Street. That would help avoid the two great failures of recent decades: wage stagnation and credit bubbles.

### 3 A NEW RECIPE: ADDING QUANTITATIVE POLICY TO THE MIX

Solving the problem of the party beginning at different times on Wall Street and Main Street requires the Fed to have additional policy instruments. On Wall Street, the problem is asset price inflation and overheated financial markets: on Main Street, the problem is an overheated economy. Wall Street and Main Street represent different targets, and policy-makers need at least two different policy instruments to hit both targets. The challenge is to deter financial excess on Wall Street without undermining shared prosperity on Main Street.

The solution is to supplement interest rate policy with quantitative monetary policy, in the form of margin requirements and asset-based reserve requirements. Quantitative policy can then be used to manage Wall Street, leaving the interest rate free to manage Main Street (Palley 2005; 2006; 2010; 2013). Metaphorically speaking, that would yield a new recipe for the monetary policy punch. Wall Street would be served quantitative policy punch, while Main Street would be served interest rate policy punch.<sup>4</sup>

Margin requirements refer to the share of credit-financed equity purchases that an investor must finance with their own cash. Raising the margin requirement makes credit financed purchases of stock less attractive because investors must come up with more of their own cash. Varying margin requirements is therefore a way of modulating stock market speculation. The Federal Reserve actively used margin requirements through to 1974, but since then it has neglected this policy tool and the requirement has been fixed at 50 percent. Restoring active use of margin requirements can provide a tool for targeting specific financial markets without taking down Main Street.

Asset-based reserve requirements (ABRR) are a much broader form of control and require financial firms to hold liquid reserves against different classes of assets (Palley 2000; 2003a; 2004; 2014). The central bank sets adjustable reserve requirements on the basis of its concerns with each asset class. By adjusting the reserve requirement on each asset class, the central bank can change the return on that asset class, thereby affecting incentives to invest in the asset class.

ABRR can provide a broad new set of policy instruments that address specific financial market excesses by targeting specific asset classes, leaving interest rate policy free to manage the overall macroeconomic situation. ABRR are especially useful for preventing asset price bubbles, as reserve requirements can be increased on overheated asset categories. For instance, a house price bubble financed by banks can be surgically targeted by increasing

4. There is also a case for a financial transaction tax (FTT). However, a FTT is policy instrument designed to reduce speculative trading and raise tax revenue efficiently (Palley 1999; 2001). As such, it is a measure to shrink Wall Street and the size of the financial sector, rather than being a monetary policy instrument used for purposes of counter-cyclical stabilization policy.

reserve requirements on new mortgages. That makes new mortgages more expensive without raising interest rates and damaging the rest of the economy.

In addition to being useful for controlling financial instability, ABRR have several other major benefits. First, ABRR have an automatic stabilizer dimension. As asset prices rise, financial institutions would have to come up with additional reserves to back them. Conversely, when asset prices fall, the ABRR falls so that firms receive an automatic injection of available liquidity.<sup>5</sup>

A second benefit of ABRR is that they increase the demand for reserves, which will be helpful as central banks seek to exit the current period of quantitative easing to avoid future inflation. By introducing and gradually raising asset reserve requirements, central banks can implement a form of reverse quantitative easing that absorbs liquidity and smoothly transitions the financial system to a new, sounder regime. Furthermore, it will also yield fiscal benefits by reducing the need to pay interest on excess reserves as financial institutions will be obliged to hold reserves to back their assets.

A third benefit is that ABRR can be used to tackle the problem of ‘too big to fail’ (TBTF). TBTF poses financial stability threats, distorts competition by unfairly advantaging large banks, and poses political threats from the size of banks. ABRR can be used to shrink banks by imposing higher requirements on TBTF firms, giving them an incentive to voluntarily shrink themselves. There may be no need to break up TBTF banks. Instead, judicious application of ABRR can get the market to solve the problem on its own.

Lastly, ABRR can be used to promote socially desirable investments and ‘green’ investments that are needed to address climate change (Thurow 1972; Pollin 1993). Loans for such investment projects can be given a negative reserve requirement that can be credited against other reserve requirements, thereby encouraging banks to finance those projects in order to earn the credit.

In sum, ABRR provide a comprehensive framework for collaring Wall Street and the financial sector, while leaving interest rates free to manage Main Street and the overall economy. If the central bank deems the party on Wall Street is becoming excessive, it can adjust its quantitative instruments to tamp down that excess without ending the party before it has reached Main Street.

#### 4 NEW SERVING RULES

Adding quantitative policy to the monetary policy mix can provide the Federal Reserve with a way of controlling Wall Street without disinviting Main Street. However, the Fed will still need rules for deciding when to remove the punch bowl from Main Street, and that suggests the following new alternative serving rules.

*New rule #1: a 3 percent inflation target* First and foremost, the Fed should raise its inflation target to 3 percent, or even as high as 5 percent. The current 2 percent target is a cap that inevitably keeps the economy in Wall Street’s bliss zone, and prevents the party from reaching Main Street.

The 2 percent target reflects a view that monetary policy cannot permanently impact output and employment, and only impacts inflation. Moreover, since inflation is undesirable, it should be kept low and stable. That view derives from the new classical

5. This automatic stabilizer property operates in a fashion similar to margin calls. The difference is margin calls are destabilizing since investors must pledge additional cash when prices are falling, which forces liquidation. ABRR work in reverse and are stabilizing.

macroeconomics of Milton Friedman (1968) and Robert Lucas (1972; 1976), which took hold of policymakers' imaginations in the 1970s and asserts there is a 'natural' rate of unemployment.

The inflation target is not set in stone. In the 1990s, the target was price level stability which translates into a zero inflation target. When that target proved to generate too much unemployment, the Fed raised the target to 2 percent and redefined price stability as stable low inflation. In 1978, when the Humphrey-Hawkins Full Employment and Balanced Growth Act (H.R. 50) was passed, the original intention was a 3 percent inflation target. However, 1978 was a time of high inflation and Republicans would only support the legislation if the long-term target was defined as 0 percent inflation. It is time to escape that political legacy.

There is strong macroeconomic evidence and argument for why slightly faster inflation can lower unemployment (Tobin 1972; Palley 1994; 1997a; 1998; 2003b; 2012a; Akerlof et al. 1996; 2000). The logic is that faster inflation is associated with higher prices and wages in sectors at full employment relative to those with unemployment, which shifts demand to sectors with unemployment.

Former IMF chief economist Olivier Blanchard (Blanchard et al. 2010) has also called for raising the inflation target to 4 percent. His rationale is a higher inflation target would result in higher normal nominal interest rates (normal nominal interest rate = inflation target + normal real interest rate), leaving more room to lower the nominal interest rate in the event of recession. Though Blanchard remains stuck in the New Classical macroeconomics of Friedman and Lucas (that is, there is a natural unemployment rate that inflation does not affect) and his justification for a higher inflation rate is non-Keynesian, he still arrives at the policy conclusion to raise the target inflation. That is good enough. The goal is a higher inflation target, and the more that economists of different persuasions concur regardless of reasoning, the better.

*New rule #2: real wage growth targeting* Using quantitative policy to manage Wall Street and interest rate policy to manage Main Street still means the Federal Reserve needs rules as to when to lower and raise nominal interest rates. Currently, interest rate policy is widely framed in terms of a monetary policy rule – often referred to as a 'Taylor rule' after a policy rule proposed by John Taylor (1993). That framework can be used to understand the need for change.

But first, a disclaimer. There is an extensive literature on the distinction between 'rules' and 'discretion' in monetary policy decisionmaking (Fischer 1990). That framing can easily and mistakenly present rules and discretion as opposites. Instead, monetary policy rules should be viewed as providing a framework for assisting the exercise of discretion. Rules are not a substitute for discretion, and it would be the height of folly to set interest rate policy according to an algebraic formula. However, there is a legitimate place for rules as part of informed discretionary deliberations.<sup>6</sup>

Reflecting current theory, the standard Taylor rule suggests interest rates be raised when inflation is above target (lowered when below) and when output is above potential (lowered when below). Mathematically, the standard Taylor rule is given as follows:

6. Taylor (1993: 213) was supportive of this informed discretion perspective, writing that his purpose was 'to study the role of policy rules in a world where simple, algebraic formulations of such rules cannot and should not be mechanically followed by policymakers.' However, since the financial crisis of 2008, Taylor (2010) appears to have shifted to a position where he believes rules should be followed mechanically as he blames the Federal Reserve for the crisis owing to its failure to raise rates as recommended by his rule in the period 2001–2005.



$$i_t = \pi_t + r_t^* + \alpha_\pi[\pi_t - \pi_t^*] + \alpha_y[y_t - y_t^*], \quad (1)$$

where  $i_t$  = nominal interest rate,  $\pi_t$  = inflation rate,  $r_t^*$  = estimated full employment real interest rate,  $\pi_t^*$  = inflation target,  $y_t$  = log of GDP,  $y_t^*$  = log of potential output. The coefficients,  $\alpha_\pi$  and  $\alpha_y$ , determine the sensitivity of interest rates in response to deviations from target inflation and potential output. The usual formulation is to set  $\alpha_\pi = \alpha_y = 0.5$ , reflecting the equal importance given to hitting the inflation target and potential output. To operationalize the rule the central bank needs to estimate the equilibrium real interest rate ( $r_t^*$ ), estimate potential output ( $y_t^*$ ), and pick an inflation target ( $\pi_t^*$ ).<sup>7</sup>

Given actual inflation ( $\pi_t$ ) and output ( $y_t$ ), the rule then determines the recommended nominal interest rate setting ( $i_t$ ). When inflation is above target, the central bank raises its policy interest rate to reduce demand and lower inflation. Likewise, the central bank also raises its policy interest rate when the economy is running hot and above potential output.

The rule provides a guide for setting the nominal interest rate. It has the interest rate responding positively to both the output and inflation gap, but the inflation response is particularly strong. A one-point increase in inflation raises the nominal rate by  $1 + \alpha_\pi$  so that the real interest rate rises. The logic is the rise in the real interest rate actively deters inflation by lowering aggregate demand, whereas if the nominal rate only rose equal to inflation the real interest rate and aggregate demand would be unchanged.

The Taylor rule seeks to anchor policy to the real economy by reference to potential output or the natural rate of unemployment. Both of these real anchors are unobserved variables that need to be estimated, and the variance of estimates is large for both. An alternative real anchor is real wage growth, which should match the rate of labor productivity growth.

A real wage growth targeting policy rule might take the form:<sup>8</sup>

$$i_t = \pi_t + r_t^* + \alpha_\pi[\pi_t - \pi_t^*] + \alpha_w[w_t - w_t^*]. \quad (2a)$$

According to the rule, the monetary authority should raise its nominal interest rate whenever actual real wage growth is above target real wage or real compensation growth, with the target being set at trend productivity growth (which is currently held to be 1.0–1.5 percent per annum). The relative size of the coefficients  $\alpha_\pi$  and  $\alpha_w$  would depend on policymakers' views

7. An alternative rule specification involves using the full employment unemployment rate – the so-called natural rate of unemployment ( $u_t^*$ ) – instead of potential output. Okun's law provides a relation between unemployment ( $u_t$ ) and output given by  $[u_t - u_t^*] = \gamma[y_t - y_t^*]$ . Substituting this relation then yields an unemployment-based Taylor rule given by  $i_t = \pi_t + r_t^* + \alpha_\pi[\pi_t - \pi_t^*] + \alpha_y[u_t - u_t^*]/\gamma$ . Now, the nominal interest rate is set on the basis of the gap between the actual unemployment rate ( $u_t$ ) and the estimated natural unemployment rate ( $u_t^*$ ). A second alternative rule is to set  $\alpha_y = 0$  and increase the magnitude of  $\alpha_\pi$ . The logic here is that the Phillips curve delivers a positive relation between inflation and output so that responding to output is implicitly the same as responding to inflation.

8. The modified interest rate rule could also include potential output, as follows:  $i_t = \pi_t + r_t^* + \alpha_\pi[\pi_t - \pi_t^*] + \alpha_w[w_t - w_t^*] + \alpha_y[y_t - y_t^*]$ . In that case, the monetary authority would condition its policy response on the basis of signals from both the labor market (real wage growth) and the level of output (deviation from potential). Such a hybrid rule would be less of a departure from the standard Taylor rule. In the standard rule the coefficients are  $\alpha_\pi = \alpha_w = 0.5$ . In the hybrid rule they might be  $\alpha_\pi = \alpha_w = \alpha_y = 1/3$ . That specification would diminish the monetary authority's policy response to changes in inflation and increase its response to real economic developments. Alternatively, the settings might be  $\alpha_\pi = 1/2$  and  $\alpha_w = \alpha_y = 1/4$ , which would leave the response to inflation unchanged, but allow two signals about the real economy to impact policy.

about whether inflation or real wage growth provide a better signal about the state of the economy, if real wage growth is a better signal that speaks to increasing the size of  $\alpha_w$ , and vice versa. It would also depend on policymakers' risk preferences. If policymakers are more risk-averse with regard to overshooting their inflation target, that speaks for a larger value of  $\alpha_\pi$ . If they are more risk-averse with regard to overshooting their real wage growth target, that speaks for a larger value of  $\alpha_w$ .

A real wage growth based interest rate rule would yield many benefits. First, there is tremendous uncertainty regarding estimates of full employment, which means there is a perennial danger of mistakenly tightening monetary policy before reaching full employment. With a wage based rule, policymakers would estimate trend labor productivity growth and then wait for the labor market to send a wage signal that the economy had reached full employment. The economic logic is that at full employment, real wages should grow with labor productivity to maintain labor's income share. Below full employment real wage growth tends to be a bit slower because of worker bargaining power weakness: above, it tends to be a bit faster because of worker bargaining power strength.

Second, including real wage growth in the policy rule can help diminish mistaken reaction to inflation caused by house price inflation. Real wage inflation and target real wage inflation are defined as:

$$w_t = w_t - \pi_t \quad (2b)$$

$$w_t^* = w_t^* + \pi_t^*, \quad (2c)$$

where  $w_t$  = nominal wage growth, and  $w_t^*$  = target nominal wage growth implied by the inflation and real wage growth targets. Substituting (2b) and (2c) into (2a) yields a rule that is restated in terms of nominal wage targeting as follows:

$$i_t = \pi_t + r_t^* + \alpha_\pi[\pi_t - \pi_t^*] - \alpha_w[\pi_t - \pi_t^*] + \alpha_w[w_t - w_t^*]. \quad (2d)$$

According to equation (2d) there are now separate policy responses to inflation and nominal wage inflation. The response to inflation is  $1 + \alpha_\pi - \alpha_w$ , which is less than the standard rule response of  $1 + \alpha_\pi$ . That shows how targeting real wage growth diminishes the interest rate response to inflation, while strengthening the response to cost-push inflation stemming from rising nominal wages. That can improve policy timing. First, it helps diminish the premature tightening response to inflation caused by house price inflation. Second, it specifically responds to nominal wage inflation that can trigger generalized inflation, and which is only likely to develop when labor markets are tight and real wage growth starts to systematically outstrip labor productivity growth.<sup>9</sup>

Furthermore, the above policy frame makes sense in today's globalized economy. The components of inflation, due to weather, global commodity shocks, and productivity growth, are either entirely or largely beyond the reach of monetary policy. Contrastingly, the component due to wage inflation can be influenced via policy's impact on macroeconomic conditions.

Third, basing policy on real wage growth can help fix a major economic failing, which is wage stagnation and rising income inequality. Lack of adequate wage growth significantly explains secular weakness of demand growth. Directly conditioning interest rate policy on real wage growth will help remedy that.

9. In principle, the interest rate rule given by equation (2a) could decompose inflation into separate weighted components of non-core inflation, shelter inflation, and core inflation  $x$ -shelter. The policy rule could then attach different response coefficients to the different elements, with some response coefficients even being zero.

Fourth, by helping guard against mistaken policy tightening based on incorrect estimates of full employment, wage growth targeting will benefit all workers. However, it will do this especially to economically disadvantaged groups who lack labor market bargaining power and are frequently subject to discrimination. The evidence from the last two business cycles shows full employment is the best spur to wage growth and the best way of ensuring workers get a share of productivity growth (Schmitt 2013). The data also show that during these periods the wage gains of those at the bottom – which disproportionately means African Americans, Latinos, and women – strengthened the most.

Fifth, like the standard Taylor rule, the wage growth targeting rule responds to counter deflation. However, the standard rule only responds to price deflation, whereas the wage growth rule also responds to nominal wage deflation. The relative response depends on the size of the coefficients  $\alpha_\pi$  and  $\alpha_w$ .

Sixth, there are political economy benefits to singling out real wage growth and attaching a target to it, as is done for inflation. The public and politicians know the inflation target number, which strongly encourages policy compliance. Announcing a real wage growth target would do the same for wage growth. The Federal Reserve would be publicly committed to the target and its actions would need to be consistent with that commitment. Furthermore, any change of the wage target would need explanation.

For the past three decades, it has been easy to give monetary policy an anti-inflation bias. First, inflation hawks could assert the phantom of higher inflation was just around the corner. Second, the large variance of estimates of the natural rate of unemployment could support claims that the economy was already past full employment. Adopting a real wage growth policy rule can substantially close those loopholes by requiring proof before action.

In some respects, the Federal Reserve has already started to move in the above direction due to Chairwoman Yellen conditioning policy on her ten-indicator labor market dashboard which includes nominal wage growth.<sup>10</sup> However, nominal wage growth is just one of ten indicators so it has a small weight, and the dashboard is an informal tool that should be supplemented by formally articulating a wage growth interest rate policy rule.

*New rule #3: exchange rate targeting* A third change is to add the real exchange rate ( $e$ ) to the interest rate rule and have the Fed lower rates when the exchange rate is strong relative to its warranted level, and raise rates when it is weak, as follows:

$$i_t = \pi_t + r^*_t + \alpha_\pi[\pi_t - \pi^*_t] + \alpha_w[w_t - w^*_t] - \alpha_e[e_t - e^*_t]. \quad (3)$$

Alternatively, the rule could have the Fed set an exchange rate band around the warranted rate, and only adjust its policy interest rate when the exchange rate is outside the band.<sup>11</sup>

There are several advantages to this. First, globalization has rendered the exchange rate an even more critical variable by increasing international economic integration, making manufacturing and the economy more sensitive to exchange rate effects. Moreover, the last four decades have seen several episodes of extended dollar overvaluation that have caused large trade deficits and done great damage to US manufacturing. Having the

10. Yellen's dashboard indicators are: official unemployment rate (U-3), broad unemployment rate (U-6), monthly job creation, involuntary part-time rate, long-term unemployment rate (share of unemployed), change in participation rate, quit rate, hire rate, job opening rate, and nominal wage growth.

11. The warranted exchange rate is the fundamental equilibrium exchange rate (FER) that delivers the target trade deficit (see Williamson 1994).

exchange rate in an interest rate policy rule would have the Federal Reserve policy explicitly counter such periods of overvaluation, thereby diminishing the dislocation effects of exchange rate fluctuations.

Second, exchange rate appreciation generates unwanted price and output effects. Having policy respond to the exchange rate can neutralize the initial impulse rather than waiting till the damage has been done (in the form of those unwanted effects) to respond. That improves the timing of policy response.

Third, once again, there are political economy benefits from incorporating the exchange rate into an interest rate rule. It would elevate the exchange rate as a policy variable, helping diminish the neglect of the last several decades. In particular, the exchange rate would now become an explicit variable of Federal Reserve policy consideration and open public discussion, in contrast with the current system that keeps it under the lock and cover of the Treasury.

That raises an important question of whether such a policy rule would be legitimate as the US Treasury has formal legal authority for exchange rate policy. I would strongly argue it would be legitimate as the Fed would not be targeting the exchange rate. Instead, it would be using the exchange rate to target the nominal interest rate. In a manner of speaking, it already does that when it factors the condition of manufacturing into its interest rate decision. Since manufacturing is impacted by the exchange rate, taking account of manufacturing's condition implicitly factors the exchange rate into policy. Having a rule would just do so explicitly.

## 5 A NEW PUNCH MASTER: PERSONNEL IS POLICY

So far the focus has been the policy recipe and serving rules. The punch master, who mixes and serves the policy punch, also matters. Monetary policy is made by policymakers, and it matters who those people are because policy is impacted by policymakers' beliefs about the economy, whether policy is effective and feasible, and what constitute policy priorities.

One longstanding concern is undue and inappropriate policy influence of commercial banks. That influence derives from the ownership stakes commercial banks have in the district Federal Reserve banks, and it operates through those district banks.<sup>12</sup>

A second concern is lack of diversity of representation within the Federal Reserve governance hierarchy, which is dominated by bankers and business and professional elites, who tend to be white and male. Correspondingly, the likes of ordinary people, people of color, unions, and labor interests are under-represented.

Together, the influence of commercial banks and lack of diversity tilts Federal Reserve policy in favor of big business and finance (that is, it delivers policies that peg the economy in Wall Street's bliss zone). Policy is impacted by who is in charge (that is, who is the punch master), which makes governance and representation critical issues for the Federal Reserve and monetary policy.

That speaks to the need for a new punch master. As regards governance, the privileged position of the commercial banks should be eliminated by nationalizing the Federal Reserve system and ending commercial bank ownership. District Federal Reserve bank presidents should be nominated by the President of the United States and confirmed by the Senate. Commercial banks should contribute to monetary policy via advisory

12. Palley (2015: 6) argues that the influence is also explained by the capture theory regulation, whereby the regulated (that is, the commercial banks) gain control of the regulators (that is, the Federal Reserve). The mechanism for this is the 'revolving door' system and political contributions from commercial banks to politicians, who in return appoint 'friendly' regulators.

councils. As regards diversity, this requires appointing more ordinary people, people of color, and trade unionists to the governing boards of the district banks. It also requires actively seeking out the policy input of such persons and groups.

Additionally, there is a deeper problem regarding the Federal Reserve's staff of professional economists. That staff exerts a powerful influence on monetary policy via the forecasts and policy advice it gives to the ultimate policymakers, and Federal Reserve policymakers often graduate from the ranks of the professional staff. In effect, the staff influences the punch recipe and when to serve it. That speaks to the need to expand representation of different economic points of view within the staff, which is essential to avoid intellectual closed-mindedness and group-think.

The economics profession is in denial of these issues. First, it succumbs to the view that economists can have access to a single 'true' view (that is, theory) of the economy. Second, it peddles the notion of 'independent central banks' which are supposed to free policymaking of preference bias regarding economic goals (for example, the inflation–unemployment mix). However, policymakers inevitably bring their own subjective preferences and beliefs to the policy table, which influences policy. That means there is no such thing as a central bank that is free of preference or belief bias (Palley 1997b). It is possible to create an administrative process that puts distance between central bank decisionmaking and the executive and legislative branches of government, but the preferences and economic beliefs of the punch master remain a critical matter that must be confronted.

## 6 PUNCHAHOLICS ANONYMOUS: MORE PUNCH IS NOT THE ANSWER TO SERIAL BOOM–BUST HANGOVERS

Monetary policy easing has historically been the standard response to cyclical busts. However, recent business cycle experience suggests the need for a qualified reconsideration. The problem is the Fed has bought into the neoliberal model of economic growth in which demand growth is driven by asset price inflation and debt (Palley 2012b), and that buy-in may have gotten the economy hooked on punch. In that case, more punch alone is not the answer to hangovers caused by unstable credit-driven boom–bust cycles. Instead, the answer must also include replacement of the economic growth model.

The inauguration of President Ronald Reagan in January 1981 is widely viewed as formally marking the replacement of the Keynesian economic regime, which had ruled since the end of World War II, with a neoliberal regime.<sup>13</sup> In the Keynesian regime, demand growth had been fueled by wage growth, which was tightly tied to productivity growth and supported by full employment. The neoliberal regime severed the link between wages and productivity, in part by abandoning the policy commitment to full employment. In place of wage growth, demand growth was now fueled by debt and asset price inflation.

The shift to neoliberalism was marked by longer business cycles of reduced amplitude, disinflation, and widening income inequality. The improved cyclical performance (1981–2007) was labeled by economists as the 'Great Moderation.' The argument was that it was the result of more 'flexible' labor markets, domestic deregulation, globalization, and a shift in monetary policy to low stable inflation targeting implemented by an independent central bank guided by a credible policy rule.

The Great Moderation came to a crashing end with the financial crisis of 2008, which has been followed by prolonged stagnation. It is now clear that the Great Moderation was

13. In fact, the transition to neoliberalism had begun in the late 1970s under the Carter administration, and President Reagan's inauguration is better understood as the sealing of that transition.

*Table 1 Brief history of the federal funds interest rate, June 1981–December 2008*

	High	Low
June 1981	19.10%	–
December 1992	–	2.92%
November 2001	6.51%	–
May 2004	–	1.00%
July 2007	5.26%	–
December 2008	–	0.16%

Source: Palley (2012b: 42).

constructed on a false narrative. The reality was deregulated labor markets and globalization served to sever the wage–productivity link and increase income inequality. However, the adverse impact on aggregate demand generation was hidden by financial deregulation and a rising profit share that fostered asset price inflation and a 30-year credit bubble.

The Federal Reserve also played a critical role in fostering the Great Moderation narrative. As illustrated in Table 1, the Federal Reserve lowered its policy interest rate every time the economy fell into recession, and that policy continued until the interest rate hit zero (the so-called zero lower bound or ZLB) after the financial crisis. In effect, every time the economy got drunk and suffered a hangover, the Fed delivered more punch to cure the hangover. That contributed to the delusion that all was well.

Immediately after the financial crisis it looked as if the ‘Great Moderation’ policy paradigm was dead. However, it has been revived theoretically by Paul Krugman’s ZLB economics (Krugman 1998; Eggertsson/Krugman 2012), which seeks to explain stagnation as due to the zero bound on nominal interest rates. According to ZLB economics, if only interest rates could fall lower, the problem would be solved. In effect, the ZLB is interpreted as an obstacle preventing the punch master from serving more punch to cure the hangover once again.

ZLB economics has served to foster measures such as quantitative easing (QE) and negative interest rate policy (NIRP), which aim to circumvent the ZLB obstacle and enable the punch master to ladle out another mega-serving of punch. However, what did not work before is unlikely to work this time. History is likely to repeat, in outline if not in detail (Palley 2016).

The Federal Reserve’s embrace of the neoliberal model has contributed to a dilemma in monetary policy that resembles the position of the alcoholic. After a binge, more punch can make the alcoholic (that is, the economy) feel better, but only at the cost of increasing dependence and lengthening future blackouts. In terms of the economy, the cure is a new economic growth model that eliminates the need for ever-greater servings of monetary punch. That is a task which goes far beyond the confines of standard monetary policy discussion, and it is one the Federal Reserve has avoided confronting. In the meantime, and as a first step, we should get the Federal Reserve to change the way it mixes, serves, and manages the monetary policy punch bowl.

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