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BOOK REVIEWS

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EDITOR'S NOTE

The Federal Reserve Act was passed on December 23, 1913. It was designed to provide an elastic currency that would respond to the needs of trade. There was nothing in the Act about price stability, interest rates, or full employment. The expectation was that the United States would continue to define the dollar in terms of gold, and that the operation of the international gold standard would ensure long-run price stability.

It was widely accepted that “the highest moral, intellectual, and material development of nations is promoted by the use of money unchanging in its value,” as declared by the U.S. Monetary Commission of 1876. The classical gold standard ended with the First World War, and, in August 1971, the dollar became a pure fiat money when President Richard Nixon closed the gold window.

Today the Federal Reserve System is much different than a century ago. How well has the Fed performed? Was the Fed a good idea? Can we do better? To address those and related questions, the Cato Institute brought together some of the most respected monetary scholars and policymakers at its 31st Annual Monetary Conference in Washington, D.C., on November 14, 2013. The papers from that conference are featured in this volume.

In the lead article, Charles I. Plosser argues for a rules-based monetary policy and a “limited central bank” devoted to the primary task of safeguarding the dollar’s long-run purchasing power. Jerry L. Jordan considers the lessons learned from a century of U.S. central banking, while George A. Selgin provides a detailed account of how the Fed has twisted its true record. Athanasios Orphanides, like Plosser, makes a strong case for a “price stability mandate.”

Lawrence H. White examines the Fed’s “troubling suppression of competition from alternative monies” using the examples of the liberty dollar and e-gold. Legal restrictions are also noted by Richard H. Timberlake in his article on “clearing house currency.”

Scott B. Sumner advocates rules rather than discretion in the conduct of monetary policy. His preferred rule is to target nominal GDP rather than inflation or the price level.

Since the Panic of 2007, the Fed's balance sheet and power have expanded dramatically. The Fed's ultra-low interest rates and quantitative easing have distorted capital markets, increased risk taking, politicized credit allocation, monetized government debt, and allowed the government to expand its size and scope. Moreover, the Fed's regulatory powers have increased uncertainty and damped the disciplinary forces of private free markets.

Rep. Jeb Hensarling, the chairman of the House Financial Services Committee, pledges to conduct hearings to hold the Fed accountable and help improve its performance. John A. Allison draws on his experience as chairman and CEO of BB&T Corporation to discuss the unintended adverse consequences of top-down financial regulation as opposed to the spontaneous positive results of market-based discipline, given the appropriate institutional framework making individuals responsible for their actions. Kevin Dowd and Martin Hutchinson look at the institutions that helped mitigate moral hazard and harmonize financial markets in the pre-Fed era and compare them to changes in the financial architecture since the creation of the Fed. Their main conclusion is that competitive markets bound by laws of contract and an overarching rule of law that protects private property rights provide incentives to manage risk and avoid the problem of “too big to fail”—a central bank and hordes of government regulators do not.

Rep. Kevin P. Brady, chairman of the Joint Economic Committee, makes the case for a bipartisan Centennial Monetary Commission to examine the Fed's history and consider alternatives to pure discretionary government fiat money. He takes seriously the constitutional mandate for Congress to ensure stable-valued money. Gerald P. O'Driscoll Jr. considers the prospects for fundamental monetary reform and the strategies to promote such reform. R. David Ranson argues that the Fed's overreliance on conventional statistics to guide its policy and its politicization have led to failed policies. In particular, by distorting interest rates and trying to “stimulate” the economy, the Fed has actually slowed recovery. Ultimately, real reform of the monetary and financial system requires that voters understand the limits of central banking and the benefits of limited government and free markets.

EDITOR'S NOTE

In the final article, Lewis E. Lehrman, a member of the President Ronald Reagan's Gold Commission in 1981, makes a compelling case for returning to a classical gold standard, not only to protect the purchasing power of the dollar but to prevent the federal government from using the printing press to pay its bills.

It is hoped that these articles will stimulate debate about the choice of monetary arrangements consistent with a free society, individual responsibility, and the constitutional call for Congress to safeguard the purchasing power of the dollar.

—J. A. Dorn

A LIMITED CENTRAL BANK

Charles I. Plosser

Douglass C. North, co-winner of the 1993 Nobel Prize in Economics, argued that institutions were deliberately devised to constrain interactions among parties—both public and private (North 1991).¹ In the spirit of North’s work, one theme of this article will be that the institutional structure of the central bank matters. The central bank’s goals and objectives, its framework for implementing policy, and its governance structure all affect its performance.

The Importance of Institutions

Central banks have been around for a long time, but they have clearly evolved as economies and governments have changed. Most countries today operate under a fiat money regime, in which a nation’s currency has value because the government says it does. Central banks usually are given the responsibility to protect and preserve the value or purchasing power of the currency.² In the United States, the Fed does so by buying or selling assets in order to manage

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Charles I. Plosser is President and Chief Executive Officer of the Federal Reserve Bank of Philadelphia. This article is based on the author’s keynote address presented at the Cato Institute’s 31st Annual Monetary Conference on November 14, 2013. The views reflected here are the author’s and do not necessarily reflect those of the Federal Reserve System or the Federal Open Market Committee.

¹For more about North and his co-winner, Robert W. Fogel, and the 1993 Nobel Memorial Prize in Economic Sciences, see Nobel Media (1993).

²Countries can and do pursue different means of setting the value of their currency, including pegging their monetary policy to that of another country, but I will not concern myself with such issues.

the growth of money and credit. The ability to buy and sell assets gives the Fed considerable power to intervene in financial markets not only through the quantity of its transactions but also through the types of assets it can buy and sell. Thus, it is entirely appropriate that governments establish their central banks with limits that constrain the actions of the central bank to one degree or another.

Yet, in recent years, we have seen many of the explicit and implicit limits stretched. The Fed and many other central banks have taken extraordinary steps to address a global financial crisis and the ensuing recession. These steps have challenged the accepted boundaries of central banking and have been both applauded and denounced. For example, the Fed has adopted unconventional large-scale asset purchases to increase accommodation after it reduced its conventional policy tool, the federal funds rate, to near zero. These asset purchases have led to the creation of trillions of dollars of reserves in the banking system and have greatly expanded the Fed's balance sheet. But the Fed has done more than just purchase lots of assets; it has altered the composition of its balance sheet through the types of assets it has purchased. I have spoken on a number of occasions about my concerns that these actions to purchase specific (non-Treasury) assets amounted to a form of credit allocation, which targets specific industries, sectors, or firms. These credit policies cross the boundary from monetary policy and venture into the realm of fiscal policy (Plosser 2009, 2012). I include in this category the purchases of mortgage-backed securities as well as emergency lending under Section 13 (3) of the Federal Reserve Act, in support of the bailouts, most notably of Bear Stearns and AIG. Regardless of the rationale for these actions, one needs to consider the long-term repercussions that such actions may have on the central bank as an institution.

As we contemplate what the Fed of the future should look like, I will discuss whether constraints on its goals might help limit the range of objectives it could use to justify its actions. I will also consider restrictions on the types of assets it can purchase to limit its interference with market allocations of scarce capital and generally to avoid engaging in actions that are best left to the fiscal authorities or the markets. I will also touch on governance and accountability of the Fed and ways to implement policies that limit discretion and improve outcomes and accountability.

Fed Goals and Objectives

The Fed's goals and objectives have evolved over time. When the Fed was first established in 1913, the United States and the world were operating under a classical gold standard. Therefore, price stability was not among the stated goals in the original Federal Reserve Act. Indeed, the primary objective in the preamble was to provide an "elastic currency."

The gold standard had some desirable features. Domestic and international legal commitments regarding convertibility were important disciplining devices that were essential to the regime's ability to deliver general price stability. The gold standard was a de facto rule that most people understood, and it allowed markets to function more efficiently because the price level was mostly stable.

But, the international gold standard began to unravel and was abandoned during World War I (Bernanke 2013, Lacker 2013). After the war, efforts to reestablish parity proved disruptive and costly in both economic and political terms. Attempts to reestablish a gold standard ultimately fell apart in the 1930s. As a result, most of the world now operates under a fiat money regime, which has made price stability an important priority for those central banks charged with ensuring the purchasing power of the currency.

Congress established the current set of monetary policy goals in 1978. The amended Federal Reserve Act specifies the Fed "shall maintain long-run growth of the monetary and credit aggregates commensurate with the economy's long-run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." Since moderate long-term interest rates generally result when prices are stable and the economy is operating at full employment, many have interpreted these goals as a dual mandate with price stability and maximum employment as the focus.

Let me point out that the instructions from Congress call for the Federal Open Market Committee (FOMC) to stress the "long-run growth" of money and credit commensurate with the economy's "long-run potential." There are many other things that Congress could have specified, but it chose not to do so. The act doesn't talk about managing short-term credit allocation across sectors; it doesn't mention inflating housing prices or other asset prices. It also doesn't mention reducing short-term fluctuations in employment.

Many discussions about the Fed's mandate seem to forget the emphasis on the long run. The public, and perhaps even some within the Fed, have come to accept as an axiom that monetary policy can and should attempt to manage fluctuations in employment. Rather than simply set a monetary environment "commensurate" with the "long-run potential to increase production," these individuals seek policies that attempt to manage fluctuations in employment over the short run.

The active pursuit of employment objectives has been and continues to be problematic for the Fed. Most economists are dubious of the ability of monetary policy to predictably and precisely control employment in the short run, and there is a strong consensus that, in the long run, monetary policy cannot determine employment. As the FOMC noted in its statement on longer-run goals adopted in 2012, "the maximum level of employment is largely determined by non-monetary factors that affect the structure and dynamics of the labor market." In my view, focusing on short-run control of employment weakens the credibility and effectiveness of the Fed in achieving its price stability objective. We learned this lesson most dramatically during the 1970s when, despite the extensive efforts to reduce unemployment, the Fed essentially failed, and the nation experienced a prolonged period of high unemployment and high inflation. The economy paid the price in the form of a deep recession, as the Fed sought to restore the credibility of its commitment to price stability.

When establishing the longer-term goals and objectives for any organization, and particularly one that serves the public, it is important that the goals be achievable. Assigning unachievable goals to organizations is a recipe for failure. For the Fed, it could mean a loss of public confidence. I fear that the public has come to expect too much from its central bank and too much from monetary policy in particular. We need to heed the words of another Nobel Prize winner, Milton Friedman. In his 1967 presidential address to the American Economic Association, he said that "we are in danger of assigning to monetary policy a larger role than it can perform, in danger of asking it to accomplish tasks that it cannot achieve, and as a result, in danger of preventing it from making the contribution that it is capable of making" (Friedman 1968: 5). In the 1970s we saw the truth in Friedman's earlier admonitions. I think that over the past 40 years, with the exception of the Paul Volcker era, we failed to heed this warning. We have assigned an ever-expanding role for monetary policy, and we expect our central bank to solve all manner of economic woes which it is

ill-suited to address. We need to better align the expectations of monetary policy with what it is actually capable of achieving.

The so-called dual mandate has contributed to this expansionary view of the powers of monetary policy. Even though the 2012 statement of objectives acknowledged that it is inappropriate to set a fixed goal for employment and that maximum employment is influenced by many factors, the FOMC's recent policy statements have increasingly given the impression that it wants to achieve an employment goal as quickly as possible (Thornton 2012).

I believe that the Fed's aggressive pursuit of broad and expansive objectives is quite risky and could have very undesirable repercussions down the road, including undermining the public's confidence in the institution, its legitimacy, and its independence. To put this in different terms, assigning multiple objectives for the central bank opens the door to highly discretionary policies which can be justified by shifting the focus or rationale for action from goal to goal.

I have concluded that it would be appropriate to redefine the Fed's monetary policy goals to focus solely, or at least primarily, on price stability. I base this on two facts: Monetary policy has very limited ability to influence real variables, such as employment. And, in a regime with fiat currency, only the central bank can ensure price stability. Indeed, it is the one goal that the central bank can achieve over the longer run.

Governance and Central Bank Independence

Even with a narrow mandate to focus on price stability, the institution must be well designed if it is to be successful. To meet even this narrow mandate, the central bank must have a fair amount of independence from the political process so that it can set policy for the long run without the pressure to print money as a substitute for tough fiscal choices. Good governance requires a healthy degree of separation between those responsible for taxes and expenditures and those responsible for printing money.

The original design of the Fed's governance recognized the importance of this independence. Consider its decentralized, public-private structure, with governors appointed by the U.S. president and confirmed by the Senate, and Fed presidents chosen by their boards of directors. This design helps ensure a diversity of views and a more decentralized governance structure that reduces the potential for abuses and capture by special interests or political agendas. It also

reinforces the independence of monetary policymaking, which leads to better economic outcomes.

Implementing Policy and Limiting Discretion

Such independence in a democracy also necessitates that the central bank remain accountable. Its activities also need to be constrained in a manner that limits its discretionary authority. As I have already argued, a narrow mandate is an important limiting factor on an expansionist view of the role and scope of monetary policy.

What other sorts of constraints are appropriate on the activities of central banks? I believe that monetary policy and fiscal policy should have clear boundaries (Plosser 2009, 2012). Independence is what Congress can and should grant the Fed, but, in exchange for such independence, the central bank should be constrained from conducting fiscal policy. As I have already mentioned, the Fed has ventured into the realm of fiscal policy by its purchase programs of assets that target specific industries and individual firms. One way to circumscribe the range of activities a central bank can undertake is to limit the assets it can buy and hold.

In its System Open Market Account, the Fed is allowed to hold only U.S. government securities and securities that are direct obligations of or fully guaranteed by agencies of the United States. But these restrictions still allowed the Fed to purchase large amounts of agency mortgage-backed securities in its effort to boost the housing sector. My preference would be to limit Fed purchases to Treasury securities and return the Fed's balance sheet to an all-Treasury portfolio. This would limit the ability of the Fed to engage in credit policies that target specific industries. As I've already noted, such programs to allocate credit rightfully belong in the realm of the fiscal authorities—not the central bank.

A third way to constrain central bank actions is to direct the monetary authority to conduct policy in a systematic, rule-like manner (Plosser 2008, Kydland and Prescott 1977). It is often difficult for policymakers to choose a systematic rule-like approach that would tie their hands and thus limit their discretionary authority. Yet, research has discussed the benefits of rule-like behavior for some time. Rules are transparent and therefore allow for simpler and more effective communication of policy decisions. Moreover, a large body of research emphasizes the important role expectations play in

determining economic outcomes. When policy is set systematically, the public and financial market participants can form better expectations about policy. Policy is no longer a source of instability or uncertainty. While choosing an appropriate rule is important, research shows that in a wide variety of models simple, robust monetary policy rules can produce outcomes close to those delivered by each model's optimal policy rule (Orphanides and Williams 2002).

Systematic policy can also help preserve a central bank's independence. When the public has a better understanding of policymakers' intentions, it is able to hold the central bank more accountable for its actions. And the rule-like behavior helps to keep policy focused on the central bank's objectives, limiting discretionary actions that may wander toward other agendas and goals.

Congress is not the appropriate body to determine the form of such a rule. However, Congress could direct the monetary authority to communicate the broad guidelines the authority will use to conduct policy. One way this might work is to require the Fed to publicly describe how it will systematically conduct policy in normal times—this might be incorporated into the semiannual Monetary Policy Report submitted to Congress. This would hold the Fed accountable. If the FOMC chooses to deviate from the guidelines, it must then explain why and how it intends to return to its prescribed guidelines.

My sense is that the recent difficulty the Fed has faced in trying to offer clear and transparent guidance on its current and future policy path stems from the fact that policymakers still desire to maintain discretion in setting monetary policy. Effective forward guidance, however, requires commitment to behave in a particular way in the future. But discretion is the antithesis of commitment and undermines the effectiveness of forward guidance. Given this tension, few should be surprised that the Fed has struggled with its communications.

What is the answer? I see three: Simplify the goals; constrain the tools; and make decisions more systematically. All three steps can lead to clearer communications and a better understanding on the part of the public. Creating a stronger policymaking framework will ultimately produce better economic outcomes.

Financial Stability and Monetary Policy

Before concluding, I would like to say a few words about the role that the central bank plays in promoting financial stability. Since the

financial crisis, there has been an expansion of the Fed's responsibilities for controlling macroprudential and systemic risk. Some have even called for an expansion of the monetary policy mandate to include an explicit goal for financial stability. I think this would be a mistake.

The Fed plays an important role as the lender of last resort, offering liquidity to solvent firms in times of extreme financial stress to forestall contagion and mitigate systemic risk. This liquidity is intended to help ensure that solvent institutions facing temporary liquidity problems remain solvent and that there is sufficient liquidity in the banking system to meet the demand for currency. In this sense, liquidity lending is simply providing an "elastic currency."

Thus, the role of lender of last resort is not to prop up insolvent institutions. However, in some cases during the crisis, the Fed played a role in the resolution of particular insolvent firms that were deemed systemically important financial firms. Subsequently, the Dodd-Frank Act has limited some of the lending actions the Fed can take with individual firms under Section 13 (3). Nonetheless, by taking these actions, the Fed has created expectations—perhaps unrealistic ones—about what the Fed can and should do to combat financial instability.

Just as it is true for monetary policy, it is important to be clear about the Fed's responsibilities for promoting financial stability. It is unrealistic to expect the central bank to alleviate all systemic risk in financial markets. Expanding the Fed's regulatory responsibilities too broadly increases the chances that there will be short-run conflicts between its monetary policy goals and its supervisory and regulatory goals. This should be avoided, as it could undermine the credibility of the Fed's commitment to price stability.

Similarly, the central bank should set boundaries and guidelines for its lending policy that it can credibly commit to follow. If the set of institutions having regular access to the Fed's credit facilities is expanded too far, it will create moral hazard and distort the market mechanism for allocating credit. This can end up undermining the very financial stability that it is supposed to promote.

Emergencies can and do arise. If the Fed is asked by the fiscal authorities to intervene by allocating credit to particular firms or sectors of the economy, then the Treasury should take these assets off of the Fed's balance sheet in exchange for Treasury securities. In 2009, I advocated that we establish a new accord between the Treasury and the Federal Reserve that protects the Fed in just such a way (Plosser 2009). Such an arrangement would be similar to the

Treasury-Fed Accord of 1951 that freed the Fed from keeping the interest rate on long-term Treasury debt below 2.5 percent. It would help ensure that when credit policies put taxpayer funds at risk, they are the responsibility of the fiscal authority—not the Fed. A new accord would also return control of the Fed's balance sheet to the Fed so that it can conduct independent monetary policy.

Many observers think financial instability is endemic to the financial industry and therefore it must be controlled through regulation and oversight. However, financial instability can also be a consequence of governments and their policies, even those intended to reduce instability. I can think of three ways in which central bank policies can increase the risks of financial instability. First, by rescuing firms or creating the expectation that creditors will be rescued, policymakers either implicitly or explicitly create moral hazard and excessive risk-taking by financial firms. For this moral hazard to exist, it doesn't matter if the taxpayer or the private sector provides the funds. What matters is that creditors are protected, in part, if not entirely.

Second, by running credit policies, such as buying huge volumes of mortgage-backed securities that distort market signals or the allocation of capital, policymakers can sow the seeds of financial instability because of the distortions that they create, which in time must be corrected.

And third, by taking a highly discretionary approach to monetary policy, policymakers increase the risks of financial instability by making monetary policy uncertain. Such uncertainty can lead markets to make unwise investment decisions—witness the complaints of those who took positions expecting the Fed to follow through with the taper decision in September 2013.

The Fed and other policymakers need to think more about the way their policies might contribute to financial instability. I believe it is important that the Fed take steps to conduct its own policies and help other regulators reduce the contributions of such policies to financial instability. The more limited role for the central bank I have described here can contribute to such efforts.

Conclusion

The financial crisis and its aftermath have been challenging times for global economies and their institutions. The extraordinary actions taken by the Fed to combat the crisis and the ensuing recession and

to support recovery have expanded the roles assigned to monetary policy. The public has come to expect too much from its central bank. To remedy this situation, I believe it would be appropriate to set four limits on the central bank:

- First, limit the Fed's monetary policy goals to a narrow mandate in which price stability is the sole, or at least the primary, objective.
- Second, limit the types of assets that the Fed can hold on its balance sheet to Treasury securities.
- Third, limit the Fed's discretion in monetary policymaking by requiring a systematic, rule-like approach.
- Fourth, limit the boundaries of its lender-of-last-resort credit extension and ensure that it is conducted in a systematic fashion.

These steps would yield a more limited central bank. In doing so, they would help preserve the central bank's independence, thereby improving the effectiveness of monetary policy, and, at the same time, they would make it easier for the public to hold the Fed accountable for its policy decisions. These changes to the institution would strengthen the Fed for its next 100 years.

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A CENTURY OF CENTRAL BANKING: WHAT HAVE WE LEARNED?

Jerry L. Jordan

All of us who are interested in the century-long experience of central banking in the United States owe a great debt to Allan Meltzer. His several-years-long efforts gave us over 2,000 pages of careful documentation of decisionmaking in the Federal Reserve for the first 75 years (Meltzer 2003, 2010a, 2010b). The first score of years transformed a lender-of-last-resort, payments processor, and issuer of uniform national currency into a full-fledged central bank with discretionary authority to manage a fiat currency.

Even in the mid-1930s, then Senator Carter Glass declared that we did not have a central bank in the United States. However, legislation in 1933 and 1935 had institutionalized the Federal Open Market Committee (FOMC), which had previously been an informal coordinating committee.

In an interview several years before his death, Milton Friedman was asked about any regrets in his long career. He replied that he wished he had paid more attention early on to what Jim Buchanan had been saying about the behavior of politicians and bureaucrats (Friedman 2003). Any discussion about any institution of government can be fruitful only in the context of the public-choice elements of decisionmaking by individuals who occupy policymaking positions. For the past century, the economic theories of

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prominent personalities in the central bank’s policymaking bodies have been the dominant factors giving us the very mixed results we have witnessed.

Dead-End Debates

In 60-plus years since the Accord in 1951, the U.S. central bank has gone full-circle from being a de facto bureau of the U.S. Treasury, to an “independent” monetary authority, and back to a bureau of the Treasury. Of course, the long period of “even-keeling” demonstrated that the Fed’s independence was always more in rhetoric than reality (Cargill and O’Driscoll 2013). The debates about free reserves versus net-borrowed reserves, targets versus indicators, monetary versus fiscal policy, the Phillips Curve, monetary aggregate targeting, and econometric modeling have come and gone within a decade or two. The emergence and demise of those debates over the past several decades—about how to reform and improve the formulation and execution of monetary policies by committee—have left us after 100 years questioning the *concept* of central banking and monopoly monetary authorities. In this article, I address a series of issues about central banking.

Moral Hazard

The existence of central banks with discretionary powers in a fiat currency world creates moral hazard in the financial system. Because of the explicit and implicit “safety net” offered by the existence of central banks, private financial institutions cannot be observed behaving as they would in absence of moral hazard. Because of moral hazard in the financial system—privatization of gains from risky decisions and socialization of the losses—the trend has been toward ever-more regulations and calls for closer supervision of financial companies. The resulting “permission-and-denial” regime opens ever wider the door to cronyism in the financial system.

For many years it has been recognized that “too big to fail” is a large and growing problem. In more recent years, more people are also beginning to understand that “too politically well-connected and powerful to effectively supervise” has become a major obstacle to meaningful financial system reforms. For the biggest banks, the political action committees are more important than the credit policy committees.

Moral hazard also emerges in other institutions of government as a result of the *presence* of central banks with discretionary powers. It is evident in a lessening of political pressures on tax and regulatory authorities of government to undertake the difficult decisions and actions that would enhance the “magic of the marketplace” and foster growth. Even when most observers recognize that the “sand in the gears” preventing more robust economic prosperity arises from the regulatory and tax policies of government, the mistaken belief that monetary actions can overcome those obstacles results in an adverse mix of policies by government. Economists should understand that monetary authorities cannot correct the mistakes of the rest of government. But, as we have seen, politicians have strong incentives to blame the central bank when the economy is not doing well, but take all the credit when employment is high and inflation is low.

The Myth of Central Bank Independence

Central banks and ministries of finance are not able to resist the political pressures to alter the stance of policies in response to crises. Who would want to be the secretary of the Treasury or chairman of the Fed that is blamed for another Great Depression? Moreover, once central banks make the mistake of engaging in quasi-fiscal actions in futile attempts to correct mistakes of the rest of government, there is no feasible exit strategy that does not involve collateral damage. When economic activity is constrained or adversely impacted by government’s anti-supply-side taxation and regulatory actions, central banks come under great pressure to engage in demand-side monetary actions as a counter measure. That mistake cannot be reversed without negative consequences. “Soft-landing” is a myth.

An argument can be made that the institutional setting of the European Central Bank gives it more independence than any other central bank because it does not have a single ministry of finance or single parliament to answer to. National central banks are in the position that former Fed chairman William McChesney Martin liked to describe as “independent within government.” Another former Fed chairman, Arthur Burns, asserted on occasion, “We dare not exercise our independence for fear of losing it.” As the Fed celebrates its centennial, politicians have come to view it as an activist instrument of

economic policymaking responsible for pursuing multiple objectives of financial stability, employment, output, low interest rates, and tolerable inflation—all with the single tool of the power to create fiat currency.

Rules versus Discretion

The FOMC is institutionally designed to exercise discretion rather than adopt and follow rules in the formulation of policy actions. A schedule of committee meetings every six weeks to reconsider the stance of policy causes deliberations to focus on recently reported data and recently revised forecasts of future economic activity. The 1933 and 1935 legislations “fixing” the FOMC as a separate, legal, government body—without budget, staff, buildings, or any other identifiable characteristics of a government entity—created a “monetary authority” to formulate and implement what has been called “monetary policy.” Not only was the U.S. currency not defined in terms of specie—as had been the case in 1913—but it was illegal for ordinary citizens to even own gold. Clearly, by the time the central bank had passed its 20th birthday, the Congress intended that our monetary system was one of a managed fiat currency.

Monetary Discipline

The ongoing dialogue in academic circles regarding “rules versus discretion” has not found a satisfactory solution to the issue of enforcement of adopted rules. The post-WWII Bretton Woods System—often referred to as a form of gold-exchange standard—required that the United States maintain a hard peg of its currency to gold, and that other countries peg their currency to the dollar and be able to exchange excess dollars for gold at the fixed U.S. dollar price. This obligation on the part of the United States to redeem the dollar for gold was intended to provide essential discipline on the world’s reserve currency.

However, by the 1960s the United States began to abuse the “exorbitant privilege” of borrowing in its own currency. Washington ran larger budget deficits, reflecting the Vietnam War and the War on Poverty, and supplied more dollar-denominated bonds than the world wanted to acquire. By mid-decade, emerging U.S. inflationary pressures were eroding the real value of the growing stocks of dollar-denominated bonds held by central banks and governments around

the world. One large holder, Germany, faced upward pressure on its currency, yet refrained from seeking gold in exchange for surplus dollars, but other countries challenged the Johnson administration to honor the commitment to absorb the surplus dollars in exchange for gold. The drain on the U.S. gold stock was supposed to impose monetary and fiscal discipline, but that failed.

Rather than constrain the creation of excess dollar-denominated bonds by reducing spending or raising taxes, the Johnson administration chose capital controls, taxation of foreign travel by its citizens, and subsidies to exporters as temporary measures to address the imbalance between the supply and demand for dollars. First suspension, then ending the London gold pool, followed in 1968 by ending the gold-backing of Federal Reserve notes, prolonged (with the help of moral suasion on foreign governments) the period that the U.S. dollar was notionally (but not really) convertible into gold at \$35/oz.

A brief lurch toward fiscal discipline in the final year of the failing Johnson presidency, in the form of a 10 percent surtax on personal and business incomes, helped stabilize the exchange regime and was aided by revaluation of the German currency. However, the mild U.S. recession of 1970 precipitated “pedal to the metal” monetary policy, and as 1971 got under way the world was once again flooded with excess dollars.

By mid-1971, U.S. policymakers faced a dilemma: (1) continue with highly expansionary monetary and fiscal policies and face continued international pressures to convert surplus foreign-held dollars into a dwindling gold supply as well as accelerating inflation in the following presidential election year, or (2) curtail monetary growth and fiscal deficits and risk a return to recession during the election cycle. They chose instead the “magic wand” of floating the currency and imposing wage and price controls that allowed them to open further the monetary and fiscal spigots. The post-election result was accelerating inflation, a falling dollar, collapse of the Bretton Woods system, and then another lurch toward restraint and a worse recession.

Just a few years later excess monetary creation produced reacceleration of inflation and the rest of the world again challenged the United States to restore fiscal and monetary discipline during the failing presidency of Jimmy Carter. This time the “exorbitant privilege” to borrow in its own currency was revoked when foreign governments and central banks demanded that the United States issue

“Carter bonds” denominated in German and Swiss currencies. For the first time in decades the ability of the United States to service additional foreign-held debt would not be based on tax collections or on creation of additional liabilities of its central bank, but on the earnings from exports and proceeds from foreign inflows.

This externally imposed discipline ushered in the “Great Moderation,” which was characterized by falling budget deficits (and even occasional surpluses), falling inflation, and rapid economic growth. The essential point is that U.S. policymakers were not disciplined by institutional arrangements within the central bank or by pressures from elsewhere within the U.S. government.

We now have a century of experience that congressional oversight of a national monetary authority is not effective. The few occasions of discipline emerging from competition with other, more effectively managed, foreign currencies suggest that opening the door to *domestic* alternatives to Fed-issued notes would offer the potential for greater monetary stability than a monopoly currency.

Transparency

Deliberations by central bank policymakers in the formulation of discretionary policy actions must be conducted in secret, especially when operating under a dual mandate involving short-run tradeoffs. Debates about possible discretionary responses to certain contingencies, if broadcast live on C-SPAN, would cause private market participants to alter their behavior. Because central bank actions and operations are conducted within the national and international financial systems, the actions and reactions of other participants in financial markets will influence the transmission of monetary actions to the real economy. Generally, policymakers know that if their preference is to target a price-axis variable—such as an overnight interbank rate or an exchange rate—such targets cannot be preannounced. That is, policymakers cannot announce that they plan to raise short-term interest rates *gradually* by some incremental amounts over an announced time horizon. “Forward guidance” with regard to policy targets is possible only with horizontal-axis magnitudes—such as bank reserves, central bank money, or monetary aggregates.

The “exit strategy” for the FOMC under Chairman Paul Volcker in 1979 was to announce a target of total reserve growth and let markets set interest rates. That lesson was forgotten—or never learned—by current policymakers. Exiting the current zero interest rate

regime has proven to be quite messy because there simply is no way to be transparent about the end without creating considerable turbulence in financial markets.

Open-Mouth Policies

There was a time not long ago when the FOMC directive would give a form of forward guidance by announcing that although the decision at a meeting was to leave the fed funds rate unchanged, a majority of the committee had a “bias to raise” or a “bias to lower” the rate at a subsequent meeting. The idea was that such announcements would alter private market participants’ behavior in predictable ways and achieve some desired effect without actually having to do anything.

However, because there is always more public and political pressure to lower rates than to raise rates, it goes without saying that there is a permanent institutional bias toward lower rates. The unique status of the U.S. central bank as a “creature of Congress”—rather than a part of the executive branch—reinforced the natural bias toward lower interest rates.

The effect of the institutional bias was that the committee of 19 policymakers was always quicker to reach a consensus that the target rate should be lowered, versus overcoming the reluctance to take the heat for raising rates. Rare has been the member of Congress or the executive branch that complained that the monetary authorities were maintaining interest rates at too low a level—until very recently.

Neutral Monetary Policy

There was a time not long ago when the FOMC would attempt to determine at what level of the fed funds rate the stance of monetary policy was “neutral”—neither expansionary nor contractionary with respect to economic activity. This notion of a “neutral” fed funds rate (either nominal or real) was different from a “natural” rate in the Wicksellian sense. On occasion, changes in an estimated real rate and a perceived natural rate give opposite signals about the stance of policy. Elsewhere I have argued that such was the case in the late 1990s during the favorable “productivity surprise” (Jordan 2006). Now, we have the mirror image of that experience. Conventional real rate analysis holds that if the central bank (perhaps reinforced by debt and deficits in the fiscal policies) can generate expectations of higher

inflation, the real interest rate will be lower and thus stimulative. A natural rate analysis suggests the opposite. To the extent that expectations of higher inflation cause nominal bond yields to be higher while there are other reasons to believe the natural rate is low, the stance of policy is more restrictive than if the expectations of higher inflation were not increasing market rates.

Today, however, the overnight interbank rate has become meaningless as a policy instrument. The volume of transactions in the fed funds market had largely dried up by the middle of 2011. Announcing a target level of the fed funds rate has no meaning if there are no transactions and the operations desk of the central bank does not need to make outright purchases or sales of securities or repurchase agreements to maintain the rate. For now, the rate is as meaningless as the official price of gold—a price at which there are neither purchases nor sales. Despite occasional stories in the financial press about the Fed “raising short-term interest rates,” the operations desk has no tools available for influencing the overnight interbank rate. Because the Fed does not own any short-term Treasury bills, the desk cannot intervene in the overnight market to affect the fed funds rate. However, as of this writing (December 2013) the New York Fed has announced a program to develop a new tool—reverse repurchase agreements of Treasury securities and mortgage-backed securities—for setting short-term interest rates.

Aggregate Demand Management

Prior to the era of quantitative easing (QE), the notion that monetary actions can and should be employed so as to influence total nominal spending in the national economy remained the dominant framework. This was in spite of the increasing globalization of commerce and worldwide use of the U.S. currency in pricing goods and assets and in conducting transactions. If an analytical framework exists that relates the several rounds of QE and the massive increase in excess reserves to any measure of economic activity, it is a remarkably well-kept secret.

Nevertheless, a small network of bloggers that fly the banner of “market monetarists” have aggressively promoted the notion that the central bank should somehow target a growth rate of nominal GDP. Whatever the theoretical merits of that objective, the only suggestion for a possible directive the FOMC could adopt to instruct the trading

desk is Scott Sumner's idea of a type of "futures market" of GDP forecasts that might serve as an indicator variable signaling the need for more expansionary or restrictive policies.

Monetary Targeting

The success in the 1970s and 1980s of targeting various monetary aggregates with a view to influence nominal spending in the economy depended on unique institutional arrangements. The empirical relationships between the monetary base and monetary aggregates (money multipliers), and between the monetary aggregates and nominal GDP (money velocity) were altered as a result of legislation and regulation, financial innovations (e.g., hypothecation, credit default swaps, and collateralized debt obligations), and globalization of commerce. Now, under the QEs, the link between central bank monetary base and commercial bank liabilities is completely broken.

Deflation

Unlike a gold standard under which the purchasing power of money could increase, a central bank managed fiat currency can only decline in purchasing power. There is no support in central banks for the idea of "virtuous deflation"—a rise in the purchasing power of money resulting from increased productivity and technological innovations. The concept of a "productivity norm" (as suggested by Selgin 1990) for measures of output prices is never considered. The fears of the consequences of deflation in the banking system are so pervasive that there is an institutional bias in favor of more rapid debasement of the currency, rather than tolerate the risk of accidentally permitting a rise in purchasing power. Moreover, there is no consideration of asset prices in assessing the trends in the purchasing power of money. Instead, asset prices are viewed as an instrument in achieving objectives of employment and output.

The Duel Mandate

The notion that a monetary authority has responsibility for both the purchasing power of money and the rate of unemployment institutionalizes the Phillips Curve tradeoff in the formulation of policy actions. Because the lags of policy actions are not only uncertain but also different with respect to real and nominal magnitudes, there is a

committee bias to focus on short-run effects. Ironically, even during the Great Moderation of the 1990s—when unemployment trended well below the assumed “natural unemployment rate” and inflation did not accelerate—policymakers gave even *greater* attention to the Phillips Curve analysis.

At the July 1995 meeting of the FOMC there was an extended discussion of the longer-run objectives of the policymakers. One leader of the initial debate was Fed Governor Janet Yellen, who stated:

The key question is how much permanent unemployment rises as inflation falls, and here the methodology used to assess the consequences does matter. These authors [George Akerlof, Bill Dickens, and George Perry] used general equilibrium methodology and here is what they find: The natural rate rises above its assumed 5.8 percent minimum to 6.1 percent as measured inflation falls from 4 down to 2 percent; the natural rate rises to 6.5 percent at 1 percent inflation, and then to 7.6 percent at zero percent inflation [Jordan 2012: 23].

This astonishing invocation of the “natural rate of unemployment” was actually quite common in such meetings even though there was (is?) no theoretical or empirical support for it. Even though the economy at the end of the last century was on a track to achieve under 4 percent unemployment and at the same time continue to experience less than 2 percent inflation, the Phillips Curve had resurfaced in policy discussions in new clothing, using Friedman’s language, but ignoring everything he had said about the notion of some “tradeoff” that could, or should, be exploited by policymakers.

Gap Analysis

Closely associated with the Phillips Curve approach, “gap analysis” incentivizes policymakers to give considerable weight to estimates and forecasts of “aggregate supply” (potential output) and formulate policies with a view to “manage aggregate demand” in order to influence inflation rates and unemployment rates. This, of course, requires considerable confidence in forecasts of productivity, employment (including labor force participation rates), and the impact of various “supply shocks.” It also assumes there is some dependable linkage between actions taken, and “aggregate demand” somehow measured.

Quantity Easing

Advocacy of expansion of the central bank's balance sheet in the face of a "lower bound" of controllable interest rates first arose in the context of the classical "inside money/outside money" paradigm. That is, the controllable "outside money" (monetary base) represented by the Fed's balance sheet in a fiat money world is assumed to have a direct and predictable effect on the "inside money" represented by commercial bank deposit liabilities. The linkage depends on the actions of commercial banks to minimize surplus reserve balances by making loans or acquiring financial securities. However, the emergence of "shadow banking" channels for transmitting credit have caused the link between outside money and economic activity to become highly unreliable. Furthermore, there is no theoretical model or empirical evidence explaining the parameters of banks' demand for "excess" reserve balances.

The Mix between Monetary and Fiscal Policy

When monetary policy becomes fiscal policy, the mix is complete. There once was a notion that monetary actions could be restrictive and fiscal policy expansionary, or the other way around. That became nonsense when monetary actions in QE mode morphed into fiscal actions carried out by the central bank. Of course, recent debates—especially in Europe—about whether "fiscal austerity" is contractionary have muddied the dialogue. The massive deficits and national debts of some countries have caused some policymakers to argue that long-term, sustainable prosperity can be achieved only by reducing government spending and/or raising more tax revenue—the opposite of conventional arguments about fiscal policies. But the real issue is whether actions of central banks are actually fiscal, or at least quasi-fiscal, in nature. That is, if the actions of reserve banks could (and maybe should) be conducted by a bureau of the ministry of finance/treasury, is it still useful to make a distinction between monetary and fiscal policies?

Once open market operations mean nothing more than monetizing government bonds and acquiring a large portfolio of private debt instruments such as mortgage-backed securities, or attempting to "twist" the yield curve by altering the term-structure of publically held government debt, traditional views of monetary policies and actions are no longer useful. The massive open market operations

under QE have broken the link between outside money and inside money (the money multipliers), have rendered the targeting of the overnight bank lending rate impossible, and have distorted the income-velocity of money that once was a prominent feature of monetary analyses.

It is reasonable to question whether QE actions by the monetary authority are properly viewed as expansionary. While it is common to see massive portfolio purchases by reserve banks as “easy” money policies, there is another way to think about it. First, there is a view that low nominal interest rates are a product of QE, low interest rates are expansionary, and thus QE is expansionary. An alternative view is that the low nominal interest rates are not at all the product of QE, but a reflection of the tax and regulatory regime that discourages private investment—and are also a product of the shifting of demographics toward a rapidly aging population. There is a conjecture by policymakers that QE means rising asset prices, so a “wealth effect” will eventually produce rising aggregate demand and a return to prosperity. That hasn’t worked out well so far, and now the fears that future implementation of an exit strategy from QE will be contractionary raises cautions about long-term investments and other commitments. One doesn’t have to understand Ricardo to understand why households in several QE countries are cautious about their financial future.

Potentially a bigger problem with the view that QE is expansionary is the other traditional channel of monetary policy—the effects of the Fed’s balance sheet on the consolidated balance sheets of commercial banks. The central bank’s balance sheet (outside money) was historically connected to the balance sheets of banks via fairly predictable money multipliers. The monetary base created by the central bank led to the expansion of bank balance sheets, and the greater deposits created inside these commercial banks constituted the bulk of the nation’s money supply and could be reliably transmitted to the economy at large via money velocity.

However, a part of the process of fiat money creation is bank acquisition of earning assets (i.e., loans and securities). The supply of earning assets to banks (sometimes called the “demand for bank credit”) is derived from the aggregate supply of claims to future earning streams—bonds and borrowings of households and businesses to be repaid out of future earnings. Banks compete for such earning assets against numerous domestic and foreign institutional

investors (e.g., pension funds, mutual funds, and life insurance companies). The appetite of such nonbank institutional investors for earning assets is influenced by factors such as demographic trends and target-income requirements. In sum, the super-low interest rate environment (whether or not attributable to the central bank) means larger stocks of earning assets are necessary in order to generate the necessary earnings, leaving a smaller supply offered to banks.

Because QE by monetary authorities reduces the stock of such earning assets (other things the same), the supply offered to banks is smaller yet. In other words, monetization of government obligations and acquisition of mortgage-backed securities by a central bank shrinks the floating supply of instruments that might otherwise be acquired by banks. Furthermore, if business demands for bank loans are suppressed because government taxation and regulation diminish the availability of profitable investment opportunities, and household demands for bank loans are restrained for a host of reasons including demographics, the multiplication of central bank *outside* money into commercial bank *inside* money does not occur with the previous reliability.

The result is that massive expansion of the Fed's balance sheet under a program of QE may, in fact, operate perversely. Without QE operations of the monetary authorities, commercial banks would have seen a greater supply of earning assets (or demand for bank credit), and the expansion of their own balance sheets would have increased the nation's money supply by more than has occurred under QE.

Conclusion

When the reserve banks were incorporated and then opened for business in late 1914, nothing they did would have been construed to be what later came to be called monetary policy. Now, almost a century later, the same can be said again.

In the beginning, the U.S. central bank was supposed to be a lender of last resort. But even after almost 100 years there are no established rules for providing such a safety net. No one can say who will and who will not be bailed out in the future. Instead of lending only to inject liquidity into financial markets, the Fed has also loaned to insolvent institutions—including banks, nonbank financial

companies, and even nonfinancial companies. No one can say who is, and who is not, going to receive loans in the future, for what amounts, and for what duration. There are no effective rules governing central bank lending.

Congress delegated its constitutional authority to “coin money and regulate the value thereof” to a central bank but has consistently failed to provide effective oversight of the money-creation process. Worse, Congress saddled the central bank with an unworkable dual mandate and an institutional bias toward artificially low interest rates. The central bank is now dominated by people who believe inflation occurs as a result of a too-low unemployment rate, and that inflation is not a risk so long as unemployment is above some threshold. Indeed, monetary policymakers will not give greater weight to inflation until they perceive that too many people are working, earning a paycheck, and supporting their families.

The Fed’s century-long track record includes the Great Depression of the 1930s; the Great Inflation of the 1970s; episodes of bubbles, panics, and crises; and an average inflation that left today’s dollar worth only a small fraction of the 1913 dollar. The challenge is to establish institutional arrangements that prevent the next hundred years from being simply more of the same.

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OPERATION TWIST-THE-TRUTH: HOW THE FEDERAL RESERVE MISREPRESENTS ITS HISTORY AND PERFORMANCE

George A. Selgin

For a private-sector firm, success can mean only one thing: that the firm has turned a profit. No such firm can hope to succeed, or even to survive, merely by *declaring* that it has been profitable. A government agency, on the other hand, can succeed in either of two ways. It can actually accomplish its mission. Or it can simply *declare* that it has done so, and get the public to believe it.

That the Federal Reserve System has succeeded, in the sense of having prospered, is indisputable. At the time of its 100th anniversary, its powers are both greater and less subject to effective scrutiny than ever, while its assets, now exceeding \$3 trillion, make it bigger than any of the world's profit-oriented financial firms.¹ And, criticism from some quarters notwithstanding, the Fed enjoys a solid reputation. "The Federal Reserve," Paul Volcker observed recently, "is respected. And it's respected at a time when respect and trust in all our government institutions is all too rare. It's that respect and trust that, at the end of the day, is vital to the acceptance of its independence and to support for its policies" (Bordo and Roberds 2013: 400). Besides securing support for it at home, a Dallas Fed brochure

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¹On the tremendous growth in the Fed's size and overall role in the U.S. financial system during the first year of the recent financial crises, see Stella (2009).

(FRBD1)² proudly declares, the Fed's status has caused "emerging democracies around the globe" to treat it as a model for their own monetary arrangements.

But what has the Fed's reputation to do with its actual performance? Not much, according to Milton Friedman. "No major institution in the U.S.," Friedman (1988) observed some years ago, "has so poor a record of performance over so long a period, yet so high a public reputation."³ The Fed has succeeded, not by actually accomplishing its mission but by convincing the public that it has done so, through publicity that misrepresents both the Fed's history and its record.

What follows is a survey of such propaganda as it occurs in official Federal Reserve statements aimed at the general public, which are properly regarded as reflecting the views of "the Fed," rather than those of particular Fed employees.⁴ In showing how Fed authorities misrepresent the Fed's record, I do not mean to suggest that they always do so intentionally. Group-think, conditioned by employees' natural desire to defend the institution they work for—or to at least avoid biting the hand that feeds them—undoubtedly play a part. But whatever the motives behind it, the misrepresentation in question harms the public, by causing it to overrate the status quo when considering possible reforms.

Origins

No Fed propaganda has contributed more to its stature than that devoted to convincing the public that any other arrangement would have resulted in a less stable U.S. monetary system.

²To save space in citing sources, I refer to particular Federal Reserve Banks as "FRBX," where "X" is the initial of the particular Fed bank: A=Atlanta; B=Boston; Ch=Chicago; C=Cleveland; D=Dallas; K=Kansas City; M=Minnesota; NY>New York; P=Philadelphia; R=Richmond; SF=San Francisco; SL=St. Louis. Where I draw upon more than one undated online source from the same Fed Bank, I refer to each by its order of appearance among the undated references, e.g., "FRBP1"; "FRBP2," etc.

³Selgin, Lastrapes, and White (2012) review the Fed's performance for most of its first century.

⁴Such statements must be distinguished from research by Fed-employed economists aimed at other researchers, which despite being vetted by the Board of Governors reflects individual Fed economist's idiosyncratic opinions. Indeed, I frequently rely on such research in identifying misinformation in works by other Fed staff and officials that are intended for general readers.

To support this belief, the Fed has had to overcome the American public's long-standing resistance to the idea of having a central bank in the United States. The Fed's architects were able to do this easily enough, by denying that the Federal Reserve System was a central bank at all, and official Fed publications still vaunt its "decentralized" structure.⁵ But the Banking Act of 1935, in making the newly constituted Board of Governors the acknowledged seat of Federal Reserve power, put paid to that conceit, forcing Fed apologists to instead insist that a central bank was, after all, the only arrangement capable of providing the nation with a stable currency system.

To take such a stand is to claim that the infirmities of the pre-Fed U.S. monetary system were the inevitable consequences of a lack of Fed oversight. "In the early years of our country," says the Philadelphia Fed's video "The Federal Reserve and You" (FRBP1), "there was very little supervision or regulation of banks at all." Consequently, the video continues, "financial crises and panics took their toll." Ben Bernanke, responding to a question raised by Congressman Ron Paul at a Congressional Hearing, likewise observed that the Fed was created because "there were big financial panics and there was no regulation there and people thought that was a big problem" (Bernanke 2009).

In an article on "The Founding of the Fed," the Federal Reserve Bank of New York (FRBNY1) refers specifically to the shortcomings of the U.S. monetary system between the demise of the second Bank of the United States and the outbreak of the Civil War. "For the next quarter century," the article observes,

America's central banking was carried on by a myriad of state-chartered banks with no federal regulation.⁶ The difficulties brought about by this lack of a central banking authority hurt the stability of the American economy. There were often violent fluctuations in the volume of bank notes issued by banks and in the amount of demand deposits that the banks held. Bank notes, issued by the individual banks, varied widely in reliability.

⁵See, for example, Board of Governors (2013a, 2013b) and FRBP (2009).

⁶The writer seems to be under the impression that any currency-issuing institution qualifies as a "central bank."

According to the San Francisco Fed (FRBSF1), some of the banks in question “were known as ‘wildcat banks’ supposedly because they maintained offices in remote areas (‘where the wildcats are’) in order to make it difficult for customers to redeem their notes for precious metals.”

The suggestion such remarks convey of pre-Fed American banking as a free-for-all is, to put it mildly, extremely misleading. “The early years of the republic,” Bray Hammond (1957: 185–86) observes in his Pulitzer-prize-winning study of banking in antebellum America,

are often spoken of as if . . . government authority refrained from interference in business and benevolently left it a free field. Nothing of the sort was true of banking. Legislators hesitated about the kind of conditions under which banking should be permitted but never about the propriety and need of [sic] imposing regulations.

So far as the Federalists and Jeffersonians who dominated American politics at the time were concerned, “the issue was between prohibition and state control, with no thought of free enterprise.”⁷

Although the federal government withdrew from the banking business between 1836 and 1863, banking continued to be regulated by state authorities. That remained the case, moreover, despite “free banking” laws passed, first by Michigan (in 1837), and subsequently by 17 other states. Despite their name, which some Fed officials appear to take literally, and despite providing something akin to a general incorporation procedure for banks, these laws did not open the floodgates to unregulated banking. On the contrary, banks established under them were often subjected to more burdensome regulations than those common to charter-based arrangements (Ng 1988). Among other things, American “free” banks were universally prohibited from branching. They were also required to “secure” their notes with assets chosen by state regulators.

Thanks to research by Hugh Rockoff (1975) and Arthur Rolnick and Warren Weber (1983, 1984), among others, we now know that the “free-for-all” account of antebellum banking is about as faithful to reality as a 1950s Hollywood western. Fly-by-night banks were few and far between, and while many banks failed, the most common

⁷Hammond served for some time as the Board of Governors’ assistant secretary.

cause of failure, besides underdiversified loan portfolios that went hand-in-hand with unit banking, was heavy depreciation of the securities that some “free” bankers were forced to purchase in order to “secure” their notes.

Official Fed sources also fail to point out how antebellum banking regulations stood in the way of the establishment of a “uniform” U.S. currency. In a brief, sepia-toned segment of the Philadelphia Fed’s video, “The Federal Reserve and You” (FRBP1), a pair of farmers, complete with dungarees and open-crown hats, ponder a stack of state bank notes as they try to settle a sale, while a voice-over relates that there were 30,000 different kinds of notes in circulation back then (a much inflated figure, actually, unless one includes every sort of forged note), with certain notes commanding far less than their face value. What the video *doesn’t* say is that both the great variety of state banknotes and the discounts to which they were subject were further fruits of unit banking laws. In Scotland and elsewhere where, during that same era, note-issuing banks were allowed to establish nationwide branch networks, no special government intervention was needed to achieve a uniform currency.

The San Francisco Fed video also fails to mention how, despite unit banking, discounts on state banknotes had fallen to very modest levels by the early 1860s—so modest that, had someone in the autumn of 1863 been foolish enough to purchase every (non-Confederate) banknote in the country for its declared value, in order to sell the notes to a broker in New York or Chicago, that person’s loss would have amounted to less than 1 percent of the notes’ face value, even reckoning “doubtful” notes as worthless (Selgin 2003: 607–8).⁸

That improvement didn’t stop the northern government from passing legislation authorizing U.S. Treasury notes (“greenbacks”), establishing national banks, and subjecting outstanding state bank notes to a prohibitive 10 percent tax. As Fed sources point out, these measures did away with remaining banknote discounts, and so gave the United States an entirely uniform currency at last. But those sources (and many non-Fed writings also) misstate both the motivation behind the steps taken—which was actually that of replenishing the Union’s empty coffers—and the precise means by which discounts were

⁸This loss, it bears noting, is lower than that routinely incurred today by merchants who accept credit cards and by persons who draw cash from ATMs other than those belonging to their own bank.

eliminated. Despite what is often suggested, discounts didn't vanish simply because the notes of all national banks were subject to the same regulations and backed by government bonds. Those similarities alone couldn't have prevented national banks from applying discounts to rival banks' notes sufficient to cover the cost of returning them for payment. Instead, a provision of the 1864 National Bank Act, a revised version of the 1863 National Currency Act, simply compelled every national bank to accept other national banks' notes at par.⁹

That "bank runs and financial panics continued to plague the economy" after the Civil War is of course readily acknowledged by official Fed publications (FRBP2). The main reason for this, according to one of those sources, was "[t]he inability of the banking system to expand or contract currency in circulation or provide a mechanism to move reserves throughout the system" (FRBNY1). Here again Fed officials treat what was really a consequence of misguided regulation as having been due to a *lack* of regulation. In particular, instead of explaining how regulations kept national banks from issuing more currency when it was needed, engendering the notorious "inelasticity" of the U.S. currency stock, they blame that inelasticity on "the absence of a central banking structure" (*ibid.*). Put it that way and—presto!—a central bank becomes the only conceivable remedy.

In fact the U.S. currency stock might have been made perfectly elastic simply by doing away with barriers to branch banking and repealing Civil-War-era laws regulating banks' ability to issue notes, including the requirement that national banknotes be backed 110 percent by U.S. government bonds. (Those laws, it bears recalling, were part of the Union's strategy for funding the war, and as such were obsolete.) That such deregulation could have worked, and worked better than the Fed did, is strongly suggested by Canada's experience. Canada didn't have a central bank until 1935, yet it avoided the crises that rattled the U.S. economy in 1873, 1884, 1893, and 1907. Canada's relatively stable system consisted of several dozen nationally branched banks-of-issue, all of which were able to issue notes backed by their general assets, and subject to no further restriction save one (itself relaxed in 1907) based on their paid-in

⁹According to Selgin and White (1994), this Procrustean means for achieving a uniform currency turned national bank notes into "quasi-high-powered" money, undermining the routine clearing and redemption of rival banknotes that normally constrains overissue of notes in a competitive note issue arrangement.

capital. Canadian banks' relative freedom allowed them to meet both secular growth and seasonal peaks in currency demand, while nationwide branching, by facilitating note redemption, saw to the mopping-up of excess currency (Selgin and White 1994: 237–40).

Canada's example didn't go unnoticed by those seeking to fix the U.S. currency system, and quite a few legislative attempts were made—the Indianapolis, Carlisle, and Fowler plans among them—to replicate it. Alas, all were doomed, thanks in part to their call for branch banking, which was vigorously opposed by bankers in smaller towns as well as those in New York City. Main Street feared the competition to which branching would expose it, while Wall Street was anxious to hold on to the large correspondent balances that were a by-product of the status quo.¹⁰

It was only when Canadian-style currency reform proved a dead end that reformers generally abandoned it in favor of a central-bank based alternative. Instead of calling for deregulation of the existing banking and currency system, this alternative involved having a new bank (or, as it were, set of banks) vested with the exclusive right to both branch and issue notes backed by assets other than government bonds. Because the new banks, which were to do business only with established banks and the U.S. government, posed no direct threat to established banks, and because it left the structure of the commercial banking industry more or less unchanged, the new plan steered clear of concerted bankers' opposition. A central bank was, in short, no more than a second-best solution—if that—to the ills of the pre-1914 U.S. currency and banking system.

Yet one would never guess such from the Fed's own accounts of its history, which for the most part don't even mention Canada's successful arrangement, the various asset-currency plans inspired by it, or how banking industry insiders were instrumental in seeing to it that those plans were set aside in favor of a central-bank alternative. According to one of Ben Bernanke's recent George Washington University lectures (Bernanke 2012a), for example, it was only after the 1907 crisis "that Congress began to say, 'Well, wait a minute, maybe we need to do

¹⁰"The Federal Reserve System," Kolko (1963: 253) observes, "stabilized the financial power of New York within the economy, reversing the longer term trend toward decentralization by the utilization of political means of control over the central money market." See also Calomiris and Haber (2014), White (1989), and Williamson (1989).

something about this, maybe we need a central bank, a government agency that can address the problem of financial panics.””

Independence

“Most studies of central bank independence,” a San Francisco Fed publication informs us, “rank the Fed among the most independent in the world” (FRBSF 1999a). The Fed’s independence is supposed to allow it to “conduct monetary policy with relative autonomy from the federal government,” especially by insulating its decisions “from short-term political influence” (FRBA3; see also Board of Governors 2013b). Particular arrangements that supposedly rule-out such “short-term political influence” include the fact that members of the Board of Governors serve staggered 14-year terms and the fact that the Fed, instead of relying on Congress for funding, uses its seigniorage revenue to cover its costs and pay shareholder dividends (Board of Governors 2013a, 2013b; FRBD2).

But despite these arrangements, and no matter how independent the Fed may be compared to other central banks, the truth is that it has always conducted monetary policy with an eye toward satisfying the desires of the general government. That the Fed was a mere handmaiden to the Treasury before 1951 is sufficiently obvious that at least one official Fed educational document concedes the point. “From its founding in 1913,” a Philadelphia Fed publication recognizes, “to the years up to and following World War II, the Fed largely supported the Treasury’s fiscal policy goals” (FRBP2).

Until 1935, the Secretary of the Treasury and his second-in-command, the Comptroller of the Currency, served as the chairman and vice-chairman, respectively, of the Federal Reserve Board. Although the Banking Act of 1935 removed Treasury representatives from what then became the Board of Governors, while establishing the present terms of appointment, it did not end the Treasury’s influence. On the contrary, that influence actually increased. “From 1935 to 1951,” Richard Timberlake (n.d.) observes, “the secretary of the treasury, with the compliance of Fed Board Chairman Marriner Eccles, continued to dominate Fed policies.” During World War II especially, and for some years afterwards, monetary policy again became entirely subordinated to the Treasury’s wants, with the Fed holding down interest rates on government securities by serving, in

effect, as the Treasury's bond buyer of last resort, which meant having monetary policy play second fiddle to government funding.

Fed outreach materials all agree, on the other hand, in proclaiming 1951 as the year in which the Fed achieved complete independence. "When the Korean War broke out," the aforementioned Philadelphia Fed publication observes,

Fed chairman William McChesney Martin again faced pressure from the Treasury to maintain low interest rates to help provide funds for the war effort. Martin, however, worked closely with the Treasury to break the long-standing practice of supporting government bond interest rates. Since then, the Fed has remained staunchly independent in its use of open market operations to support its monetary policy goals [FRBP2].

Actually, the Fed's chairman at the time of the so-called "Treasury Accord" was not Martin but Thomas B. McCabe. Martin took part in the Accord, not as the Fed's representative, but as the Treasury's, having at the time been its assistant secretary for monetary affairs. But let us not quibble. The big question is, did the Accord really free the Fed from politics? According to Robert Weintraub (1978: 354), the claim is "at best a half truth." The Accord allowed the Fed to reduce its Treasury purchases to the extent allowed by its agreement to swap unmarketable $2\frac{3}{4}$ bonds for $2\frac{1}{2}$ ones already outstanding. In turn the Fed promised to raise its discount rate only with the Treasury's permission, which was unlikely to be given except under "very compelling circumstances" (*ibid.*: 353–54).

As if to make clear who held the upper hand, days after the Accord was reached President Truman had chairman McCabe tender his resignation, appointing McChesney Martin in his place. Far from daring to flex the Fed's muscles, Martin proved a pushover when it came to resisting government influence (Meltzer 2003: 712). Although the Fed avoided inflation during most of the 1950s, that was so only because the decade was one of small government deficits (with occasional surpluses), and because Eisenhower, who succeeded Truman in 1953, was a resolute inflation hawk. When Kennedy and then Johnson took command, Martin had no trouble switching to the more activist and inflationary stance they favored, and although he did offer some resistance to Johnson's demand for further help in financing the Great Society programs and the

Vietnam War, that resistance proved too feeble to keep the inflation rate from rising (Cargill and O'Driscoll 2013).¹¹

When Martin retired at last, his replacement, Arthur Burns, upheld Martin's doctrine of "independence within government." As if to render that meaning of that doctrine crystal-clear, during the 1971 election campaign Nixon and his staff pressured Burns to pursue an expansionary monetary policy, even though doing so might mean losing control of inflation, in part by leaking to the press that "the Federal Reserve would lose its independence if interest rates were not kept low" (Day 2013; see also Abrams 2006). Burns complied, with consequences that are all too well-known. He then went on to conduct monetary policy during the remaining Nixon, Ford, and Carter years "with the same political sensitivity" (Cargill and O'Driscoll 2013: 422).

Although Paul Volcker managed to rein in inflation and thereby restore the Fed's reputation as an independent agency devoted to keeping prices stable, he was able to do so only because he was backed by presidents who were themselves convinced that inflation had become the nation's top economic problem (*ibid.*: 423). "Political pressure," Cargill and O'Driscoll observe (*ibid.*), "is political pressure even if it happens to lead to correct policy."

More recently still, political pressure appears to have played a part in the Fed's ill-fated decision to keep interest rates low despite evidence of an overheating housing market. On the occasion of his testifying to the Financial Crisis Inquiry Commission, Alan Greenspan pointed out "that if the Federal Reserve had tried to slow the housing market amid a 'fairly broad consensus' about encouraging homeownership, 'the Congress would have clamped down on us'" (Cargill and O'Driscoll 2013: 424–25).¹²

¹¹"We should be under no illusions," Martin told the governors prior to the vote; "a decision to move now can lead to an important revamping of the Federal Reserve System, including its structure and operating methods. This is a real possibility and I have been turning it over in my mind for months" (Board of Governors, minutes, December 3, 1965).

¹²Some steps taken during the subprime crisis have also tended to further undermine the Fed's already far from complete independence. In particular, the Supplementary Financing Program (SFP) set up by the Treasury in December 2007 to assist the Fed in sterilizing emergency loans it was then making, threatened, in the words of one commentator "to blur operational responsibility for monetary policy" (Stella 2009: 23). Despite its having been rendered redundant when the Fed gained the power to pay interest on bank reserves, the program still exists, although it is now officially "suspended." For more concerning how the Fed's conduct during the recent crisis compromised its already limited independence see Bordo (2010) and Cochrane (2012).

In short, while the Treasury Accord may ultimately have relieved the Fed of its former duty to serve as the Treasury's "bond buyer of last resort," it did not otherwise free monetary policy from political influence. Instead, as Weintraub (1978: 353) observes, Fed chairmen ever since McCabe have understood perfectly well that "a Chairman of the Federal Reserve Board who ignores the wishes of the President does so at his peril."

Inflation and Deflation

Of the many challenges the Fed faces in trying to put a favorable spin on its record, none is more daunting than that of pretending that it has kept prices stable. The U.S. consumer price level was approximately the same when the Fed was founded as it was at the time of the dollar's establishment as the official U.S. monetary unit. It is now about 24 times higher. The dollar has thus lost over 96 percent of its pre-Fed value, with most of the loss occurring since 1971. Before then, the Fed was still somewhat constrained by an obligation to redeem its notes in gold.

Since the Fed can hardly deny outright that, by any reasonable measure, it has failed to keep prices stable, it must settle for suggesting that it has done so while carefully avoiding any reference to the actual course of prices since its establishment. A particularly flagrant instance of this approach occurs in the Atlanta Fed video "The Fed Explains Good versus Bad Standards" (FRBA2). That video starts by comparing the need for a reliable standard of value to that for reliable standards of weight and measurement. "Over the years," the narrator observes, "we have come to appreciate the importance of maintaining consistent standards in our measurements, and the measurement of value is no different. Keeping that standard stable is vital to keeping our economy operating at its maximum efficiency." Did the gold standard do the trick? "Not really," the narrator explains:

Fluctuations to [sic] the purchasing power of gold made gold a poor standard on which to base our measure of value, and that made trade difficult since no one knew what a dollar would buy from day to day. Eventually, the United States separated from the gold standard and Congress tasked the Federal Reserve to set its policies in order to maintain price stability. Now, the Fed is in charge of keeping the purchasing power of a dollar

stable so that when people want to buy or sell something everyone has a clear understanding of the measure of value.

The video implies—though it never *says*—that the dollar has been a more reliable “measure of value” since the Fed’s establishment, and particularly since 1971 (when the U.S. “separated” from the gold standard), than it was before. In a like manner, another Atlanta Fed video (FRBA1), shows a cartoon car (the real economy) heading along a road strewn with obstacles (the macroeconomic environment, presumably). “Because the Federal Reserve is keeping an eye on inflation,” a voice tells listeners, “you can keep an eye on the road.” In truth, of course, it has become both more necessary and more difficult for businessmen and consumers to keep track of inflation since 1914 than it was during most of the preceding century.¹³

When it isn’t claiming, implicitly or otherwise, to have prevented it, the Fed portrays inflation, not as evidence of its own lack of monetary restraint, but as a kind of menace-from-without, while portraying itself as a heroic, if not invincible, inflation fighter. “If the price level begins to rise too quickly,” the Atlanta Fed video tells listeners, “central banks, like the Federal Reserve, will *try* to adjust monetary policy in order to slow this advance of prices” (emphasis added). A still more blatant example of this tactic occurs in the New York Fed’s educational comic book, “The Story of Monetary Policy” (FRBNY 1999a; see also FRBNY 1999b), with its panel showing the Fed, depicted as a superhero—complete with blue bodysuit and yellow cape—thrusting an elbow into a Big Red Blob standing for “inflation.” Just where the blob came from is never explained, though readers might just as well assume that, like Superman’s nemesis Jax-Ur, it came from the planet Krypton.¹⁴

In view of the actual extent of inflation since 1914, the Fed might at least appear justified in claiming credit for avoiding *deflation*. Yet even that claim is misleading. It overlooks, first of all, the fact that several of the most notorious instances of deflation—including those of 1920–21, 1930–33, 1937–38, and 2008–09 (the last of which was

¹³On the substantial increase in price-level uncertainty since the Fed’s establishment see Selgin, Lastrapes, and White (2012: 570–74).

¹⁴In claiming to have done a good job combatting inflation the Fed in recent years has also taken advantage of the widespread treatment, which it has done much to encourage, of 2 percent inflation as “the new zero.”

severe relative to the then established trend of steadily rising prices)—took place *after* 1914. The claim also rests on the assumption, itself common in Fed publications, that deflation is necessarily a bad thing. “At first glance,” the San Francisco Fed’s “Dr. Econ” (FRBSF 2006) observes,

deflation might sound like a good thing—who would not like a world where things consumers buy get cheaper over time? However . . . in addition to falling prices of goods and services, other prices would be falling too. For instance, falling wages are likely to accompany falling prices (since wages are the price of labor). Should wages fail to adjust . . . then jobs could be lost as employers struggle to keep up with falling revenues.

Elsewhere Dr. Econ (FRBSF 1999b) observes that “Periods of deflation typically are associated with downturns in the economy,” quoting, with obvious approval, Samuelson and Nordhaus’s (1998) assertion that occasions “in which prices fall steadily over a period of several years, are associated with depressions.”

The trouble with this perspective is that it fails to recognize the existence of two very different sorts of deflation. “Bad” deflation happens when an insufficient level or growth rate of aggregate demand leads to a decline in equilibrium prices unconnected to any improvement in an economy’s productivity. “Good” deflation, on the other hand, reflects productivity improvements. Because good deflation, unlike the bad sort, goes hand-in-hand with falling unit production costs, it generally doesn’t entail falling profits, wage rates, or employment (Selgin 1997, Stern 2003).

In equating deflation with depression, Fed spokesmen ignore the possibility of good deflation, and so treat all deflation as demand-driven. In one of his GWU lectures, Ben Bernanke (2012a; compare Bernanke 2002) observes:

The sources of deflation are not a mystery. Deflation is in almost all cases a side effect of a collapse of aggregate demand—a drop in spending so severe that producers must cut prices on an ongoing basis in order to find buyers. Likewise, the economic effects of a deflationary episode, for the most part, are similar to those of any other sharp decline in aggregate spending—namely, recession, rising unemployment, and financial stress.

In fact the broader historical record shows that, far from being exceptional, supply-driven deflation was once far more common than the demand-driven sort (Atkeson and Kehoe 2004, Bordo and Filardo 2005). In particular, for most of the last quarter the 19th century, prices throughout the gold-standard bloc declined at a rate roughly reflecting declining real costs of production. Yet far from being symptomatic of a “long” or “great” depression, and notwithstanding occasional financial panics and the ululations of greenbackers and silverites, the deflation went hand-in-hand with robust long-term economic growth. Indeed, instead of inspiring still more rapid growth, as the Fed’s pronouncements might lead one to expect, the inflation that followed new gold discoveries of the 1890s brought a slowdown.

The Fed’s refusal to admit that deflation can be a good thing has had practical consequences beyond that of misleading the public. By preventing not only good (that is, productivity-driven) deflation, but good *disinflation*, in recent years, it may well have encouraged business cycles, particularly by contributing to the recent housing boom (Selgin, Beckworth, and Bahadir 2013). According to Alan Greenspan (2010), when the Fed decided, in 2003, to maintain a very low federal funds rate, “the probability of getting deflation . . . was less than fifty-fifty. But had it occurred, the impact would have been much too difficult to deal with.” That the source of deflation (or disinflation) “risk” was not a slackening of demand but surging productivity apparently didn’t matter. But it ought to have, for it meant that, instead of preventing a recession, the Fed’s decision fueled a boom.

Financial Panics

As the Fed’s own accounts make clear, it was founded mainly for the purpose of putting an end to financial panics like those of 1893 and 1907. Those accounts are, however, not to be trusted when it comes to either understanding the nature of pre-Fed panics or assessing the Fed’s success in preventing others like them.

As we’ve seen, Fed sources routinely overlook the role misguided regulations played in causing or at least aggravating pre-Fed crises, blaming them instead on random outbreaks of unwarranted fear. “Occasionally,” the Dallas Fed says (FRBD 2006: 8),

the public feared that banks would not or could not honor the promise to redeem [their] notes, which led to bank runs. Believing that a particular bank’s ability to pay was

questionable, a large number of people in a single day would demand to have their banknotes exchanged for gold or silver. These bank runs created fear that often spread, causing runs on other banks and general financial panic. . . . Financial panics such as these occurred frequently during the 1800s and early 1900s.

In his opening GWU lecture Ben Bernanke (2012a) likewise speaks of panic spreading, like a cold, from one bank to the rest. “[I]f one bank is having problems,” he says, people “might begin to worry about problems in their bank. And so, a bank run can lead to widespread bank runs or a banking panic, more broadly.” To illustrate the point, Bernanke refers to the run on “Jimmy Stewart’s” (that is, George Bailey’s) perfectly solvent bank in *“It’s a Wonderful Life.”* Had the Federal Reserve been on the job, he says, Bailey wouldn’t have had to depend on the generosity of the good citizens of Bedford Falls.¹⁵

But the sort of financial panic that Bernanke’s “Frank Capra” theory describes happens *only* on TV (where, admittedly, it happens with alarming regularity, every December). Even in the pre-Fed U.S., which had more than its fair share of crises, bank-run “contagions” were not common, and those outbreaks that did occur were narrowly confined (Calomiris and Gorton 1991, Kaufman 1994, Tenzelides 1997). Instead of causing banks to fail, runs tended to be staged against banks that were already on the brink of failure. Nor were the system-wide runs that began in late February 1933 an exception, for those runs were due, not to indiscriminate panic but to a well-justified fear that FDR, upon assuming office, would devalue the dollar (Wigmore 1987).

Fed sources also give the impression that, because the Fed was *supposed* to put a stop to panics, it largely succeeded in doing so, whereas in truth panics were more common during the Fed’s first two decades than they’d been during the previous four (Wicker 1996, 2000; Jalil 2009). And though panics did disappear for a while after 1933, credit for that belongs, not to the Fed, but to the RFC and, after it, the FDIC and FSLIC.

¹⁵In fact, because the Bailey Building and Loan Association was a thrift rather than a bank, the Fed would not have had permission to lend to it until the summer of 1934, and even once it had that authority, it could not have accepted the Association’s mortgages as collateral for a discount window loan.

That deposit insurance was itself no panacea was made clear both by the S&L crisis of the 1980s, to which the FSLIC succumbed, and by the more recent subprime crisis. The Fed therefore continues to bear some responsibility for avoiding or containing panics. According to various official Fed sources, the responsible way for it to do so is by heeding the advice Walter Bagehot gives in *Lombard Street* (1873). Bagehot, Bernanke explains in his GWU lecture, “said that during a panic, [the] central bank should lend freely . . . against good assets.” The “good assets” rule is supposed to limit last-resort lending to solvent institutions, so as to avoid propping up insolvent ones. Bagehot also wanted borrowers to be charged “high” rates, to discourage them from borrowing simply for the sake of relending at a profit, and also (since he wrote in the days of the international gold standard) to attract gold from abroad.

Intriguingly, Bagehot had nothing to say about what we now know as the “moral hazard” problem—the problem of firms, and their creditors, taking greater risks because they anticipate being rescued. He didn’t have to say anything, because when he wrote the Bank of England, to which his strictures were aimed, was still a private firm with no inclination to lend to anyone of doubtful solvency. It was all Bagehot could do to try and get the profit-oriented Bank to lend to indisputably *solvent* firms just because they were desperately illiquid.

The Fed today is, of course, a horse of a very different color. Despite being nominally privately owned and paying dividends to its owners, its purpose isn’t to turn a profit, and its managers are rewarded not according to how profitable it is, but according to their perceived success in promoting price stability and high employment, among other goals.¹⁶ Bureaucratic incentives therefore incline Fed officials, not to deny last-resort aid to firms that (according to Bagehot’s rules) qualify for such, but to make last-resort loans to firms that *don’t* qualify rather than risk being blamed for allowing a crisis to unfold. The moral hazard problem is therefore more than capable of rearing its ugly head.

¹⁶Nor would anyone want things to be otherwise: because the Federal Reserve’s “liabilities,” unlike the Bank of England’s in 1873, aren’t redeemable in gold (or in anything else), were it to maximize profits the result would be considerably greater inflation than the United States has actually experienced.

And so it has, thanks to the Fed's having lent money repeatedly, throughout the 1980s, to banks that were in fact insolvent (Schwartz 1991), and especially thanks to its having, with its rescue of Continental Illinois in 1984, officially embraced the notion that some financial institutions, solvent or not, are simply too big to fail (TBTF).¹⁷ The Rubicon had been crossed. After that, creditors could hardly be blamed for assuming that, so long as a bank was sufficiently large or "systematically important," it might qualify for last-resort aid. Official Fed paeans to Bagehot thus came to be read as if there were an asterisk attached to them: "To get credit from us," the Fed was now widely understood to say, "you must *either* have good collateral *or* be strategically important." The risks inherent in this revision of Bagehot's rules were to become all too evident in the course of the next major crisis.

The Subprime Crisis

The most recent financial crisis has allowed the Fed to achieve one of its most impressive PR feats, to wit: convincing the public that the crisis, instead of supplying more proof of its inadequacy, shows that it's now working better than ever. To accomplish this, the Fed has had to argue that, had it not been for its interventions, the outcome would have been much worse. Typical of this spin is San Francisco Fed President John C. Williams's (2012) observation that, at the end of 2008, the U.S. economy was

teetering on the edge of an abyss. If the panic had been left unchecked, we could well have seen an economic cataclysm as bad as the Great Depression, when 25 percent of the workforce was out of work. . . . Why then didn't we fall into that abyss in 2008 and 2009? The answer is that a financial collapse was not—I repeat, not—left unchecked. The Federal Reserve did what it was supposed to do.

But did the Fed really do everything "it was supposed to do" to contain the crisis? Is it even certain that its interventions made the crisis no *worse* than it would have been otherwise? There are good reasons for believing that the correct answer to both questions is "no."

¹⁷Subsequent investigations revealed that Continental Illinois' failure would actually have had only minor systemic consequences (Bédard 2012: 358–59).

The Fed was, first of all, “supposed” to command such superior information as ought to have allowed it to see the crisis, or at least *some* trouble, brewing. After all, according to the San Francisco Fed’s “Dr. Econ” (2001), “Federal Reserve operations and structure provide the System with some unique insights into the health of the financial system and the economy,” providing it “with firsthand knowledge of the conditions of financial institutions.” In fact Fed officials never saw what hit them. As the FOMC’s 2006 transcripts make clear, that committee was convinced at that late date both that a housing market downturn was unlikely and that, if such a downturn occurred, it would not do much damage to the rest of the economy. New York Fed President Timothy Geithner, for example, observed that “we just don’t see troubling signs yet of collateral damage, and we are not expecting much,” while Janet Yellen did not hesitate to congratulate outgoing Fed Chairman Alan Greenspan for leaving “with the economy in such solid shape” (Appelbaum 2012).

Besides not realizing that the boom was leading to a bust, the Fed encouraged it, and so contributed to the severity of the collapse, by maintaining an extremely low federal funds rate target in the wake of the 2001 crash. Even Fed officials hint at this. “During the early 2000s,” a Boston Fed education website (FRBB1) tells us, “low mortgage rates and expanded access to credit made homeownership possible for more people, increasing the demand for housing and driving up house prices”; while Federal Reserve Bank Vice President Jeff Fuhrer, speaking on the Philadelphia Fed video “The Federal Reserve and You” (FRBP1), observes that “when the Fed takes action to move interest rates up and down, it *almost always* has a significant effect on mortgage rates” (my emphasis).¹⁸ It seems reasonable, in light of such claims, to conclude that the Fed did indeed stoke the boom, and that is indeed the conclusion many researchers, equipped with similar logic and corresponding evidence, have drawn.¹⁹ Yet Fed spokesmen, instead of drawing the same conclusion, insist that what was “almost always” the case ceased to be so around 2003. According to them—and to Alan Greenspan and Ben

¹⁸Bernanke (2012a) likewise observed that “by raising the overnight interest rate, known as the federal funds rate, higher interest rates feed through the system and help to slow the economy by raising the cost of borrowing, of buying a house, of buying a car.”

¹⁹See Leijonhufvud (2009) and Taylor (2007, 2013)

Bermanke especially—low mortgage rates at that time were due to a “global saving glut” over which the Fed had no control.

Though it initially commanded some assent beyond the Fed, the savings glut hypothesis has since been subject to withering criticism. Among various counterarguments, perhaps the most fundamental is offered by Giancarlo Bertucco (2012; see also Borio and Disyatat 2011), who points out that, in a monetary (as opposed to barter) context, the global savings glut hypothesis isn’t an alternative to the domestic monetary policy hypothesis at all. “In a world with money,” Bertucco observes,

emerging economies can become savers [only by] selling goods to the developed country. . . . The origin of the mass of liquidity accumulated by emerging economies must therefore be [traced to] the decisions of the U.S. financial system which, by creating new money, financed the demand for goods which was fulfilled by emerging economies.

Home equity loans played no small part in financing the demand for imports of all kinds, and especially imports from China, thus contributing both to the U.S. trade imbalance and to the capital inflow that was that imbalance’s inescapable counterpart.

Nor did the Fed do everything it was supposed to do when it came to last-resort lending. Ben Bernanke, as we’ve noted, insists that in making last-resort loans, the Fed abides by Bagehot’s principles, the soundness of which he readily grants. In a 2012 speech, for example, he said that the recent crisis

is best understood as a classic financial panic—differing in details but fundamentally similar to the panics described by Bagehot [who] advised central banks . . . to respond to panics by lending freely against sound collateral. Following that advice, from the beginning of the crisis, the Fed . . . provided large amounts of short-term liquidity to financial institutions, including primary dealers as well as banks, on a broad range of collateral. . . . [T]hose actions were, again, consistent with the Bagehot approach of lending against collateral to illiquid but solvent firms [Bernanke 2012b].

Actually Bernanke’s Fed spurned Bagehot’s advice in at least one crucial way. It didn’t do so by granting last-resort loans to an

investment bank or even to nonfinancial firms: whatever the Fed's own standard practice may have been, Bagehot himself never insisted that last-resort lending be confined to banks. Nor was it necessarily inconsistent of the Fed to have rescued Bear and AIG but not Lehman, for although Lehman was certainly insolvent, some authorities (e.g. Cline and Gagnon 2013) maintain that Bear and AIG were solvent when the Fed came to their aid.²⁰ Nor, finally, was it merely that the Fed made last-resort loans at below-market rates or without securing those loans adequately—though it has been charged with doing both.²¹ The main problem was that, even if the Fed did *intend* to confine its emergency lending to illiquid but solvent firms, as Bagehot's rule dictates, in its public pronouncements it justified its emergency lending, and its \$29 billion loan in support of Bear Stearns's acquisition in particular, not on the Bagehotian grounds that, having been denied credit elsewhere but having had good collateral to offer, the firms were entitled to it, but on the grounds that the firms it was aiding were too big (or "systematically important") to fail.

Explaining the Bear rescue to the Joint Economic Committee, for example, Ben Bernanke (2008a; see also Bernanke 2008b) testified:

Normally, the market sorts out which companies survive and which fail, and that is as it should be. However, . . . Bear Stearns participated extensively in a range of critical markets. With financial conditions fragile, the sudden failure of Bear

²⁰The opinion is, however, controversial. "If Bear Stearns had been viewed as solvent by the financial community," the more common understanding has it, "JPMorgan may not have insisted on such a large government cushion to acquire the firm" (Sanati 2010). In justifying Bear's rescue to the Financial Inquiry Commission Treasury Secretary Paulson himself insisted that Bear was insolvent. "We were told Thursday night that Bear was going to file for bankruptcy Friday morning if we didn't act. So how does a solvent company file for bankruptcy?" (*ibid.*)

²¹See Hogan, Le, and Salter (2014), Humphrey (2010), and Labonte (2009). According to the last source, had the Fed's support of Bear Stearns's acquisition "been crafted as a typical discount window loan directly to JPMorgan Chase," rather than as an indirect loan through the Fed-created Limited Liability Corporation Maiden Lane 1, "JPMorgan Chase would have been required to pay back the principal and interest, and it (rather than the Fed) would have borne the full risk of any depreciation of Bear Stearn assets" (Labonte 2009:19). By taking on risk connected to Bear's acquisition, the Fed violated Bagehot's rule calling for last-resort loans to be fully secured. The same criticism can be made of its support of Citigroup and Bank of America (*ibid.*: 20–25).

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Bear Stearns likely would have led to a chaotic unwinding of positions in those markets and could have severely shaken confidence. The company's failure could also have cast doubt on the financial positions of some of Bear Stearns' thousands of counterparties and perhaps of companies with similar businesses. Given the current exceptional pressures on the global economy and financial system, the damage caused by a default by Bear Stearns could have been severe and extremely difficult to contain. Moreover, the adverse effects would not have been confined to the financial system but would have been felt broadly in the real economy through its effects on asset values and credit availability.

Tim Geithner, who was then president of the New York Fed, likewise stressed not Bear's solvency but the fact that allowing it to fail would have led to "a greater probability of widespread insolvencies, severe and protracted damage to the financial system and, ultimately, to the economy as a whole" (Labaton 2008).

A similar admixture of Bagehotian and TBTF criteria for central bank lending also occurs in various post-crisis Fed publications. According to the Federal Reserve Bank of San Francisco (FRBSF1), for example, Bear Stearns's failure would have

risked a domino effect that would have severely disrupted financial markets. To contain the damage, the Federal Reserve facilitated the purchase of Bear Stearns by the bank JPMorgan Chase by providing loans backed [*sic*] by certain Bear Stearns assets. Several months later, however, the investment bank Lehman Brothers collapsed because no private company was willing to acquire the troubled investment bank and Lehman did not have adequate collateral to qualify for direct loans from the Federal Reserve. As a result, financial panic threatened to spread to several other key financial institutions, including the giant insurance company American International Group (AIG). AIG played a central role guaranteeing financial instruments, so its failure had the potential to lead to a cascade of failures and a meltdown of the global financial system. To contain this threat, the Federal Reserve provided secured loans to AIG.

The trouble with such a mingling of Bagehotian and TBTF lending criteria is, as we have seen, that it raises a moral hazard. Bernanke

himself was fully aware of the danger. “Some particularly thorny issues,” he observed after the Bear rescue (Bernanke 2008b),

are raised by the existence of financial institutions that may be perceived as “too big to fail” and the moral hazard issues that may arise when governments intervene in a financial crisis. [Bear’s rescue was] necessary and justified under the circumstances that prevailed at that time. However, those events also have consequences that must be addressed. In particular, if no countervailing actions are taken, what would be perceived as an implicit expansion of the safety net could exacerbate the problem of “too big to fail,” possibly resulting in excessive risk-taking and yet greater systemic risk in the future. Mitigating that problem is one of the design challenges that we face as we consider the future evolution of our system.

In retrospect, however, it’s evident that the problem *wasn’t* “mitigated,” for Lehman’s counterparties, who were well aware of its troubles, clearly expected it to be rescued, and so took no adequate precautions against its going bankrupt.

Nor could the Fed claim that it had effectively guarded against any such expectation by means of an unambiguous statement of its last-resort lending policy. “In its nearly 100-year history,” Allan Meltzer observes (2012: 261), “the Fed has never announced its policy as lender of last resort. From the 1970s on, it acted on the belief that some banks were too-big-to-fail. Although the FOMC discussed last resort policy at times, the Fed never committed itself to a policy rule about assistance.”

Michael Lewis (2008) was among those who correctly anticipated the consequences of the Bear rescue. “Investment banks,” Lewis wrote just afterwards, “now have even less pressure on them than they did before to control their risks.” He continued:

There’s a new feeling in the Wall Street air: The big firms are now too big to fail. If the chaos that might ensue from Bear Stearns going bankrupt, and stiffing its counterparties on its billions of dollars of trades, is too much for the world to endure, the chaos that might be caused by Lehman Brothers Holdings Inc. or Goldman Sachs Group Inc. or Merrill Lynch & Co. or Morgan Stanley going bankrupt must also be too much to endure.

Already we may have seen one of the pleasant effects of this financial order: the continued survival of Lehman. What happened to Bear Stearns might well already have happened to Lehman. Any firm that uses each \$1 of its capital to finance \$31 of risky bets is at the mercy of public opinion. . . . Throw its viability into doubt and the people who lent them the other \$30 want their money back as soon as they can get it—unless they know that, if it comes to that, the Fed will make them whole. The viability of Lehman Brothers has been thrown into serious doubt, and yet Lehman Brothers lives, a tribute to the Fed's new policy.

Unless they were somehow prevented from doing so by new regulations, Lewis (2008) went on to say, Lehman and other large investment banks would “use the implicit government guarantee to underwrite their relentless pursuit of incredible sums of money for themselves—and thus create problems for the Fed and the financial system that will make the undoing of Bear Stearns seem trivial.” For larger financial firms especially, market discipline did in fact deteriorate after the Bear Stearns bailout (Hett and Schmidt 2013). Lehman itself behaved as if its principal aim was to secure a place at the very top of the Fed's critical list.

When the inevitable reckoning came, the Fed faced a stark choice: it could either abandon TBTF or set aside, more flagrantly than ever before, Bagehot's call for lending only on good collateral. To the financial industry's immense surprise, it took the former course, provoking a panic that was only compounded when Bernanke and Paulson, in attempting to get \$700 billion from Congress, warned that, without this assistance, the crisis “would threaten all parts of our economy.”²²

²²According to John Taylor (2008: 15–17), it appears to have been this testimony *rather than* Lehmann's failure itself that caused the crisis to deepen during the ensuing month. The FDIC's decision, October 28th, to spare WaMu's uninsured depositors at the expense of its secured creditors also appears to have contributed more than Lehman's failure did to the late-October freeze-up of the wholesale credit market (Allison 2013: 75–77).

The direct collateral damage from Lehman's bankruptcy proved far less extensive than government authorities claimed it would be. Instead of triggering the failure of thousands of counterparties, it led to the embarrassment of only one, when the Reserve Primary (money market) Fund, which held a large amount of Lehman's securities, “broke the buck.” Other funds that held Lehman's paper were able to cover their losses by drawing upon their parent companies.

Many Fed critics conclude that, having justified its rescue of Bear Stearns on too-big-to-fail grounds, the Fed ought also to have rescued Lehman. Others, however (Ayotte and Skeel 2010; Skeel 2009; Danielsson 2008) maintain that the Fed would have done still less harm by letting Bear itself go bankrupt, notwithstanding its having been solvent, for that would at least have suggested that the Fed was unwilling to take investment banks under its TBTF umbrella, and so would have given Lehman and its counterparties reason to prepare for that firm's bankruptcy.

The Fed also departed from Bagehot's advice by sterilizing its last-resort lending. Despite the rescues it undertook, it kept the total size of its balance sheet more or less unchanged, offsetting its emergency lending with corresponding sales of Treasury securities. Consequently, instead of adding to the overall supply of liquid funds, as it should have done were it following Bagehot's dicta (and as it had done, with good results, during past crises including Y2K and 9/11), the Fed chose to *redistribute* such funds from presumably solvent financial institutions to more doubtful ones (Labonte 2009: 28–29). Fed officials defend this course on the grounds that it allowed it to maintain its announced interest rate target. But the argument makes little sense, since in hindsight it seems clear that the occasion justified lowering the target. By sterilizing its emergency loans the Fed inadvertently contributed to the collapse of aggregate spending that was to transform the financial crisis into a full-fledged recession.

According to Daniel Thornton (2012: 8–10), the Fed's conduct was actually due, not to its desire to maintain an (excessively high) rate target, but to Fed officials' belief “that the market's ability to allocate efficiently was impaired.” This rationale, too, was suspect, owing both to the “pretense of knowledge” that underlay it, and to the fact that, by assuming the new role of credit allocation, the Fed exposed itself “to the temptation to politicize its selection of recipients of its credit” (Bordo 2008: 8).

Whatever the reason for it, sterilized lending was, according to Thornton (a vice president of and economic advisor to the Federal Reserve Bank of St. Louis), a serious policy error. “I find it puzzling,” he writes,

that the Fed decided not to increase the monetary base even though it was increasingly clear that the difficulties in the

financial markets and the economy were intensifying and financial markets were in need of additional credit. Increasing the monetary base would not have been a panacea, but increasing the availability of credit to the market would have facilitated the adjustment process significantly. In any event, not increasing the supply of credit by sterilizing the Fed's lending . . . produced no noticeable results. Financial market and economic conditions continued to deteriorate, risk spreads remained high, and on March 14, 2008, the Fed participated in a bailout of Bear Stearns [Thornton 2012: 8–9].

After Lehman failed the Fed ceased to sterilize its lending, allowing the federal funds rate to approach zero. But it also welcomed two new measures that prevented its new stance from contributing to any substantial increase in overall lending and spending. These measures consisted, first, of the Treasury's Supplementary Financing Program (SFP) and, second, of legislation allowing the Fed to begin paying interest on bank reserves. Under the SFP, which began on September 17th and was supposed to be short-lived, the Treasury effectively started doing the Fed's sterilizing for it, by issuing short-term "cash management bills" and parking the proceeds in special Fed bank accounts (Stella 2009). By paying interest on bank reserves, which it began doing on October 6th, the Fed encouraged banks to hold on to excess reserves instead of lending them, further dampening the effect of the Fed's easing.²³

These restrictive measures were once again defended on the grounds that they helped the Fed to implement its desired monetary policy. "Interest on reserves," the Board of Governors (2008) informed the press, "will permit the Federal Reserve to expand its balance sheet as necessary to provide the liquidity necessary to support financial stability while implementing the monetary policy that is appropriate in light of the System's macroeconomic objectives of maximum employment and price stability." More specifically, the step was made necessary, the press release goes on to say, because the Open Market Desk had "encountered difficulty achieving the operating target for the federal funds rate set by the FOMC,"

²³That the interest rate payments were modest does not mean that dampening was trivial. According to Ireland (2012), even a small increase in the interest rate paid on bank reserves could result in a large increase in banks' demand for excess reserves.

because of the large increase in reserve balances the Fed's various emergency lending facilities had sponsored over the course of the preceding weeks:

Essentially, paying interest on reserves allows the Fed to place a floor on the federal funds rate, since depository institutions have little incentive to lend in the overnight interbank federal funds market at rates below the interest rate on excess reserves. This allows the Desk to keep the federal funds rate closer to the FOMC's target rate than it would have been able to otherwise.

A Federal Reserve Bank of San Francisco educational resource summed up the Fed's strategy thus:

The Fed's new authority gave policymakers another tool to use during the financial crisis. Paying interest on reserves allowed the Fed to increase the level of reserves and still maintain control of the federal funds rate (FRBSF 2013).

Where to begin? The Fed can always “expand its balance sheet” as much as it wishes, without regard to the federal funds rate, by purchasing assets, as it has done during the various rounds of quantitative easing (QE). And interest on reserves wasn't needed to “place a floor on the federal funds rate”: it merely served to raise the floor—that is, the rate at which banks ceased to have any incentive to extend overnight credit to other banks—from zero to some positive value. As a solution to the “zero lower bound” problem, this was akin to raising the pavement around skyscrapers to their second story, so as not to have to worry about jumpers ever reaching the ground.

The Fed's decision to reward banks for not lending in the midst of a liquidity crunch was eerily reminiscent of one of its more notorious Great Depression blunders: its decision to double banks' minimum reserve requirement starting in 1936, just when a recovery was at last getting under way. According to many economists, that decision helped to trigger the “Roosevelt Recession” of 1937–38.

The Recovery

The spin Fed sources put on its conduct during the subprime crisis is matched by their misleading portrayal of its role in the post-

crisis recovery. According to official accounts, thanks to the Fed's actions the economy has recovered more rapidly and more fully than it could possibly have done without the Fed's help. "Uncertainty," Cleveland Fed President Sandra Pianalto (2013) observed last spring, has

been restraining the economy. Businesses have been hesitant to hire workers and make investments [while] lenders have also become more cautious. . . . In this environment, the Federal Reserve has taken aggressive and unconventional actions to nudge the U.S. economy back to self-sustaining health. . . . Clearly, the FOMC's policies have been beneficial in increasing economic growth.

In truth, it's far from "clear" that Fed policies have contributed much to the post-2008 recovery. Both theory and experience suggest, first of all, that thanks to adjusting prices and expectations economies *eventually* recover from contractions brought about by reduced lending and spending even if nothing is done to actually restore spending to its former level. What's more, recoveries are usually rapid: in the course of his George Washington University lectures, Bernanke (2012a) observed that "if you look at recessions in the postwar period in the United States, you see very frequently that recoveries only take a couple of years . . . and in fact, very sharp [recessions] are typically followed by a faster recovery." What Bernanke didn't say is that, according to the latest careful studies, and setting aside the recent recession, contractions generally lasted no longer, and recoveries were no slower, during the four decades before the Fed's establishment than they have been since World War II (Romer 1999, Davis 2006). As for the generally disastrous interwar period, it also involved one relatively rapid recovery—from the sharp 1920–21 downturn—to which the Fed contributed very little, if anything at all.

The post-2008 recovery, in contrast, has been painfully slow. Moreover, by some measures at least, it is still far from complete. The Fed's attempts to take credit for it consequently bring to mind an episode of *The Beverly Hillbillies* (a 1960s TV show, in case you're under 50) in which the local doctor is impressed when Granny reveals that she's got a cure for the common cold—a potion that, she says, has worked like a charm for half a century. It's only at the end of the episode that Granny explains that, by "working like a charm,"

she means that all you have to do is take a swig, and in a week to ten days you're as good as new. The difference is that, to judge by the pace of recovery alone, the potions the Fed has been administering to America's ailing economy since the fall of 2008, instead of merely doing nothing, appear to have made it sicker.

This isn't to deny that the Fed *might* have hastened the recovery if, during late 2007 and the first half of 2008, it had acted to preserve economy-wide liquidity instead of making sterilized loans aimed at bolstering particular firms and markets. According to Thornton (2012: 25), the Fed did provide some help through its Term Auction Facility, though it's having done so at subsidized rates—yet another violation of Bagehot's rules—was “troublesome.” But not until after mid-March 2009 did it began expanding the monetary base aggressively, by its first round of QE. By that late date, however (Thornton observes), aggressive easing was no longer justified: financial markets had already stabilized; risk-spreads had declined considerably; and the TAF auctions were undersubscribed. By June, according to the NBER's reckoning, the contraction had already ended (*ibid*: 14).

Instead of promoting recovery, Thornton claims, the Fed's aggressive but belated expansion hampered it by adding to the very uncertainty that Cleveland Fed President Pianalto bemoans.²⁴ “Most economists agree,” Thornton observes (*ibid*: 18),

that if important policymakers were to tell the public that we could be facing the next Great Depression, consumption would sink like a rock. . . . In a similar vein, I believe an “extreme” policy stance, such as the one the FOMC has pursued since late 2008 and indicates that it will continue until late 2014, generates expectations that the economy is much worse than it might otherwise appear. This expectations effect will be particularly important when the actions are

²⁴Fed (and FDIC) regulators also contributed to what President Pianalto refers to as bankers' “more cautious” approach to lending. According to John Allison (2013: 138), the former CEO of BB&T, ever since the crisis the Fed's examiners, in a classic case of slamming the barn door shut after the horses have bolted, have been “making it more difficult for banks to extend new loans and to work with existing business borrowers who are struggling, especially any business with debt related to real estate.”

taken at a time when there are significant signs that financial markets are stabilizing and the economy is improving.

Among other things, the “expectations effects” of the Fed’s unorthodox policies gave banks and other firms a greater inclination than ever to hold cash rather than invest it, undermining the potential for QE to either reduce long-term rates or revive aggregate demand. Instead, the easing served merely to further redistribute credit, while dramatically enhancing the Fed’s share of the total extent of financial intermediation.

Despite such criticisms, the belief that the Fed “saved us from another Great Depression” (Li 2013) is now well on its way to becoming conventional wisdom. The Fed has thus managed to achieve what is surely its greatest PR coup of all. It has taken its most notorious lemon, and made lemonade from it.

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THE NEED FOR A PRICE STABILITY MANDATE

Athanasios Orphanides

The founding of the Federal Reserve was a good idea, but its performance during its first hundred years has been hampered by the lack of clarity of its mandate. At times its mandate was interpreted as requiring the pursuit of multiple targets resulting in the failure to safeguard price stability over time. This article reviews the evolution of the Federal Reserve's mandate and argues that Congress should clarify the primacy of price stability as the central bank's mandate to ensure that the Federal Reserve will better safeguard monetary stability going forward.

Was the Fed a Good Idea?

Was the Fed a good idea? In one word: “Yes!” This is perhaps the expected answer from someone who spent many years at the Federal Reserve. This one-word answer, however, reflects the more general belief that a well-functioning monetary system is a prerequisite for the greatness of any nation and that a central bank is necessary to safeguard monetary stability in a modern economy. Over the past century, the United States has evolved into the most powerful nation on earth, and the creation of the Federal Reserve 100 years ago has contributed to this achievement. Emergencies may arise where the

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very existence of a nation could be threatened in the absence of a central bank. During war, the ability of a nation's central bank to facilitate the financing of the war effort may become a matter of existential consequence. During crises central banks can play a critical stabilizing role.

While the creation of the Fed was a good idea, a qualifier is also appropriate: In two words, my answer is "Yes, but." In its history so far, the Federal Reserve has not always managed to avoid major errors. On the 100th anniversary of the Federal Reserve, it is appropriate to focus on what can be learned from the mistakes of the past to improve its performance going forward.

A central bank is necessary to ensure a well-functioning monetary system. But what exactly should a central bank aim to do? How broad should its mandate be? How can it best contribute to the functioning of our economy? Some envision a very broad mandate for the central bank and the discretionary power to seek numerous objectives all at once. Others suggest a more limited role, guided by systematic rules that avoid discretionary actions. Discretion should never be ruled out completely. Crises and emergencies may require actions that deviate from systematic rules. Not all circumstances can be foreseen and neatly captured in systematic rules ahead of time. The relevant questions are: What defines the systematic behavior of the central bank? How clear are its objectives under normal circumstances? and How limited is its discretion during crises?

Despite the best efforts of its dedicated staff and leadership, the Federal Reserve did not avoid serious errors. Why were these errors committed? What was the central bank trying to achieve? Did the Federal Reserve deviate from attempting to attain its mandate and if so how? In my view, an important part of the answer is that the Federal Reserve has been hampered by the lack of clarity in its mandate. At times, its mandate was interpreted overly broadly, overburdening the central bank beyond what any central bank can reasonably be expected to deliver. At times, this has led the Federal Reserve to try to achieve too many things at once and lose sight of price stability, the one objective that a central bank can and should deliver over time.

While price stability is essential for a well-functioning monetary system, the mandate of the Federal Reserve has never clearly specified that it should treat price stability as its overriding objective. This can be corrected. What is required is an Act of Congress to make price stability the primary objective of the Federal Reserve.

An Evolving Mandate

When the Federal Reserve was founded in 1913, the Federal Reserve Act made no mention of price stability and its mandate was rather diffuse. The preamble of the Federal Reserve Act called for the establishment of the Federal Reserve “to furnish an elastic currency.” Section 14 of the Act came closest to specifying a policy objective:

Every Federal reserve bank shall have the power: . . . To establish . . . rates of discount . . . which shall be fixed with a view to accommodating commerce and business [Section 14, Federal Reserve Act, 1913].

As the Federal Reserve was founded in the environment of the gold standard, which was thought to safeguard price stability over time, it could be argued that in 1913 it was not necessary to explicitly state that price stability should be the mandate of the institution. The leadership and the staff of the Federal Reserve made efforts toward a more concrete interpretation of the mandate, but the lack of clarity hampered the institution.

In 1939, in the first edition of the Federal Reserve’s publication *Purposes and Functions*, the Board of Governors tried to explain its role as follows:

The purpose of Federal Reserve functions, like that of Governmental functions in general, is the public good. Federal Reserve policy cannot be adequately understood, therefore, merely in terms of how much the Federal Reserve authorities have the power to do and how much they have not the power to do. It must be understood in the light of its objective—which is to maintain monetary conditions favorable for an active and sound use of the country’s productive facilities, full employment, and a rate of consumption reflecting widely diffused well-being [Board of Governors of the Federal Reserve System 1939].

Widely diffused well-being sounds wonderful, like motherhood and apple pie! But of course, this is not a statement of what the Federal Reserve could achieve, and it’s not a statement about what the Federal Reserve could be held accountable to. It is evidence that without clear guidance, the Federal Reserve was trying to achieve

things beyond its control, with no systematic guide. This was reflected in the outcomes. The 1930s was arguably the worst decade in the history of the institution. Remarkably, after episodes of rather violent inflation and deflation experienced during the first 25 years of the Federal Reserve, no mention of price stability as an objective can be found in this description.

Things changed for the better during the 1950s. The Federal Reserve managed to preserve price stability and support economic growth better during this period. This was not an accident. The 1950s was a period during which the Federal Reserve adopted a more useful and appropriate interpretation of its objectives. An example appears in a response provided by the Board to a hearing of the Senate Committee of Finance in August 1957.

The objective of the System is always the same—to promote monetary and credit conditions that will foster sustained economic growth together with stability in the value of the dollar. . . . Price stability is essential to sustainable growth [U.S. Senate 1957].

Understanding that “price stability is essential to sustainable growth” was key to the success of the 1950s. Unfortunately, since the primacy of price stability was not mandated by Congress, no assurance could be provided that this interpretation would persist. Indeed, price stability was not properly defended and things changed for the worse in the late 1960s and the 1970s.

In 1977, the Congress amended the Federal Reserve Act in an effort to improve monetary stability.

The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy’s long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates [Federal Reserve Act, Section 2A, 1977 amendment].

The 1977 amendment defined maximum employment and stable prices as the “dual mandate” of the Federal Reserve (with the understanding that long-term interest rates would remain moderate if price stability was achieved). Unfortunately, once again the Congress failed to provide clarity regarding the primacy of price stability. The lack of

clarity meant that the Federal Reserve retained considerable discretion in interpreting its mandate. The Federal Reserve remained at risk of shifting from the interpretation that resulted in relatively good outcomes in the 1950s to the interpretation that led it to the disastrous outcomes of the 1930s.

Following Paul Volcker's appointment as chairman in 1979, and the successful disinflation he engineered early in his tenure, the United States experienced a long period of reasonable price stability and growth. Was that made possible by adopting a literal interpretation of the dual mandate as stated in 1977? Interestingly, the opposite is true. The success of this period could be traced to the recognition by Chairman Volcker of the importance of the primacy of price stability for achieving the broader objectives of full employment over time.¹

Chairman Volcker reminded us why the focus on price stability remains so important in a recent speech:

I know that it is fashionable to talk about a “dual mandate”—that policy should be directed toward the two objectives of price stability and full employment. Fashionable or not, I find that mandate both operationally confusing and ultimately illusory: . . . The Federal Reserve, after all, has only one basic instrument so far as economic management is concerned—managing the supply of money liquidity. Asked to do too much—for instance to accommodate misguided fiscal policies, to deal with structural imbalances, or to square continuously the hypothetical circles of stability, growth and full employment—it will inevitably fall short. If in the process of trying it loses sight of its basic responsibility for price stability, a matter which *is* within its range of influence, then those other goals will be beyond reach [Volcker 2013].

But why is placing equal importance to the achievement of other objectives, such as full employment, so problematic? After all, the achievement of full employment is a desirable public policy objective. However, full employment is not an appropriate monetary

¹Lindsey, Orphanides, and Rasche (2005) provide a detailed documentation of the considerations behind Volcker's reform in October 1979 that set the stage for the environment of stability that followed.

policy target. Unlike price stability, which is a goal that the Federal Reserve can properly define, measure, and achieve, a similar target for real economic activity does not exist. No reliable measures of appropriate real economic activity targets can be usefully constructed and the central bank does not have the tools to achieve any target for real economic activity without compromising the one thing it can achieve—price stability.

Theoretical models may point to various real economy targets that are compatible with price stability. For example, some theories focus on the unemployment rate and derived “natural rate” concepts. However, such theories do not provide practical guidance. Alan Greenspan, who succeeded Paul Volcker as chairman of the Federal Reserve and shared his understanding of the primacy of price stability, explained the challenge as follows:

While the idea of a national “threshold” at which short-term inflation rises or falls is statistically appealing, it is very difficult in practice to arrive at useful estimates that would identify such a natural rate. . . . In light of these uncertainties, I do not think that any one estimate of the natural rate is useful in the formulation of monetary policy [Greenspan 1994].

For more than a quarter century, the chairmen of the Federal Reserve believed that to best fulfill the mandate of the institution it was key to focus on preserving price stability and avoid relying on any real economic activity targets. Their assessment was shared by many others, and proposals were made in Congress to modify the mandate of the Federal Reserve to reflect this view.² However, the statutory mandate of the Federal Reserve remained unchanged, and the robustness of the institution’s defense of price stability continued to rest on the interpretation of its statutory mandate.

What about the present? Unfortunately, judging from recent statements, the Federal Reserve may have deviated from the interpretation of the mandate that had been adopted during the

²Such efforts included the “Zero Inflation Resolution” introduced in 1989, the “Economic Growth and Price Stability Act of 1995,” and subsequent proposals.

Volcker-Greenspan era. Consider the quote below from the December 2012 FOMC statement:

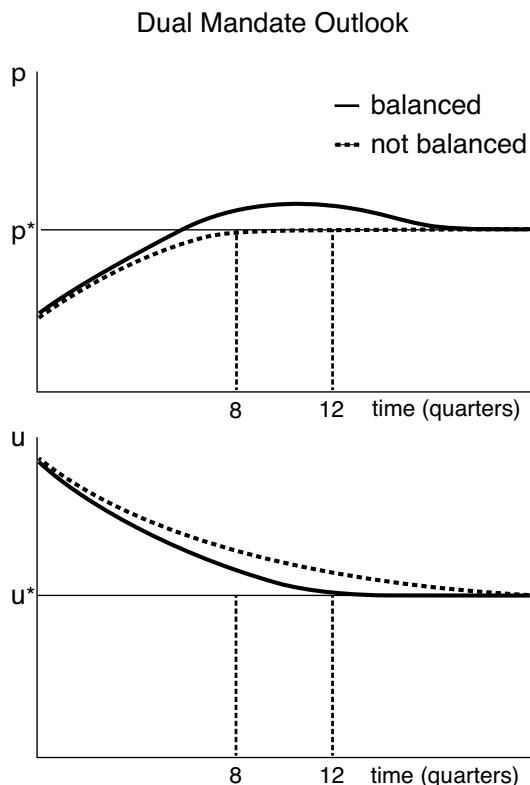
Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. . . . [T]he Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored [Federal Open Market Committee 2012].

In this statement, the Committee suggests a more literal interpretation of the dual mandate that appears to downplay the primacy of price stability and explicitly introduces a numerical threshold on the unemployment rate as a guide for monetary policy.

Elevating the role of the unemployment rate as a policy goal or guide, necessarily diminishes the importance of price stability as a goal or policy guide. Interpreted in this manner, the dual mandate can become a justification for letting inflation rise beyond what the Federal Reserve considers consistent with price stability. Pursuing an inflationary policy could be justified as necessary to achieve better outcomes with respect to its employment objective.

Figure 1 reproduces a figure from a recent speech by Narayana Kocherlakota (2013), a member of the Committee who recommends pursuing an inflationary policy on the basis of this argument. The figure compares two policies. One policy aims to achieve price stability over the policy horizon of two years while an alternative policy seeks to raise inflation above the Federal Reserve's price stability objective at that horizon. According to Kocherlakota, the policy aimed at achieving price stability is "not balanced" because it leaves the unemployment rate higher than desired. Instead it is considered preferable to adopt an easier policy stance aiming to drive inflation above its price stability objective. According to this line of reasoning, this policy would be "balanced" because it would guide the unemployment rate faster to its target. In contrast to this interpretation, what is described in the figure as "not balanced" would be the more appropriate guide for a policy that respected the primacy of price stability.

FIGURE 1
PRICE STABILITY VS. A DUAL MANDATE: A CONFLICT?



SOURCE: Kocherlakota (2013).

What Could Go Wrong?

What could go wrong when policy loses sight of price stability as its primary goal? An example can be drawn from the 1970s, the earlier period in the history of the Federal Reserve when the primacy of price stability was not respected. As an example, it is instructive to focus on one FOMC meeting, in August 1970, drawing on the excellent documentation that the Federal Reserve provides about the historical monetary policy decisions of the Committee.

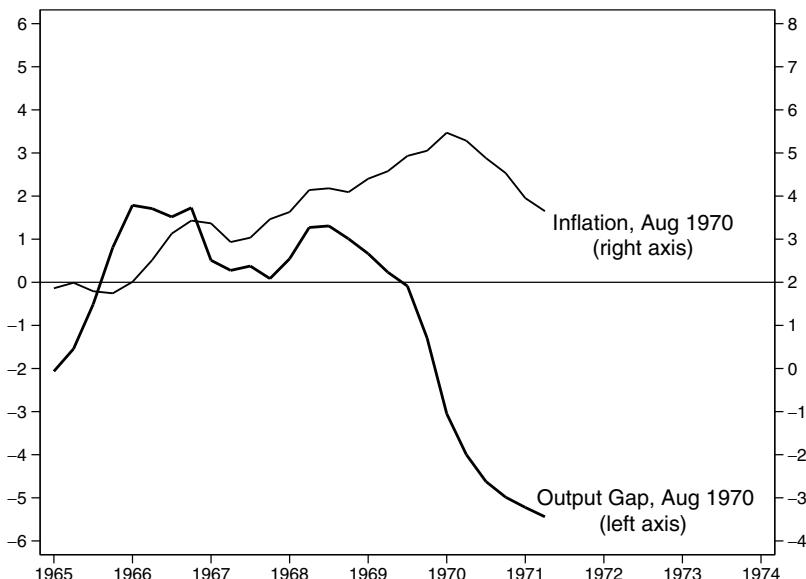
In the summer of 1970, the economy was recovering from a recession. Similarly to the recent experience, many policymakers were frustrated with the pace of the recovery. The economy was growing, but the unemployment rate remained high and staff analysis suggested

that extensive underutilization of resources was expected to persist for a considerable time. Inflation was somewhat higher than desired and policy should have been tightened if the FOMC wished to restore price stability, as would have been called for had the Federal Reserve properly recognized the primacy of price stability at that time. In contrast, a more "balanced" approach suggested that easier policy was needed to make faster progress in closing real-activity utilization gaps. Continuing inflation was not viewed as a threat in light of these gaps. Staff analysis also suggested that

the upturn would be starting from a point where there is substantial underutilization of resources, as evidenced by a 5 percent unemployment rate and an operating rate in manufacturing at well under 80 per cent of capacity. In these circumstances, there is virtually no risk that economic recovery over the year ahead would add to the inflationary problem through the stimulation of excess—or even robust—demand in product or labor markets [Federal Open Market Committee 1970: 19].

Figure 2 reproduces the inflation and output gap consistent with the historical data as available up to 1970Q2, and staff forecasts for

FIGURE 2
INFLATION AND OUTPUT GAP: AUGUST 1970



subsequent quarters as shown in the Greenbook. The horizontal axis shows zero for the output gap (left axis) and two for inflation (right axis) to reflect the Federal Reserve's implicit goals, though at that time the Committee had not yet stated explicitly its definition of price stability. Based on the staff analysis and forecasts, a member of the Committee noted:

If those projections were realized, however, the gap between actual and potential real GNP would be between 5.5 and 6 percent by the second quarter of 1971. In his judgment, that was not satisfactory as a goal of policy [Federal Open Market Committee 1970: 45].

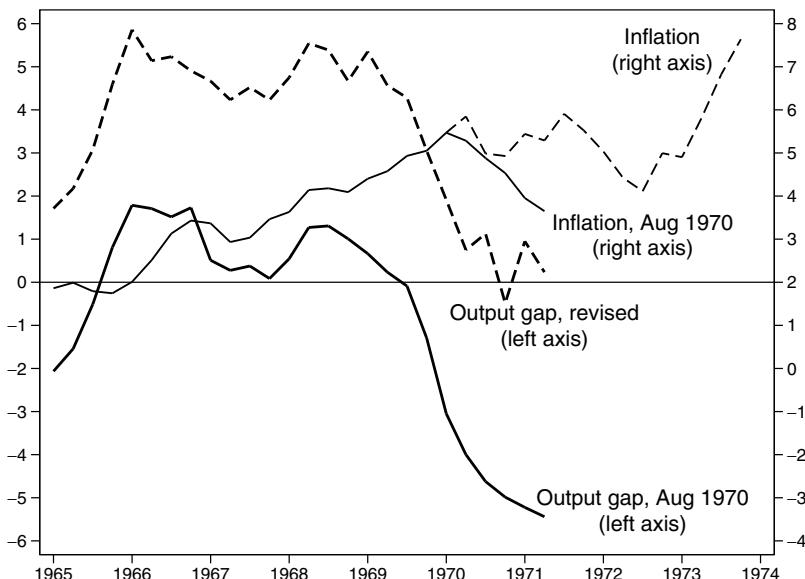
The policy conclusion was that easier monetary policy was needed to achieve a more "balanced" path for inflation and the output gap. Easier policy would close the output gap faster, while inflation would remain on the right track and eventually decline toward 2 percent. Based on this analysis and the desire to make faster progress towards full employment, the FOMC eased policy at that meeting and maintained excessively accommodative conditions for a long time.

In retrospect, this proved a grave error as the accommodative policy pursued led to the Great Inflation of the 1970s. What went wrong can be seen in Figure 3, which compares the data and forecasts available in August 1970 to revised data and estimates of corresponding concepts that became available much later.³

Inflation did not decline in 1971, as had been forecast by the staff in August 1970, but remained elevated and later increased further. The reason can be seen in the dramatic reassessment of the output gap. Rather than a negative output gap in 1970 that was forecast to widen to "between 5.5 and 6 per cent by the second quarter of 1971," subsequent revisions in estimates pointed to a severely overheated economy in 1970. Reliance on a measure of real economic activity as a policy guide misled the Committee.

³The revised series show inflation of the GDP deflator and the output gap, based on Federal Reserve estimates of potential GDP, as available in 1994. The August 1970 concepts refer to the GNP gap and deflator. See Orphanides (2003) for more details and documentation regarding data sources and revisions.

FIGURE 3
INFLATION AND OUTPUT GAP



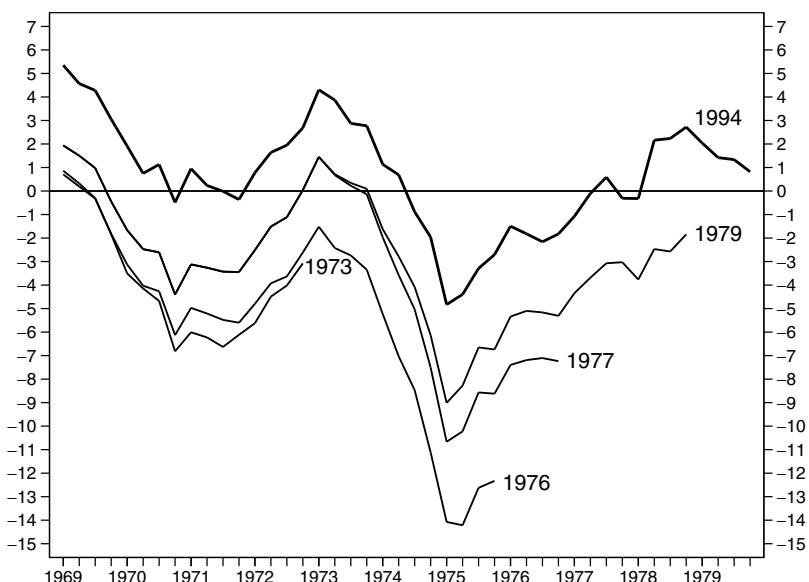
Unfortunately, the error was only gradually recognized over time. Despite successive downward revisions to potential GNP, estimates remained overly optimistic and perceived output gaps excessively negative throughout the 1970s. This can be seen in Figure 4 (reproduced from Orphanides 2003), which compares output gap estimates as available in 1973, 1976, 1977 and 1979 with the 1994 estimate that was also plotted in Figure 3.

In 1970, the staff of the Federal Reserve and the FOMC thought that the easy money policy pursued at the time was consistent with achieving full employment and price stability. The policy appeared to be “balanced.” The mismeasurement of what constituted the proper target for real economic activity was only recognized when it was already too late to correct the error. The easy money policy of 1970 morphed into the stagflation of the 1970s.

Is This Time Different?

Do concerns about the inappropriateness of pursuing real economic activity targets remain justified today? Or have the

FIGURE 4
OUTPUT GAP REVISIONS



uncertainties faced in the past been resolved? The Federal Reserve releases its own analysis to the public with a lag so one cannot yet examine recent revision patterns and errors. But an examination of the evolution of the estimates of potential output produced by the Congressional Budget Office (CBO) may provide useful hints.

Figure 5 plots the path of quarterly real GDP against vintages of potential GDP as estimated by the CBO in 2007, 2010 and 2013.⁴ Figure 6 compares the estimates of the output gap that correspond to the three alternative estimates of potential output. The results illustrate that this time is not different. Revisions in estimates of real economic activity targets remain an important unknown. Employment and production measures continue not to be appropriate targets for central banks.

⁴Orphanides (2013) provides additional details on these data.

PRICE STABILITY MANDATE

FIGURE 5
GDP AND REVISIONS OF CBO POTENTIAL GDP ESTIMATES

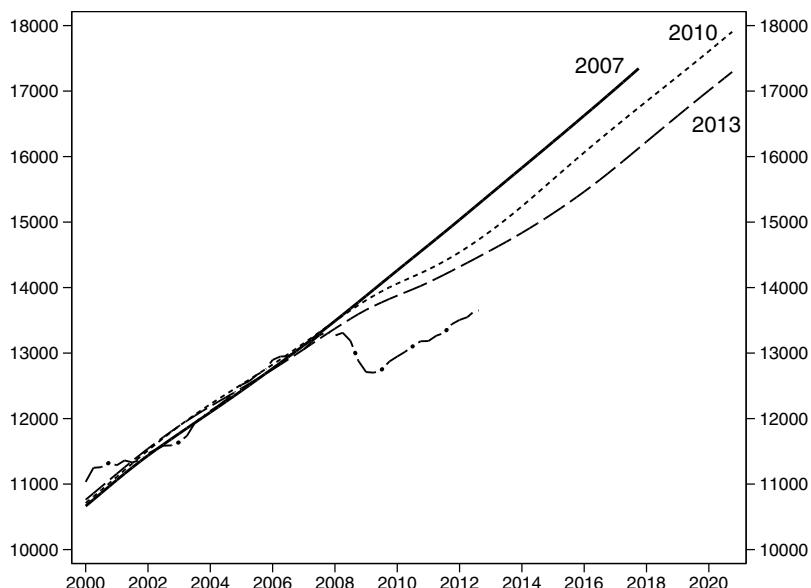
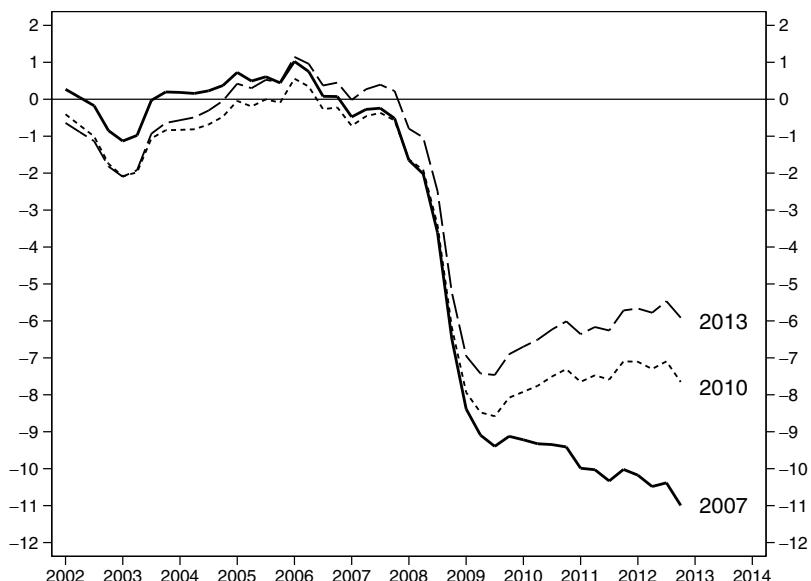


FIGURE 6
REVISIONS OF OUTPUT GAP ESTIMATES



Conclusion

The unprecedented expansion of the balance sheet of the Federal Reserve observed over the past year, despite the continued improvement in the economy, raises concerns. The continuing increases in monetary policy accommodation have been justified on the basis of the “dual” mandate of the Federal Reserve and the need to “foster maximum employment.” Excessive emphasis on reducing the rate of unemployment, however, risks compromising price stability.

The risks emanate from the lack of clarity of the mandate of the Federal Reserve, as currently stated in the Federal Reserve Act. A clearer mandate that properly acknowledges the primacy of price stability as the means for advancing maximum sustainable growth and employment over time would greatly reduce the likelihood of repeating past mistakes and would better ensure that the Federal Reserve will safeguard monetary stability going forward.

The Fed needs a clearer mandate for its second hundred years. What is required is an Act of Congress to make price stability the primary objective of the Federal Reserve.

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THE TROUBLING SUPPRESSION OF COMPETITION FROM ALTERNATIVE MONIES: THE CASES OF THE LIBERTY DOLLAR AND E-GOLD

Lawrence H. White

Proposals abound for reforming monetary policy by instituting a less-discretionary or nondiscretionary system (“rules”) for a fiat-money-issuing central bank to follow. The Federal Reserve’s Open Market Committee could be given a single mandate or more generally an explicit loss function to minimize (e.g., the Taylor Rule). The FOMC could be replaced by a computer that prescribes the monetary base as a function of observed macroeconomic variables (e.g., the McCallum Rule). The role of determining the fiat monetary base could be stripped from the FOMC and moved to a prediction market (as proposed by Scott Sumner or Kevin Dowd). Alternative proposals call for commodity money regimes. The dollar could be redefined in terms of gold or a broader commodity bundle, with redeemability for Federal Reserve liabilities being reinstated. Or all Federal Reserve liabilities could actually be redeemed and retired, en route to a fully privatized gold or commodity-bundle standard (White 2012). All of these approaches assume that there will continue to be a single monetary regime in the economy, so that the way to institute an alternative is to transform the dominant regime.

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A different approach to monetary reform is to think about ways that alternative monetary standards might arise in the marketplace to operate in parallel with the fiat dollar, perhaps gradually to displace it. This approach prompts us to look at the alternative monetary systems that are currently available, or could become available if allowed. We can try to evaluate the likelihood that members of the public would spontaneously adopt, wholly or partially, one or more alternative systems (White 1989). Of more immediate relevance—and the avenue taken here—is to consider how legal restrictions are currently blocking the process of monetary innovation, and examine the case for removing such obstacles.

In his monograph *Choice in Currency*, F. A. Hayek (1976: 17) proposed an end to any legal barriers that block the monetary use of foreign fiat currency or gold within any domestic economy: “But why should we not let people choose freely what money they want to use? By ‘people’ I mean the individuals who ought to have the right to decide whether they want to buy or sell for francs, pounds, dollars, D-marks, or ounces of gold.” He believed a government’s “claim to a monopoly, or their power to limit the kinds of money in which contracts may be concluded within their territory, or to determine the rates at which monies can be exchanged, to be wholly harmful.” Thus, governments should “bind themselves mutually not to place any restrictions on the free use within their territories of one another’s—or any other—currencies, including their purchase and sale at any price the parties decide upon, or on their use as accounting units in which to keep books.”

Increasing the competition among central banks for market share, Hayek argued, would make each of them more serious about keeping the inflation rate close to zero. Hayek’s antimonopoly message bears re-emphasizing in light of the new technologies for producing private monies, and the troubling recent government efforts to suppress them in the United States and elsewhere. Open competition would enable ordinary money-users to protect themselves against bad money. It might even elicit better behavior from central banks, much as competition in express package delivery has elicited better behavior from the U.S. Postal Service. For the sake of money-users, legal barriers should be removed not only against traditional gold- and silver-based monies and foreign fiat monies, but also against new types of commodity-based monies and the new noncommodity cyber-monies.

The potential alternative monies include: (1) foreign fiat monies in paper or account-balance form; (2) physical gold and silver coins, and banknotes redeemable into them, for which the Liberty Dollar project provided one model; (3) electronically transferable gold account balances, such as e-gold; and (4) private noncommodity cyber-monies, for example Bitcoin and Litecoin. Research is needed on how the holding and use of foreign monies is discouraged by various tax and regulatory policies. As detailed below, the Liberty Dollar and e-gold have been shut down and their entrepreneurs prosecuted by federal authorities. Bitcoin faces hostility from the same authorities.¹

The U.S. federal government has been acting as though it resents challenges to its near-monopoly of basic money within the United States and is seeking to legally impede competition. If that sounds unduly alarmist, read the indictments and the accompanying press releases.

Ordinary citizens are harmed by the restriction of monetary competition. If we care about the welfare of ordinary citizens in their role as money users, then the law should allow the market for monies to be openly competitive. It should not make money production a privileged monopoly. To the same end, provisions in the law that grant the federal government the authority to ban non-fraudulent money enterprises, or subject non-dollar-based money services to higher obstacles than dollar-based services, should be removed. Prosecution of honest money entrepreneurs should stop.

The Story of the Liberty Dollar

The Liberty Dollar was a project of an entrepreneur named Bernard von NotHaus and his nonprofit organization, NORFED (National Organization for the Repeal of the Federal Reserve and Internal Revenue Code). Von NotHaus had previously produced collectable silver medallions as proprietor of a business called the Royal Hawaiian Mint. In October 2008, NORFED launched its one-ounce silver Liberty piece, with a face value denominated in dollars. Whether it was a coin became a disputed legal question because a federal statute prohibits the unauthorized issue of coins. The face value was initially \$10, well above the then going price for

¹For detailed accounts of the Liberty Dollar, e-gold, and Bitcoin cases, see Dowd (forthcoming), a study that provides the proximate inspiration for the present article.

other one-ounce silver pieces, and was later raised to \$20 on newly minted pieces in a preprogrammed response to the rising price of silver.² The organization also issued dollar-denominated paper certificates (\$1, \$5, \$10) redeemable at the same par rates for silver kept in storage at a warehouse. The Liberty Dollar project later introduced gold and platinum pieces in higher denominations and copper pieces in a \$1 denomination.

The intention to offer a new kind of *circulating currency*, superior to the Federal Reserve's fiat money, was clear from the project's original name ("American Liberty Currency"), its promotional brochures, and its website. In mid-2005 the website mast-head proclaimed Liberty Dollars to be "America's Inflation-Proof Currency."³ At that point the Liberty Dollar website quoted a U.S. Treasury spokeswoman as confirming the legality of the project: "'There's nothing illegal about this,' Dickens said after the Treasury Department's legal team reviewed the currency. 'As long as it doesn't say legal tender there's nothing wrong with it.'"⁴ It also quoted a Secret Service spokesman as stating, "It's not counterfeit money."⁵

In September 2006, however, the U.S. Mint issued a press release with an ominous message. It first advised that Liberty Dollar "medallions" were "not genuine United States Mint bullion coins, and not legal tender." No conflict there, as the Liberty Dollar's promoters did not claim otherwise. Indeed their whole marketing pitch was that these were an *alternative* to official currency. But then the press release added: "NORFED's 'Liberty Dollar' medallions are specifically marketed to be used as current money in order to limit reliance on, and to compete with the circulating coinage of the United States. Consequently, prosecutors with the United States Department of Justice have concluded that 'the use of NORFED's 'Liberty Dollar' medallions violates 18 U.S.C.

²For a discussion of the innovative idea of denominating a paper claim to a specified weight of silver in a specified quantity of dollars, but discontinuously appreciating the parity by a programmed rule responding to the market price of silver, see White (2000) and Dowd (forthcoming).

³<http://web.archive.org/web/20050826190151/http://www.libertydollar.org>.

⁴<http://web.archive.org/web/20050718013643/http://www.libertydollar.org/html/articles/gillis.htm>.

⁵<http://web.archive.org/web/20051025094552/http://www.libertydollar.org/html/articles/nelson.htm>.

§ 486, and is a crime” (U.S. Mint 2006).⁶ Note the suggestion that “to compete with the circulating coinage of the United States” is a crime *per se*, a suggestion unwarranted by the language of the statute in question.

Here is the full text of the cited statute (18 USC § 486—“Uttering Coins of Gold, Silver or Other Metal”) that the Liberty Dollar was accused of violating:

Whoever, except as authorized by law, makes or utters or passes, or attempts to utter or pass, any coins of gold or silver or other metal, or alloys of metals, intended for use as current money, whether in the resemblance of coins of the United States or of foreign countries, or of original design, shall be fined under this title or imprisoned not more than five years, or both.⁷

The U.S. Mint also warned that the “medallions might look like real money” because they bear inscriptions: “‘Liberty,’ ‘Dollars,’ ‘Trust in God’ (similar to ‘In God We Trust’), and ‘USA’ (similar to ‘United States of America’)” and “images that are similar to United States coins”—namely, the torch of liberty and the Liberty Head. The latter image appeared on “the obverses of United States gold coins from the mid-1800s to the early 1900s.” The 2006 press release did not take note of clearly dissimilar markings, such as the 800 phone number, “LIBERTYDOLLAR.ORG,” and “ONE OUNCE 999 FINE SILVER” inscriptions on the reverse, nor did it suggest that the cited similarities constituted counterfeiting or fraud.

In November 2007, the FBI executed a seizure warrant against the Evansville, Indiana, head office of the Liberty Dollar organization, following what was reportedly a two-year investigation.

⁶Two of the more absurd and irrelevant statements made in the 2006 press release and by federal prosecutors were (1) that the U.S. Constitution bans private coinage, and (2) that the U.S. government has some kind of exclusive property right in the word “dollar” or the dollar sign. Private coinage was allowed to circulate before the Civil War, and the word “dollar” or the dollar sign appears on every price tag, traveler’s check, and ordinary check in America. Moreover, as of 2006, the dollar sign had never appeared on any official U.S. coin; its first appearance came in 2007 on the \$1 coin.

⁷www.law.cornell.edu/uscode/text/18/486#FN-1REF. Here “to utter” means to place into circulation.

Von NotHaus told a local newspaper that the FBI took gold, silver, and platinum stored on the site, together with “the dies used to mint the Liberty Dollars”; carted away “nearly two tons” of copper \$1 pieces featuring Ron Paul’s image; seized the organization’s computers and files; and froze its bank accounts (Lesnick 2007, Taylor 2007).

When federal indictments came down in May 2009, von NotHaus was predictably charged with violating 18 U.S.C. § 486. More surprisingly, he was charged with violating 18 U.S.C. § 485, an anti-counterfeiting statute that provides for fines or imprisonment of anyone who “falsely makes, forges, or counterfeits any coin . . . in resemblance or similitude of any coin of a denomination higher than 5 cents . . . coined or stamped at any mint or assay office of the United States . . . or in actual use and circulation as money within the United States.”⁸ The Liberty Dollar’s resemblance to official coinage was partial at most. As the U.S. Mint press release had noted, a Liberty Head had not been used on official coinage since the early 1900s. The two heads were not the same. Perhaps most distinctive, besides the 800 number and URL, was the Liberty Dollar’s inscription “one ounce 999 pure silver,” whereas no official U.S. silver coins had been in circulation since 1968, and none had ever been inscribed with a bullion weight or a fineness rating.

In addition, von NotHaus was charged with two counts of fraud and with conspiring with others to commit the previous offenses. All these charges related to the silver pieces. The legality of the paper certificates was not challenged by the indictments.

After a brief jury trial, von NotHaus was convicted in March 2011 on the two main charges, plus the associated conspiracy charges (Lovett 2011).⁹ He was cleared of fraud charges. More than two and a half years later, he still awaits sentencing. Following the conviction, the federal government has taken further actions to harass and intimidate users of Liberty Dollars. As summarized by a reporter for *Coin World*, officials of the U.S. Secret Service and U.S. Attorney’s Office declared in August 2011 that “Liberty Dollars held by collectors may be subject to seizure as contraband by federal law enforcement,” having been determined by the court to be counterfeits (Gilkes 2011).

⁸www.law.cornell.edu/uscode/text/18/485.

⁹Full disclosure: I was contacted by the defense and agreed to testify in the trial but was never summoned to appear.

In December 2012, the Secret Service compelled eBay to disallow listings of Liberty Dollars for sale.

The policy lesson is that to open up the Federal Reserve dollar to free currency competition Congress needs to legalize private production of precious-metal and base-metal coins for those who might want a metallic alternative to fiat money. The first and principal step would be to repeal or declare unconstitutional the statute (18 USC § 486) against making, uttering, or passing any unofficial coinage.¹⁰

The history of the statute indicates clearly that it is a relic of the Civil War, enacted to bolster the seigniorage potential of the greenback, which is no longer in circulation. The present U.S. Code's language is essentially that of an Act of Congress of June 8, 1864, entitled "An Act to Punish and Prevent the Counterfeiting of Coin of the United States." The 1864 statute specified a fine up to \$3,000 for any unauthorized person who "shall hereafter make, . . . or shall utter or pass, or attempt to utter or pass, any coin of gold or silver, or other metals or alloys of metals, intended for the use and purpose of current money, whether in the resemblance" of U.S. or foreign coins "or of original design" (Sanger 1866: 120–21). The act thereby disallowed any private party to produce ("make or utter") new coins, or to use ("pass") existing private coins.

Two types of private coins were in circulation at the time and served as substitutes for official currency. First, more than a dozen private mints had produced gold or silver coins during the California and other western gold and silver rushes (Kagin 1981). None were still in operation in 1864, the U.S. Mint having driven them out of business by opening branches in San Francisco and Denver. In both cities, the new U.S. Mint bought and used the equipment of a leading private mint. The Act banned the revival of any private mint to satisfy a preference for gold and silver over greenbacks, and banned the continued circulation of their existing products. Second, private merchants had begun supplying base-metal tokens for small change

¹⁰Rostcheck (2002) argues that any ban on private coinage is unconstitutional, on the grounds that Congress (in light of the 10th Amendment) has only the powers delegated to it by the Constitution, and the Constitution grants Congress only the powers to coin money, to "regulate the value thereof, and of foreign coin," and to punish counterfeiting. It does not delegate the power to ban private coins. But as he acknowledges, federal courts have long rejected unconstitutionality arguments based principally on the 10th Amendment.

as inflation, caused by the Union's copious printing of greenbacks, had banished official coins. Rising greenback-dollar prices had reduced the domestic purchasing power of legal-tender gold, silver, and even copper coins below their purchasing power on the world market, prompting residents of the Union to export, hoard, or melt them—the familiar effect known as Gresham's Law.

Private precious metal coins and tokens were convenient substitutes for greenbacks and fractional notes issued by the Treasury, so their continued circulation would have reduced the seigniorage revenue available to the Treasury from issuing greenbacks. Even if the use of an extraordinary revenue measure like banning private coinage was an understandable policy in a time of extraordinary revenue need like the Civil War, the federal government is in no such situation today. Government revenue is copiously supplied at lower dead-weight cost by other means. Today the revenue motive provides no good reason to continue to ban private coins. The “general welfare” calls for a long-overdue restoration of the liberty of private firms or organizations to produce metal coins intended for use as money, and the liberty of ordinary people to use them as money.

As a second and supplemental step, the anticounterfeiting law (18 USC § 486) needs to be amended to clarify that pieces of *original design*, clearly marked to identify the producer as other than the U.S. Mint, are not to be considered counterfeit copies of official coins. Neither is it counterfeiting to make or use a private coin carrying one or more traditional design elements like the Statue of Liberty's torch, or the word “liberty” or “dollar,” or the dollar sign (\$), or any other element that is *not* a trademark of the U.S. Mint, when not part of an attempt to mimic the overall look of a current official coin in order to falsely pass an unofficial coin as an official coin.

Finally, to remedy an injustice, and to make it clear that the market is henceforth open to private mint entrepreneurs, the federal court system should vacate the conviction of Bernard von NotHaus, or the executive branch should pardon him.

The Story of E-Gold and Other Gold-Based Payment Systems

E-Gold Ltd. was a successful for-profit service offering transferable gold-denominated accounts. It worked in tandem with the sister service Gold and Silver Reserve Inc., hereafter G&SR, also

known as OmniPay, which sold e-gold units to members of the public in exchange for official monies, and bought units back. Both firms were launched in 1996 by Dr. Douglas Jackson, a Florida oncologist. E-Gold also offered silver, platinum, and palladium accounts, but gold accounts ultimately held 97 percent of E-Gold's total account balances by market value (Jackson 2013a).

Like von NotHaus, Jackson viewed his product as a private currency immune to fiat money inflation. Jackson (2012: 10) told an interviewer that he liked to quote the following sentence from Vera Smith's *The Rationale of Central Banking* (1936), a classic work that reviewed historical debates over central banking versus free banking: "How to discover a banking system which will not be the cause of catastrophic disturbances, which is least likely itself to introduce oscillations, and most likely to make the correct adjustment . . . is the most acute unsettled economic problem of our day."

He then immediately commented: "A system and currency like e-gold, particularly after emergence and integration into the financial mainstream as a reserve asset used as a medium of settlement, can definitively solve this problem." Unlike the Liberty Dollar, which began as a hand-to-hand currency and introduced electronic transfers only later, e-gold was designed exclusively for Internet transactions from the start. E-Gold kept its account balances in grams of fine gold, and backed them 100 percent with gold bars warehoused in London.

Brian Grow et al. (2006) described E-Gold's service model this way in *Business Week*:

Opening an account at www.e-gold.com takes only a few clicks of a mouse. Customers can use a false name if they like because no one checks. With a credit card or wire transfer, a user buys units of e-gold. Those units can then be transferred with a few more clicks to anyone else with an e-gold account. For the recipient, cashing out—changing e-gold back to regular money—is just as convenient and often just as anonymous.

E-gold appeals to "gold bugs": people who invest in the precious metal and believe money ought to be anchored to it.

Jackson (2006: 76; 2013c) has always disputed suggestions that the system was anonymous, or that G&SR had no identity controls on persons buying or selling e-gold units, although in court he

agreed that the controls were insufficient to block criminal abuse of the system.

E-Gold's customer base at first grew slowly, then more rapidly in 2000 and 2001 (Dibbel 2001). One symptom of success was the launching of competing "digital gold currency" payment systems, similarly providing in-house transfers from one account holder to another, such as e-Dinar (launched in 2000 through a partnership with E-gold); e-Bullion (2001); GoldMoney.com (2001); 3P Pay (2001), acquired by Crowne Gold in 2002; Pecunix (2002); and i-golder (2005).

Douglas Jackson told *Business Week* that "E-Gold has about 1.2 million funded accounts through which transactions worth \$1.5 billion were conducted in 2005" (Grow 2006). He told a congressional hearing: "Since its inception, E-Gold has settled over 67 million individual transactions and is today processing 50,000–70,000 account-to-account transfers per day, valued at over \$2.0 billion USD annually" (Jackson 2006: 75). Kim Zettner (2009) of *Wired* reported: "At E-Gold's peak, the currency would be backed by 3.8 metric tons of gold, valued at more than \$85 million. E-Gold was now second only to PayPal in the online payment industry."

In his congressional testimony, Jackson (2006: 75) enumerated the benefits of the e-gold system as convenience and low cost for remittances and payments, finality (nonreversibility), and a store of value free from political risk:

E-gold is a payment system that, unlike any other, allows people from any region or economic background to operate globally: a migrant worker can send value back home easily and a merchant can accept payment from someone in a third-world country who may be without access to a charge card or bank account. E-gold alone is free of chargeback risk, yet the fees for receiving payment in e-gold are a tiny fraction of those charged by any other systems. Thanks to e-gold, for the first time in history, normal people of modest means worldwide have the option of using a medium of exchange and store of value that is designed from the ground up to be immune to debasement.

The upward trajectory of e-gold ended in December 2005 when FBI and Secret Service agents raided three locations in Florida: the offices of G&SR (E-gold Ltd. itself was registered in the

Caribbean nation of St. Kitts and Nevis), Jackson's home, and the firm's computer servers in Orlando. According to Zettner (2009), federal investigators learned of E-Gold when they discovered that a ring of credit card scammers were using E-Gold accounts to transmit ill-gotten funds. The Department of Justice then targeted E-Gold itself:

Its goal was to force the service to comply with [post-9/11] regulations governing money-transmitting services like Western Union and Travelex. Federal regulations required those businesses to register with the Treasury Department's Financial Crimes Enforcement Network (FinCEN), to be licensed in states that required it, to diligently authenticate the identity of customers and to file suspicious activity reports on shady-looking customers. But E-Gold wasn't doing this.

Jackson believed E-Gold was exempt from regulation because it was a payment system not a money transmitter.

That is, E-Gold was transferring ownership of gold among its customers, not transmitting *money* in the manner of Western Union.¹¹ At the same time, Zettner (2009) noted, "Jackson insisted E-Gold wasn't a bank, either." Because E-Gold did not make loans, it indeed did not meet the joint criteria for being considered a bank (both taking deposits and making loans) and thereby being subject to bank licensure and "know your customer" bank regulations.

Was Jackson right to think, relying on the advice of his legal counsel, that then-existing statutes and regulations did not apply to his service? That is a question for experts in the field of money-service business law, but some federal officials appear to have thought that he may have been right. Grow et al. (2006) reported:

Federal officials reluctantly confirm this loophole: E-gold and other digital currencies don't neatly fit the definition of financial institutions covered by existing self-monitoring rules

¹¹In response to a question from Rep. Ron Paul at a congressional hearing in July 2011, no less an authority than Federal Reserve chair Ben Bernanke insisted that gold is not money today (Fontevecchia 2011).

established under the Bank Secrecy Act and USA Patriot Act. “It’s not like it’s regulated by someone else; it’s not regulated,” says Mark Rasch, . . . former head of the Justice Dept.’s computer crime unit. The Treasury Dept.’s Financial Crimes Enforcement Network (FinCEN) is studying ways to close the regulatory gap. Meanwhile, U.S. officials say E-Gold and similar companies should voluntarily do more to deter crime.

The phrases “don’t neatly fit the definition of financial institutions covered” and “should voluntarily do more” as used here imply that E-Gold and other digital gold payment providers were not clearly compelled to do more by existing law.

Both before and after the raid, Jackson voluntarily cooperated with federal authorities by sharing information on suspicious account activity. He provided information that led to the identification and arrest of major credit-card scamming ringleaders. At his own initiative he blocked suspected criminals from cashing out their accounts. His defense attorneys provided evidence (*U.S. v. E-Gold* 2008: 68, 70, 74–75) that Jackson had met with IRS officials responsible for enforcement of the Bank Secrecy Act, and was waiting for a ruling from them on whether the firm needed to be licensed, when the raid took place.

The Justice Department nonetheless indicted Douglas Jackson (along with Reid A. Jackson and Barry K. Downey, identified as E-Gold’s co-owners) in April 2007 on four charges (*DGC Magazine* 2008): “One count of conspiracy to launder monetary instruments, one count of conspiracy to operate an unlicensed money transmitting business, one count of operating an unlicensed money transmitting business under federal law, and one count of money transmission without a license under D.C. law.”

The key statute in the money transmitting indictment was 18 USC § 1960 (“Prohibition of Unlicensed Money Transmitting Business”), which bans ownership or operation of an “unlicensed money transmitting business.” The statute includes the following definition: “The term ‘money transmitting’ includes transferring funds on behalf of the public by any and all means including but not limited to transfers within this country or to locations abroad by wire, check, draft, facsimile, or courier.” It is not clear from this language whether gold-denominated account balances count as “funds.” The statute refers to the definition of money transmitting in another

statute, 31 USC § 5330 (“Registration of Money Transmitting Businesses”), which offers a related but slightly different definition: “The term ‘money transmitting service’ includes accepting currency or funds denominated in the currency of any country and transmitting the currency or funds, or the value of the currency or funds, by any means through a financial agency or institution.”¹² By this second definition, strictly interpreted, E-Gold would *not* seem to have been a “money transmitting service,” because it did not transmit currency or funds “denominated in the currency of any country,” nor “the value of the currency or funds” it had accepted, but rather transferred ownership of claims to purchased gold.

Making the argument that neither E-Gold nor G&SR fit the statutory definition of a money transmitting business under 18 USC § 1960 or 31 USC § 5330, specifically because they did not transmit claims to cash or currency, or that at best the statutes are unconstitutionally vague, the firms’ attorneys filed a motion to dismiss the indictment’s three counts related to money transmitting. In a memorandum opinion (*U.S. v. E-Gold* 2008) D.C. District Court Judge Rosemary M. Collyer denied the motion, ruling that under the statutory definitions “a business can clearly engage in money transmitting without limiting its transactions to cash or currency” because in the language of 18 USC §1960, “‘Money transmitting’ includes transferring funds on behalf of the public by any and all means.” She implied, but did not argue explicitly, that claims to gold held on account are “funds” in the statute’s sense of the term. The judge had previously quoted, and here seemed to accept without question, the indictment’s description of the e-gold system as one in which “the account holder can then use the e-gold to buy a good or pay for a service, or to transfer *funds* to someone else” [emphasis mine]. Therefore, she ruled: “Defendants’ alleged conduct, including, *inter alia*, transferring funds on behalf of the public by wire, qualifies them as a ‘money transmitting business’ under Section 1960.”¹³

¹²www.law.cornell.edu/uscode/text/18/1960; www.law.cornell.edu/uscode/text/31/5330.

¹³Curiously, Judge Collyer quoted the language of a Financial Crimes Enforcement Network (FinCEN) regulation referring to “funds” but neglected to notice that it refers specifically to “funds denominated in currency.” Gold ounces are not “denominated in currency” in the standard meaning of the phrase.

Assuming that gold holdings are “funds,” the statement that the defendants engaged in *transferring funds on behalf of the public by wire* can only refer to the combined efforts of the two firms, G&SR and E-Gold, not either firm separately. In-house balance transfers among account holders, which E-Gold provided, are not *wire* transfers. G&SR wired money only to customers who sold e-gold holdings to it. Paying a customer who sells the firm gold is not, as such, transferring funds on behalf of the public. The combination of G&SR and E-Gold did provide a functionally similar service to money transmitting through the three-step combination of G&SR selling e-gold units to customer A for addition to A’s account, E-Gold transferring the units on A’s order to account-holder B, and then G&SR buying the E-Gold units from customer B.

Of course, functional similarity does not imply that either G&SR or E-Gold or both together fit the technical legal definition of a “money transmitting business” as then defined by the law. If they did not fit the legal definition, a would-be prosecutor should have no legal case. A practice that is a substitute for prohibited practices is not itself prohibited. A maker of small cigars cannot be prosecuted for not following rules and regulations on cigarettes written in a way that does not cover small cigars. As Jackson found out, however, contrary to the hopes of his firms’ attorneys, relying on a favorable interpretation of the statutory language was not an effective defense. Once federal anti-money-laundering authorities decided that G&SR and E-Gold did not scrutinize customers to the authorities’ satisfaction, namely at the level of licensed money transmitters, even if the firms’ owners never intended to have criminals use their services, the authorities had the discretion to issue a set of indictments that a federal judge was unlikely to dismiss.

After his motion to dismiss the charges was denied, threatened with lengthy jail time and heavy fines, Douglas Jackson and his co-defendants agreed to a plea bargain.¹⁴ Jackson was sentenced (Zettner 2009) to 36 months of “supervised release,” including “six months of house arrest and electronic monitoring, and 300 hours

¹⁴According to the Department of Justice (2008) press release announcing the guilty pleas, “Douglas Jackson faces a maximum prison sentence of 20 years and a fine of \$500,000 on the conspiracy to engage in money laundering charge, and a sentence of five years and a fine of \$250,000 on the operation of an unlicensed money transmitting business charge.”

of community service.” He was also forced to turn over “about \$1.2 million to the government.” His firms were assessed \$300,000 in fines. The feds did not seize the warehoused gold (which was in London), but even the most innocent account holders were left without access to their gold. “Also as part of the plea agreement,” noted the Department of Justice (2008), “the businesses will create a comprehensive money laundering detection program that will require verified customer identification, suspicious activity reporting and regular supervision by the Internal Revenue Services’ (IRS) Bank Secrecy Act Division, to which the Financial Crimes Enforcement Network delegated authority according to federal regulations.” E-Gold and G&SR were closed down until they could come into compliance. They have never reopened.

The transcript of the sentencing hearing (*U.S. v. E-Gold* 2008: 14) provides troubling evidence to support the view that E-Gold was being prosecuted, or at least a heavier sentence was being requested, in part because of Douglas Jackson’s free-market “philosophy,” his daring to challenge *in words* the wisdom of the established government-regulated money and banking system. Judge Rosemary M. Collyer posed the following question to prosecution about the sentencing memo the federal government had submitted to the court:

You say E-Gold was found [*sic*] at least in part based upon a philosophy that opposed government regulation of financial institutions and the banking industry. E-Gold’s founders and principals blindly followed that philosophy to the point of ignoring for over a decade laws designed to protect citizens from precisely the types of criminals that require anonymity. What do you mean when you say that it was founded on a philosophy that opposed government regulation?

Jonathan W. Haray, assistant U.S. attorney, responded:

Your Honor, the government bases that largely on public statements made by Dr. Jackson, who has provided public statements, some that are available or have been available on E-Gold’s own website. . . . I’m referencing some interviews that were done with *Business Week Magazine* or *Business Week* online where Dr. Jackson was very candid I think about his view of his vision for the company which was to create a

system of, sort of a version of a financial institution that didn't have government regulation. And that he derided the U.S. banking system because of the involvement of U.S. banking regulations and laws.

Another member of the prosecution team, Laurel L. Rimon of the U.S. Department of Justice (*U.S. v. E-Gold* 2008: 95), seemed to acknowledge that the applicability of existing legal restrictions to e-gold was unclear, but that the federal government intended to make an example of E-Gold to send a message:

E-gold is the most prominent digital currency out there. It has the attention of the entire world. That world is a bit of a wild west right now. *People are looking for what the rules are and what are the consequences.* Criminal activity runs rampant. It's important that this case be seen as making a clear statement that if you are a person who knowingly facilitates and conducts funds transfers with dirty money, you're going to pay the price [Emphasis added].

Judge Collyer (*U.S. v. E-Gold* 2008: 112) spoke to the ubiquity of government control over money and payments:

I have no doubt that Dr. Jackson has respect for law. He wanted to set up a currency system that avoided government oversight. That's clear what he wanted to do. He thought he could do that. Turns out he couldn't.

In her sentencing memorandum (*U.S. v. Douglas Lee Jackson* 2008: 3), Judge Collyer acknowledged that E-Gold "conceptually, is not illegal" provided it acquires a money transmitter license and operates under its customer identification and transaction reporting requirements.

Douglas Jackson tried for several years to bring E-Gold Ltd. and Gold & Silver Reserve into compliance with federal and state restrictions on money transmitters. He discovered a Catch-22 that nobody at his sentencing seems to have anticipated: He could not get a license as a money transmitter in Florida or elsewhere because he was now a convicted felon. In a recent interview, Jackson (2012: 6) told an interviewer that he was winding up E-Gold and G&SR, and had incorporated a new firm to try to

license what he called “the intellectual property underlying the e-gold system” to “a financial institution or agency, whether new or established, that is fully acceptable to regulators and licensable in the various jurisdictions.” As of November 2013 no successor firm had yet appeared, but I am told that eventual success is expected. In December 2010 Jackson (2010) announced on E-Gold’s blog the approval of a plan for the release of frozen account balances, requiring the account holder to complete “an agreed upon customer identification process.” Due to a variety of obstacles, the actual claims process was not launched until June 2013 and is presently ongoing (Jackson 2013b).

The regulatory closure of E-Gold and G&SR, the convictions of Douglas Jackson and associates, and the far-reaching powers of federal officials to which these events testify, has had a chilling effect on the “digital gold currency” industry. Crowne Gold, based in Nevada, closed its operations in 2008. In July 2011, the Treasury’s FinCEN issued revised regulations that require digital currency firms doing business with U.S. citizens, even if domiciled outside the United States, to register as “Money Services Businesses,” which means incurring sizable upfront costs and ongoing reporting obligations to remain in compliance. GoldMoney.com, domiciled on the English Channel island of Jersey, closed its balance-transfer service in December 2011 due to what it called the “global increase of compliance requirements for payment service providers” (Expat-World 2011).¹⁵ The digital gold payment service iGolder, registered in Belize, closed its operations in August 2013. Its website (www.igolder.com) now announces: “During the past months, we have been recommending Bitcoin more than our own payment system. . . . Since iGolder has a central point of failure (our server may be raided by thugs wearing some kind of uniform), we feel it is safer for us to cease operations.”

Only a few online payment firms appear to remain in business that allow transfers of gold units between account holders (as E-Gold did): E-dinar, based in Dubai; Pecunix, based in Panama; Perfect Money, also based in Panama; and c-gold, based in the Seychelles. Each requires strict identity verification to open an account.

¹⁵GoldMoney continues to provide online purchase and physical storage of precious metals.

The policy lesson of the E-Gold story is that anti-money-laundering laws and money transmitting licensure requirements in the United States—and the discretion given to their federal enforcers—are serious entry barriers to any domestic gold-based online payment system, apparently to the point of being completely prohibitive. To be frank, the laws are tools of state surveillance. They are prior restraints of citizens' liberty, applied *before* any crime has been detected. They are accordingly, as Paul Rosenberg (2012) argues, objectionable on human rights grounds.

From a pragmatic or consequentialist perspective, a billion dollars in compliance costs is not worth it if it yields less than that in the value of crime reduction. We would need a fair and comprehensive cost-benefit study of these laws and their application to new online gold payment services before we conclude that the laws are worth having in their present form. Such an analysis would need to take into account both the static loss of preferred payment options and valued financial privacy for law-abiding customers, and the Kirzner (1985) dynamic cost of suppressed payment system innovation. International payments via E-Gold-type services are easy, instantaneous, and final, and account-to-account transfer payment fees have been well below those of payments via Western Union, credit cards, or bank wire.

The compliance expenses of "know your customer" rules and associated transaction reporting requirements inevitably increase the price of payment services to consumers. In other areas of life where the costs and benefits of crime prevention are internalized, as by the owners of supermarkets and shopping malls, we do not generally see a policy of requiring IDs before allowing access.

Conclusion

The legal barriers to open currency competition in the United States are not only (1) the legal tender laws to the extent that they render it doubtful that a U.S. court would compel specific performance of a nondollar contract, (2) capital gains taxes and state sales taxes on precious metals, and (3) the statute(s) banning private coinage. Clearing away the legal barriers to a parallel monetary standard, as the case of e-gold shows, must also include (4) elimination of any aspects of anti-money-laundering laws, bank secrecy laws, or

money-transmitting licensing requirements, or their application by federal enforcement agencies, that discriminate against payment systems that use nondollar units. This last barrier is becoming ever more salient as FinCEN moves to restrict Bitcoin and Bitcoin exchanges (Lee 2013, Ferrara 2013).

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CLEARING HOUSE CURRENCY

Richard H. Timberlake

The Federal Reserve System is no longer just an unconstitutional monetary institution promoting a continuing inflation; it has also become, with quantitative easing, an unauthorized fiscal agent for the U.S. government. The fiat currency and equally fiat bank reserves it creates are much in contrast to the private currency and bank reserves that the commercial banks' clearing house associations provided in the latter half of the 19th century. It is that episode I review here.

The Structure of Commercial Banking after the Civil War

The commercial banking world of the 19th and 20th centuries in the United States had many unstable characteristics, most of them the results of misguided government regulations, both state and federal. Civil War financing added to the problems, most notably, prohibition of bank-note currency issues by state banks. State laws had already restricted state banks' sizes and branching freedom. The National Banking Acts, passed in 1863 and 1864, aggravated many of the problems—one example being the imposition of legal reserve requirements for national banks. Some states had adopted this ill-advised measure even before the Civil War. All told, state and federal laws resulted in a two-tier system, national and state, with built-in rigidities that severely limited all banks' abilities to respond to

changes in the demand for money and credit (Dowd 1995, McCulloch 1986). Especially, in the latter half of the 19th century and into the 20th, an unusual demand for bank credit could so deplete bank reserves that the supply of bank credit and bank-issued deposits would decline. This perverse elasticity emphasized the system's instability: an increase in the demand for credit and money could result in a decrease in the supply of both. No other industry faced such a problem (Timberlake 1993: 207–9). Bank suspensions and the restriction of cash payments became the standard response to these unusual liquidity demands.

During the period 1865–1910, influential bankers, politicians, and many economists described the banking system's instability as a “currency problem” rather than as a deficiency in the man-made policies governing the commercial banking framework. This judgment substituted symptom for cause. Nonetheless, the system-wide restrictions and regulations on credit activities stimulated the banks to devise an effective defense: clearing house associations operating as lenders of last resort. The associations worked remarkably well and could have endured. However, in 1913–14, the Federal Reserve System replaced the clearing house system.

The Appearance of Clearing House Associations

State and national banking laws—and the widespread practice of demand deposit banking (i.e., the use of checks) after the prohibition of state bank notes—resulted in a large number of relatively small banks. The superfluity of banks stimulated the development of clearing house banks and, subsequently, clearing house associations to economize the humdrum work of check clearing. These institutions first appeared in New York City and then in other large cities. A prominent bank in the financial district would assume the role of a clearing center for all the banks that chose to belong to the local association. Representatives from each bank would then congregate at the clearing bank with similar clerks from all the other banks. Upon a signal, the clerks would carry out their claims and payments from and to each other and strike a balance for the difference.

This practice became so widespread that banks in many cities constructed jointly owned clearing houses. To expedite the daily clearing operation, many banks kept a balance of specie and greenbacks, or

some other form of lawful money, as a reserve deposit in their clearing house accounts. National bank notes served as lawful reserves for some state banks, but not for national banks. When a bank needed to transfer large amounts of dollars, it would withdraw clearing house certificates (CHCs) in the form of certificates of deposit in large denominations, often \$5,000 and \$10,000, from its reserves to satisfy bank creditors in other cities (Timberlake 1993: chap. 14).

Bank panics prompted the clearing house managers to add a lending function to their clearing operations. A member bank facing demands for payments that threatened its reserves could apply for a loan to the clearing house loan committee. If the committee determined that the applying bank was sound, it would arrange for a bank with plentiful reserves to lend, usually at 6 percent annual interest, some of its excess reserves to the needy bank. Today, the fed funds market operates similarly. The borrowing bank conventionally secured its loan with its own collateral paper worth 133 percent of the dollar value of the amount it borrowed. It then used the clearing house loan certificates (CHLCs) it had acquired from the loan to clear its deficiencies at the clearing house, and subsequently paid off the loan when it received remittances for its own outstanding loans. Most of this activity came during the spring and fall of the year when new money was most needed for crop financing, but it became especially important during panics.

Clearing Houses Become Lenders of Last Resort

Each successive panic from 1857 to 1907 saw an extension of clearing house currency issues. More important, the clearing house itself became a fractional reserve lending institution. Clearing house managers, with the approval of their loan committees, began making short-term loans to reserve-deficient banks without the constraint of any dollar-for-dollar deposit in the clearing house. CHLCs so issued extended the clearing houses' liabilities to values exceeding their reserves, and promoted the clearing house into a *private, market-directed central bank*.

The CHLCs were identical to the CHCs but had the word "loan" in their heading. Even though they were redeemable to clear adverse credit balances at the clearing house, the CHLCs were not, at first, a currency that could be used at the local grocery store. They, too,

were in denominations of \$5,000 and \$10,000 and acceptable only for check- and note-clearing operations at the clearing house.

As time and panics went on, the number of clearing houses increased, as did the loans and certificates that deficient banks needed. Gradually, the efficacy of filling credit needs during a panic stimulated the formation of clearing houses in small towns that had only a few banks where the issues of CHLCs would never have been needed just for clearing operations. One such clearing house appeared in Willacoochee, Georgia, which had only one bank. These new clearing houses began endorsing other items as CHLCs, such as certified checks, cashier's checks, and low-denomination certificates of deposit. All these currencies were formally acceptable only as remittances at the clearing houses. However, as the practice became ubiquitous, the issues and their denominations became small enough to be used in many places to fill the transaction needs of hand-to-hand currency. The guarantee of redemption at the clearing house was sufficient for their common acceptability.

During the Panic of 1907, clearing house currency innovations became quantitatively significant. Also by this time, their widespread existence came to be a political and economic issue. Many bankers, economists, and political scientists weighed in on both their evolution and their legality.

Professional Opinions of Clearing House Currencies

A. Piatt Andrew, a professor of economics at Harvard University, wrote three articles about the 1907 Panic, one of which measured the dollar quantity of clearing house certificates and other substitutes for legal reserves, frequently called "cash." Andrew (1908: 434) called the suspension of cash payments "the most extensive and prolonged breakdown of the country's credit mechanism which has occurred since the establishment of the national banking system." All this currency, he concluded, "was an inconvertible paper money issued without the sanction of law, an anachronism in our time, yet necessitated by conditions for which our banking laws did not provide. During the period of apprehension, . . . it worked effectively and doubtless prevented multitudes of bankruptcies which otherwise would have occurred" (Andrew 1908: 459).

Indeed, the banking laws did not provide solutions; they were the problem. Clearing house supplies of bank monies fulfilled an unusual

demand for additional means of payment that the formal monetary system of lawful money, or cash, could not meet. They were the only means of providing elasticity to the banking and monetary system.

As the Panic of 1907 played out, Edwin Seligman, a professor of political economy at Columbia University, organized a series of lectures, one each week, “to contribute to the understanding of the crisis of 1907, and to lay down some principles which might be of service in the reconstruction of our currency system” (Seligman 1908: ix). The lecturers, Seligman excepted, were prominent bankers or financiers.

In the introductory lecture, Seligman reviewed the country’s monetary and industrial history, seeking to determine whether the recent panic occurred due to real or monetary causes. He emphasized the inflation of about 2 percent per year that had occurred under the gold standard since 1896. Monetary increases based on gold discoveries, he observed, enabled the banks to expand credit to all agricultural and commercial enterprises. Liquidation of capital values, he concluded, “by checking the movement of exaltation retarded the increase” (Seligman 1908: xxiii).

A. Barton Hepburn, former comptroller of the currency and author of a comprehensive monetary history, also gave a lecture, which he titled “Government Currency vs. Bank Currency.” In his lecture, Hepburn provided a largely accurate history of U.S. money and banking. He also added a gratuitous opinion: “Judged from an historical and scientific standpoint,” he observed, “the currency system of a country can best be administered through the instrumentality of a central bank of issue” (Hepburn, in Seligman 1908: 57). The central bank would have a board of directors appointed by the government and be much like the Reichsbank in Germany, the Banque de France, and the Bank of England. It would earn a modest return on its capital, “but at the same time,” noted Hepburn (1908: 59), “the altruistic influences, personated [sic] by the government would largely control. . . . Why will not a government-controlled central bank of issue, where the banks of the country in good credit can . . . discount their receivables, receiving the proceeds thereof in bank notes, afford the best solution to the currency question?”

Five years earlier, in his banking history, Hepburn had discussed the CHLCs and other private, clearing house currencies that had appeared spontaneously during the Panic of 1893. Except for the high-denomination CHLCs, he argued, all the currencies and the

substitutes for currency were illegal. His perplexed conclusion was: “This temporary currency . . . performed so valuable a service . . . in moving the crops and keeping business machinery in motion that the government, after due deliberations, wisely forbore to prosecute. . . . It is worthy of note,” he concluded, “that no loss resulted from this make-shift currency” (Hepburn [1903] 1924: 352).

Hepburn, a learned banker and historian, argued that privately issued money, though illegal, performed an invaluable service without appreciable cost. The laws, not the “make-shift currency,” were obviously the problem and what needed changing, so that what was done spontaneously and privately could be legal.

The next lecturer, Albert Strauss, a banker-financier, after a lengthy discussion of gold and foreign exchange, noted the inelasticity of the American monetary system, which he likened to an “old rubber band.” He argued that “national bank-note circulation will expand a certain limited distance, but neither the old rubber bands nor our bank-note circulation will contract.” To provide the proper elasticity, Strauss favored a central bank. He believed “a form of organization can be devised for such a bank that will effectually protect it from the danger of political control or influence” (in Seligman 1908: 85–86). However, he did not provide any answers as to how such dangers could be avoided.

Paul Warburg, another prominent banker of the day agreed with Strauss. His lecture, “American and European Banking Methods and Bank Legislation Compared,” contrasted the European banking systems, which featured central banks, with that of the United States, which did not. He described an “ideal banking system” as one that “provides for the maximum use of credit and the minimum use of cash,” by which he meant currency and bank reserves (i.e., base money). Such a system, he thought, would avoid “all violent convulsions.” He saw European central banking as coming “very near” the ideal, but considered the U.S. system as being “palpably inefficient.” The Panic of 1907 reflected “a disgraceful state of temporary insolvency.” His principal argument was that the European central banks managed their countries’ credit systems dispassionately and wisely, while the U.S. banking system was “wrong from top to bottom” (Warburg, in Seligman 1908: 132). He also emphasized the extensive branching capabilities in European banking systems, but did not treat analytically the lack thereof in the American system.

Warburg (1908: 138) noted the incongruity between the bounteous reserves that the American banks held and the reluctance of the banks to use them: "While one thousand millions of dollars were lying idle in our banks and trust companies as so-called reserves, this money, by virtue of the law, could scarcely be touched!" However, he gave no suggestions as to how that problem might be remedied, beyond the prescription that all banks' reserves should be kept by the hoped-for central bank.

Both Strauss and Warburg thought of central banks as semi-independent institutions with very little government participation or ownership, and with a gold standard constraining the whole system. To his credit, Warburg (1908: 142, 149) severely criticized the usury laws that, he correctly charged, prevented borrowing at critical times.

Amazingly enough, near the end of his lecture Warburg (1908: 150) recommended, "a central clearing house, with power to issue against clearing-house certificates, notes to be guaranteed by the United States." He thought that this organization "would form the best solution for the time being." However, his "central clearing house" seemed to be no more than a less-than-optimal surrogate for the central bank he advocated.

All of the lecturers so far considered seemed to accept the technical aspects of the banking system as given. None called for the elimination of legal reserve requirements, although a few recommended branch banking. Most supported the notion of a central bank, but one limited by strict rules. They also took for granted, without saying so, the commanding presence of a gold standard.

Only one of the lecturers seemed to recognize the great virtue that the clearing house system had rendered during the panics of the era. That man was James Graham Cannon, who at the time was vice president of the Fourth National Bank of New York. His lecture, "Clearing Houses and the Currency," fairly well summarized the major arguments that appeared in his book, *Clearing Houses*, which the National Monetary Commission published in 1910.

In his lecture at Columbia, Cannon (1908) first gave a detailed report of how the clearing house system worked. He then discussed a banking crisis marked by a severe increase in the banks' and public's demand for "cash" or "lawful money" (again, monetary base items) that exclusively fulfilled the role of bank reserves. At the onset of a crisis, he observed, banks sequestered reserves to protect their legal requirements, and especially to counter a popular attempt to

convert bank notes or demand deposits into base-money currency, such as, gold, greenbacks, silver certificates, and to some extent national bank notes (for nonnational banks). This attempt, he argued, was bound to fail because bank reserves were all fractional, and the fraction averaged only about 15 percent of total demand obligations.

To counter the stringency arising from reserve money being “hoarded,” Cannon explained, clearing houses began the practice of issuing CHLCs, which were based on short-term paper deposited by the borrowing banks as collateral. These certificates extended the base money of the financial system and filled the immediate need for more currency, but could only be used to pay off balances due at the clearing house. Since the ratio of balances to clearings was between 2 and 5 percent, this newly created monetary base effectively substituted for “lawful money” reserves and thereby kept that much more real lawful money available as currency and reserves for banks threatened by bank runs (see Cannon 1910: 221).

The practice of the clearing houses in the major cities to issue large-denomination certificates as balancing media at the clearing house spread to other cities, as noted earlier, then to small cities, towns, and villages. When only, say, two or three banks are located in a small town, the directors get together at one of them and clear balances while having afternoon coffee. During the Panics of 1893 and 1907, however, banks in many such towns and villages issued quasi-currencies in the form of cashiers’ checks and other credit items stamped “payable only at the clearing house.” Since the notes were stamped “payable,” retailers and consumers, not knowing anything about check clearings, could believe that some respectable institution was going to redeem them, so they must be “good.” Cannon (1908: 111, 116) cited James Eckels, a comptroller of the currency, who had labeled them “due bills,” when the question of their legitimacy arose and was decided in a court of law. After the 1893 panic, Eckels (U.S. Comptroller of the Currency 1893: 15) observed: “The service rendered by [clearing house certificates] was invaluable, . . . and to their timely issuance . . . is due the fact that the year’s record of suspensions and failures is not greatly augmented.” The judge had ruled that the CHLCs were not money.

Cannon (1908: 114) concluded that the CHLCs issued in the Panics of 1893 and 1907, were “the solution of the problem.” The CHLCs “allow[ed] banks to take to the Clearing House their fixed

[dollar, interest-bearing] assets and convert them into a medium of exchange between themselves, thus allowing an extension of further credit, which credit was utilized by their depositors through the Clearing House." To penalize the banks for their use, Cannon (1908: 116) noted, "would have been not only a serious blow to one of the most effective and ingenious contrivances for the deliverance of the country from the throes of panic that has yet been devised, but would also have been a direct violation of the spirit of the law."

At the end of his lecture, Cannon (1908: 115) suggested that the laws should be changed to permit CHLCs to become a part of the monetary base (although he did not use this term), which "would be secured beyond peradventure. [Their] retirement would be provided for promptly, and when outstanding . . . would be covered by ample collaterals or by lawful moneys of the United States." His final recommendation was for the incorporation of the clearing house system by the United States government in order to legitimize the entire operation. Nonetheless, he insisted that the clearing houses should be in charge of all the lending activity that panic conditions demanded.

Another Harvard economist, O.M.W. Sprague, in discussing the Panic of 1907 a few years after it occurred, emphasized the fact that since the New York banks held a significant amount of reserves for the reserve city banks, and for most of the larger banks in the rest of the country, they had calls from banks everywhere for cash remittances of lawful money that they could not meet. Their reserves were central for the entire banking system. If they paid out such moneys, only some form of unlawful moneys, "redeemable at the clearing-house," would come back (Sprague 1910: 257).

Sprague, however, had another answer for what was wrong. He noted that "undue importance has come to be attached to the maintenance at all costs of a certain minimum [legal] ratio between reserve and deposit liabilities. . . . Without exaggeration," he argued, "this arithmetical ratio of reserves can only be adequately characterized as a sort of fetich [sic] to which every maxim of sound banking policy is blindly sacrificed." The New York banks "were primarily responsible because of their position as the central reserve banks of the country" (Sprague 1910: 280)" To correct this reserve-ratio problem, Sprague (pp. 319–20) offered the following solution: "Somewhere in the banking system of a country there should be a reserve of lending power, and it should be found in the

central money market [in New York]. . . . Provision for such reserve power may doubtless be made in a number of different ways.” However, he did not suggest any of the possibilities that he implied, or seem to be aware that “the reserve of banking power” he thought so necessary was already in place. The banks had plenty of reserves to service the liquidity needs of their depositors, but the *legal reserve requirements* that applied to all the national banks, and to many state banks, immobilized the reserves. If banks trench on their reserves, thereby reducing the ratio to a value below the legal minimum, everyone hears about it. Newspapers jump on the fact and publicize it as an object of opprobrium, fueling further demands for cash by frightened depositors. The offending bank usually becomes subject to significant penalties for the amount of the deficiency and is precluded from extending any further credit for whatever reason. Furthermore, any given ratio is a one-size-fits-all for a given class of banks.

The reserve necessities banks face vary from day to day, week to week, and season to season. Banks, if left alone, condition themselves to meet those varying demands. But if their reserves are rendered immobile by strict legal requirements, they lose their reserve flexibility.

Clearing Houses as Lenders of Last Resort

Privately owned and managed clearing house associations emerged during the 19th century as effective antidotes to the money and credit crises resulting from ill-conceived banking laws of the period. Most noteworthy is the fact that the clearing house system proved to be a perfect example of spontaneous order in monetary affairs and was especially compatible with the existing gold standard. The laws should have been changed so that the banks could have provided their own defenses more routinely. First, legal reserve requirements should have been abolished. Second, branch banking should have been encouraged, not prohibited. Third, banks should have been allowed to issue any demand liabilities that they and their customers agreed to—such as, hand-to-hand currencies, post notes, and due bills.

Unlike the Federal Reserve System that took its place in 1913, the clearing house system, in tandem with the operational gold standard, could not initiate inflation. No one ever imagined the possibility

because the incentives that put the clearing house machinery in motion occurred only when the demand for money, defined by rising interest rates and liquidity shortfalls, manifested itself. The incentives for action were all market-directed by thousands of people making thousands of decisions in competitive markets.

By way of contrast with the Federal Reserve System, the clearing houses' money-creating activities never resulted in any losses due to defaults on the loans that created them or any systemic losses from inflation. No personalities issuing public statements about "irrational exuberance" made the headlines. No goals, such as "planned inflation," accompanied by monetary tsunamis, labeled "QE 1, 2, 3," happened, or could have happened. (How can a central bank fail its "mandate," if it plans inflation? Inflation is the natural and logical result of all central bank policies.)

No central bank-treasury collaboration to expand the government's fiscal footprint was possible. The front door of the Treasury could not become the back door of the central bank. Removing the restrictive laws that prevent efficient competitive banking with a privately managed clearing house system would have promoted stable money and encouraged productive enterprise.

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NOMINAL GDP TARGETING: A SIMPLE RULE TO IMPROVE FED PERFORMANCE

Scott B. Sumner

The history of central banking is a story of one failure after another. This record does not mean that our actual monetary regimes have been the worst of all possible regimes—far from it. But it does mean that we can improve policy by learning from experience. Every proposed reform is a response to a previous failure, an implicit display of lessons learned.

A big part of this story has been the search for a robust monetary system that could produce good outcomes under a wide variety of conditions, without having to rely on a central bank run by a benevolent and omniscient philosopher king. It is a search for a monetary rule that can provide the appropriate amount of liquidity to the economy, under widely differing conditions. In this article, I argue that the optimal monetary rule is a nominal GDP (NGDP) target, or something closely related. To understand the advantages of this approach, it helps to see how the theory and practice of central banking have changed over time—that is, to see what went wrong with some previous monetary regimes, and how past reformers responded to those failures.

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The Gold Standard

It is not hard to see why gold and silver were used as money for much of human history. They are scarce, easy to make into coins, and hold their value over time. Even today one finds many advocates of returning to the gold standard, especially among libertarians. At the same time most academic economists, both Keynesian and monetarist, have insisted we can do better by reforming existing fiat standards.

It is easy to understand this debate if we start with the identity that the (real) value of money is the inverse of the price level. Of course, in nominal terms a dollar is always worth a dollar, but in real terms the value or purchasing power of a dollar falls in half each time the cost of living doubles. During the period since we left the gold standard in 1933 the price level has gone up nearly 18-fold; a dollar today has less purchasing power than six cents back in 1933. That sort of currency depreciation is almost impossible under a gold standard regime; indeed the cost of living in 1933 wasn't much different from what it was in the late 1700s. This long-run stability of the price level is the most powerful argument in favor of the gold standard.

The argument against gold is also based on changes in the value of money, albeit in this case short-term changes. Since the price level is inversely related to the value of money, changes in the supply or demand for gold caused the price level to fluctuate in the short run when gold was used as money. Although the long-run trend in prices under a gold standard is roughly flat, the historical gold standard was marred by periods of inflation and deflation.¹

Most people agree on that basic set of facts, but then things get more contentious. Critics of the gold standard like Ben Bernanke point to periods of deflation such as 1893–96, 1920–21, and 1929–33, which were associated with falling output and rising unemployment. This is partly because wages are sticky in the short run (see Bernanke and Carey 1996; Christiano, Eichenbaum, and Evans 2005). Supporters point out that the U.S. economy grew robustly

¹The price level effects of changes in stock supply or stock demand for (monetary or nonmonetary) gold are mostly reversed in the long run, as changes in the relative price of gold lead miners to increase or decrease the flow supply of gold. Although changes in the flow supply or flow demand for gold can have a lasting effect on the price level (and purchasing power of gold), Lawrence H. White (1999a) showed that the net effects of such changes were quite small historically.

during the last third of the 19th century, despite frequent deflation and a flawed banking system that was susceptible to periodic crises. They note wages and prices adjusted swiftly to the 1921 deflation, allowing a quick recovery. Countries with more stable banking systems, such as Canada, did even better. The big bone of contention is whether the Great Depression should be blamed on the gold standard or meddlesome government policies (see Cole and Ohanian 2004). My own research suggests the answer is “both” (see Silver and Sumner 1995).

I do see some weaknesses in the arguments put forth by advocates of the gold standard. It is true that some of the worst outcomes were accompanied by unfortunate government intervention, particularly during the 1930s (see Cassel 1936 and Hawtrey 1947). However it is worth pointing out that governments also intervened during the classical gold standard in the period before World War I.

Advocates of gold often base their arguments for gold on the assumption that it’s dangerous to give the government control over money. They claim it is much easier and more tempting for governments to debase fiat money, as compared to gold coins. That’s true, but it doesn’t mean that a gold standard prevents meddlesome governments from creating instability in the short run, as in the 1930s. For instance, during the interwar years major countries such as the United States and France often failed to adjust their money supplies to reflect changes in the monetary gold stock.

Here is how I see the debate today. Advocates of gold correctly claim that a gold standard will tend to preserve the value of money over long periods of time, and will sharply reduce the ability of governments to extract wealth from savers. Critics are right that a real-world gold standard is likely to deliver unacceptably large short-term fluctuations in the price level. I think they are also correct in assuming that wages are much stickier than they were during the gold standard’s heyday, and that the sort of deflation that led to just a brief surge in unemployment during 1921 (when wages quickly adjusted downwards) might now lead to unacceptably high and persistent unemployment rates.² A classical gold standard could probably do considerably better than the sort of regime we had between the world wars. However, if we could count on the authorities to accept

²In contrast to 1920–21 when wages fell sharply, the severe recession of 2007–09 merely led to a slowdown in the rate of growth in nominal wages.

the discipline of such a standard, why not make them adhere to a monetary rule to stabilize inflation or the growth of NGDP?

Obviously this debate could go on to look at all sorts of political models of policymaking. Instead, I will focus on purely technical issues and sketch out what I think are the pros and cons of various fiat money regimes, and leave for others the public choice issues of whether such regimes are politically feasible. However, I will return to politics at the end, when I argue that NGDP targeting would help avoid many extremely counterproductive government interventions in nonmonetary aspects of the economy. There are good reasons why many economists with libertarian leanings, including Friedrich Hayek, have embraced some version of this policy target (see Selgin 1995 and White 2008).³

Money Supply Targeting and the Taylor Rule

In the United States, gold was phased out in two steps: (1) domestically we left the gold standard in 1933, and (2) internationally the last links were broken in the late 1960s and early 1970s. What followed was a period of very high inflation, which led to renewed interest in finding some sort of anchor for the price level. Between 1979 and 1982, Paul Volcker was seen as leading a “monetarist experiment” trying to control inflation by reining in the money stock.

Contrary to the belief of many economists, the Fed never really adopted the sort of rigorous money supply rule that had been advocated by Milton Friedman (1968) and other monetarists. Even during the early 1980s there was significant variation in the money supply growth rate. The problem is that monetary velocity—that is, the ratio of nominal GDP to the money stock—also seemed volatile, especially in the wake of the so-called monetarist experiment. That is not to say that Volcker’s experiment was a complete failure; he did break the back of double-digit inflation, and by doing so proved that monetary policy rather than fiscal policy (which was expansionary under President Reagan) was the key determinant of inflation.

Like central bankers everywhere, Fed policymakers greatly prefer to target interest rates, not the money supply. So once inflation

³The late William Niskanen, former chairman of the Cato Institute, was a strong proponent of a final demand rule. His preferred target was domestic final sales (see Niskanen 2001).

was brought down to relatively low levels, they went back to targeting the federal funds rate. But memories of the Great Inflation of 1966–81 led many economists to look for a policy rule that would prevent a recurrence of high inflation. John Taylor proposed a rule for adjusting the fed funds target in such a way as to keep inflation near 2 percent and output as close to potential as possible, reflecting the Fed's dual mandate. The key insight was that as inflation rose above target, nominal interest rates had to be raised by more than one for one with inflation, assuring that even real interest rates were higher than before.

It is hard to overstate the importance of the Taylor Rule. In America, Paul Volcker and Alan Greenspan were feted as heroes who had adeptly steered the economy into the Great Moderation, the period of relative stability between 1983 and 2007. In fact, there was no miracle. All of the foreign central banks that operated under something like the Taylor Rule also achieved success in bringing inflation down to low and stable levels. It may be politically difficult to bring down the rate of inflation, especially when contracts have been negotiated on the assumption that high inflation would continue. But once this is done, it turns out to be very easy to prevent a recurrence of high inflation. Just promise to raise nominal interest rates by more than any increase in the inflation rate, until you are back on target.

Obviously something went wrong after 2007 (or maybe even before).⁴ If the Great Moderation had continued, there would be little reason to abandon the Taylor Rule. But before we consider alternatives, let's discuss what did *not* go wrong with that rule; high inflation did not return. Over the past five years the CPI (even including food and energy prices) has risen at the slowest rates since the mid-1950s, barely over 1 percent per annum.⁵ Instead, the problem since 2007 has been a severe recession and accompanying financial distress.

⁴David Beckworth (2012) argues that excessive NGDP growth contributed to the housing bubble of 2003–06.

⁵Some skeptics argue that the CPI understates the true rate of inflation. In fact, there is no possibility of objectively measuring the rate of inflation when (highly subjective) estimates of the quality of goods are changing at a rapid pace. It should be noted, however, that even purely private attempts at estimating inflation (such as the MIT “billon prices project”) show very low rates over the past four years.

Robert Hetzel (2009, 2012) makes a distinction between the “market disorder view” and the “monetary disorder view.” Although the market disorder view is the conventional wisdom, the fact that NGDP fell during 2009 at the fastest rate since the 1930s suggests that monetary policy failure was at the center of the crisis. Like Hetzel, I do not believe that financial distress alone can explain the crisis of 2008 and its aftermath (Sumner 2011). Instead, I see an almost perfect storm of bad luck and bad policy. Interestingly, some of the most popular culprits do not seem to be the real problem. For instance, many critics think that the Fed’s dual mandate (price stability and high employment) is itself a problem. In the past I shared this view, believing like others that the mandate was hopelessly vague, and that the Fed could hit only one policy target at a time. Indeed the failures of the 1970s might themselves have been partly due to the Fed trying to hit an employment target that had become unachievable due to growing structural problems with the economy.

Yet, it is hard to see how the dual mandate can be to blame for our recent difficulties. Yes, it would have been better had Congress instead insisted on an explicit NGDP growth target, with level targeting. Under level targeting the central bank promises to make up for any near-term overshoots or shortfalls of the policy target. But it is not realistic to expect mere politicians to be able to devise a sophisticated monetary policy rule. It makes more sense to view the mandate as Congress simply asking the Fed to do the best it can at producing good outcomes in those two areas, while leaving the Fed to figure out how. If it seems I am being too generous to Congress, keep in mind that this interpretation is clearly consistent with the Taylor Rule, a policy that seemed pretty successful for roughly a quarter century.⁶

Others might argue that this approach is too generous to the Fed, implicitly assuming that they will adopt the optimal policy rule. I’d make a slightly more modest claim: the Fed will adopt the sort of policy that the consensus of the macroeconomists view as best practices. If you follow Fed policy over time, including those that failed, they almost invariably reflected the consensus views of mainstream academic macroeconomists. Change that thinking, and you can impact Fed monetary policy. For instance, on September 12th, 2012, the

⁶Admittedly, it was an unconscious decision by the Fed in the early part of that period, as the Taylor Rule was not discussed until the 1990s.

Fed undertook some policy initiatives that were influenced by Michael Woodford (2003), probably the most important and influential contemporary monetary economist.⁷

In truth, I think the Taylor Rule is flawed, but I do not see the dual mandate as being the heart of the problem. It is important to distinguish between policy *goals* and a policy *target*. There is no reason why the Fed cannot have multiple policy goals. Indeed, since nominal shocks can have real effects in the short run, it makes sense to have goals related to both inflation and some measure of real economic activity. At the same time, the Fed can target only one variable at a time. The Taylor Rule took a weighted average of inflation and output gaps (deviations from estimates of the natural rate of output), and formed a single target from that composite. NGDP is a single target that can also satisfy the dual mandate, since NGDP growth is the sum of inflation and real growth, where growth obviously depends on the state of employment. In most theoretical models, a target linked to a weighted average of inflation and employment will better address the Fed's dual mandate. In practice, however, it would be far easier to get widespread agreement on an NGDP target, which does not require the Fed to estimate "economic slack" or the "natural rate of unemployment."

If the dual mandate itself hasn't been a problem, then why did monetary policy seem to fail so dramatically after 2007? I see three intertwined problems that together pushed monetary policy far off course. First, the Fed failed to "target the forecast"—that is, policy-makers relied too much on past trends rather than forecasts of where the economy was headed. Second, the Fed depended too heavily on interest rate targeting as the instrument of monetary policy. Finally, the Fed failed to engage in level targeting—that is, it did not make up for under- or overshooting of the target path. Instead, the Fed let bygones be bygones and set a new and lower growth target after it severely undershot its inflation and employment objectives in 2009.

A good example of the Fed's failure to target the forecast occurred in the September 2008 FOMC meeting, which occurred right after

⁷The Fed undertook an open-ended quantitative easing program, where the amount of assets purchased depends on progress toward the policy goals. The Fed also announced that it would maintain an easy money policy for some period after the economy has recovered, which represents an incremental move toward level targeting.

Lehman Brothers failed. The Fed decided not to cut interest rates, keeping the fed funds target at 2 percent, where it had been since April. It cited equal risks of inflation and recession. It is easy to understand the recession worries because the United States had been in a recession since December 2007, but what about inflation? On the day of the meeting, the five-year TIPS spread (a market indicator of inflation forecasts) had fallen to only 1.23 percent, well below the Fed's inflation target. If those indicators called for easing, why did the Fed stand pat? It turns out that inflation over the previous 12 months had been well above the Fed's 2 percent target. The Fed was responding to past data, not forecasts. It was like trying to steer a car while looking only in the rearview mirror.

Lars Svensson (2003) has argued that central banks should target the forecast—that is, set policy such that the central bank's forecast for the economy is exactly equal to the policy goal. For instance, if a central bank has a 2 percent inflation target, it should set the fed funds rate and monetary base at a level expected to produce 2 percent inflation. This is such common sense that many noneconomists are shocked to learn that real-world central banks do not behave this way. Instead, they resemble a ship's captain who says that while he hopes to reach the port of New York, and has been heading that way, given the current setting of the helm, along with forecasted wind and currents, he expects to end up in Boston. The attitude is perhaps somewhat understandable when interest rates are stuck at zero, but the Fed wasn't even targeting the forecast in the second half of 2008, when rates were still above zero.

In mid-December 2008 the fed funds target reached a level of zero to 0.25 percent, effectively ruling out further reductions. In theory, this should not have been a problem. There's a long academic literature discussing alternative operating procedures. Indeed, Ben Bernanke (1999) wrote articles discussing what the Bank of Japan should have been doing but was failing to do, when rates in Japan hit zero in the late 1990s. In practice, however, the Fed became very timid and failed to aggressively pursue a policy of monetary stimulus. Bernanke called for help from the Treasury. Under normal circumstances that should not have been necessary, because monetary policy is usually more effective in boosting aggregate demand than fiscal policy. Also, pure monetary policy does not boost the deficit and, therefore, does not impose the burden of higher future (distortionary) taxes.

It is not clear why the Fed did not attempt its own more aggressive stimulus. Bernanke expressed vague worries about unspecified “risks and costs” of taking such an aggressive stand. But he was not burdened by similar worries when he encouraged the Bank of Japan to be more aggressive in the early 2000s (see Bernanke 2003).

At one time I believed that the first two problems mentioned earlier were the most crucial ones. Those weaknesses made the policy somewhat slow to adjust to market conditions. But I have since come to conclude that the third problem—the Fed’s failure to engage in level targeting—is actually the most important. Level targeting is a very powerful tool both for limiting central bank discretion and for establishing policy credibility. It essentially forces a central bank to do what it says it is trying to do.

Consider the case of Japan, which has experienced mild deflation since the mid-1990s. Because its deflation rate has been quite modest, often below 1 percent, the Bank of Japan can claim that it has merely fallen a bit shy of its goal of achieving price stability. The BOJ has been rather vague about what its goal of price stability actually means, but most observers have taken it to mean something close to a target of zero inflation—or just above zero. Quite recently the Japanese government expressly called upon the BOJ to aim for a rate of 2 percent. With level targeting the central bank commits itself to making up for past inflation shortfalls or overshoots. Thus, if the BOJ had been targeting Japan’s GDP deflator, which has actually fallen by more than 15 percent since the mid-1990s, it would have been forced long ago to generate enough inflation to make up for previous shortfalls, so as to have left the deflator not much different now than it was back then. With level targeting, deflation could not have gone on for very long, partly because after a short bout of deflation, expectations of future inflation would have risen enough to reduce real interest rates and boost the price level. Market expectations would thus have helped to stabilize Japan’s price level. Nominal GDP level targeting in the United States along a 5 percent trend growth rate prior to 2008 would similarly have helped to greatly reduce the severity of the Great Recession.

The Case for Nominal GDP Targeting

All the aforementioned problems could be fixed without going to NGDP targeting. We could have the Fed target the price level, along

a level path or a slightly rising trend line. We could commit to return to the trend line if Fed policy under- or overshot in the short run. We could target the forecast, set policy at a level expected to succeed. We could switch from an interest rate instrument to a policy instrument that is not subject to the zero rate bound—the monetary base, or the price of CPI futures contracts. So why consider NGDP targeting instead?

There are several reasons for doing so, both theoretical and practical. I shall review them in a moment. But first let's start by clearing up a couple things. First, nominal GDP targeting is not a way to boost growth in the economy, or to generate a higher inflation rate. If the long-run trend rate of growth in the economy is 3 percent, then a nominal GDP growth target of 5 percent will deliver the same long-run rates of inflation as a 2 percent inflation target. A nominal GDP target is consistent with any preferred rate of inflation or deflation. Friedrich Hayek, for instance, occasionally argued that monetary policy should aim at a stable level of nominal income (Hayek [1935] 1967), which would have meant having a rate of deflation equal to the long-term growth rate of real GDP (see White 1999b, 2008).

Second, a nominal GDP targeting regime responds to demand shocks (or changes in velocity) in exactly the same way as an inflation targeting regime. In both cases the money supply adjusts to fully offset any sudden change in velocity.

If nominal GDP targeting accommodates shifts in money demand, and produces the same long-run rate of inflation as inflation targeting, then how does it differ? It differs in how it responds to productivity (supply) shocks. Suppose that an oil embargo in the Middle East reduces our oil imports by 10 percent while boosting the price of oil by 60 percent. If the Fed targeted inflation, policymakers would have to tighten money enough to deflate all nonoil prices in order to keep the overall CPI on target. Nominal wages, however, are sticky or slow to adjust, so a sudden fall in the price of domestically produced goods would sharply increase unemployment.

Of course, the Fed might prevent particular supply shocks, like shocks to oil and food output, from having such an adverse consequence by using a “core” price level index that excludes food and energy prices. In practice, this would not be a perfect solution, because energy is a component in the production of many final goods whose prices are included in even the core CPI. But productivity

shocks can occur in any sector of an economy. For instance, the computer revolution drove productivity higher at an unusually rapid pace during the late 1990s. Because nominal wages are sticky in the short run, this initially led to much higher profits, higher levels of capital investment, and very low rates of unemployment. Of course, all these trends reversed in the early 2000s. Had the Fed had been targeting NGDP instead of inflation, policy would have been tighter during the high-tech boom, and perhaps also during the housing boom of 2004–06.⁸

One way to think about NGDP targeting and the business cycle is to consider how such targeting would affect labor markets. NGDP is the total nominal income in the economy.⁹ The ratio of nominal wages to NGDP can be thought of as the share of NGDP earned for each hour's work. Now assume that nominal hourly wages are sticky. What happens if NGDP suddenly falls? There are two possibilities: (1) employment might be unaffected, in which case nonwage income (capital income) would absorb the entire shock; and (2) with less income to go around, and the same wage per hour, there would be fewer hours worked and more unemployment.

In practice, both profits and employment tend to decline when NGDP falls, but in the short run the biggest burden falls on workers, as unemployment is highly (and negatively) correlated with NGDP relative to trend. The year 2009 saw both the biggest fall in NGDP since the 1930s and the largest increase in unemployment since the 1930s. That is not a coincidence.

Elsewhere I have argued that the optimal monetary policy would stabilize aggregate hourly nominal wage growth (Sumner 1995). This policy would help keep labor markets in equilibrium and employment close to its natural rate. But there are all sorts of practical problems in measuring aggregate wage rates, and it is unlikely that a wage target would be politically feasible. NGDP targeting can be thought of as the next best thing. A stable path of NGDP growth would tend to stabilize employment more effectively than an inflation target, because employers' ability to meet their wage bills depends more on NGDP growth than on the rate of inflation. During periods such as

⁸George Selgin (1995) and David Beckworth (2008) explain of how NGDP targeting delivers better results when there are productivity changes.

⁹Technically NGDP is gross income, but the rates of change in gross income are highly correlated with changes in net national income.

late 2007 and early 2008, when prices rose rapidly despite slow NGDP growth, wages also grew slowly. So NGDP targeting is the better way to keep aggregate nominal wages close to equilibrium, helping to stabilize employment.

A second advantage to NGDP targeting is that it limits asset market instability. Asset bubbles tend to form when NGDP growth is higher than average. That's not to say that NGDP targeting would entirely eliminate asset bubbles. After all, the recent tech and housing bubbles occurred during periods when NGDP growth was only modestly above its trend. The big advantage here of NGDP targeting shows up on the downside. Financial market crises are highly correlated with falling NGDP, and are almost certainly made worse by it. The most famous example of this occurred in 1929–33, when U.S. nominal income was cut in half. Some economists believe that the Great Depression was triggered by a financial crisis (e.g., Hall 2010). Yet, the first financial crisis occurred more than a year into the Depression, and was probably caused by the collapse in spending that was already in progress.

In the late 1990s and early 2000s a severe decline in NGDP caused a financial crisis in Argentina. Then, in 2008–09, falling NGDP in the United States and Europe caused a relatively modest financial crisis to become much larger. For instance, IMF estimates of the total losses to the U.S. banking system from the current crisis nearly tripled between April 2008 and April 2009, as NGDP growth expectations plunged sharply. What started as a localized subprime mortgage crisis spread to other types of mortgages in other regions of the country and also to commercial and industrial debt. In Europe sovereign debt even became engulfed in the crisis. None of this should be at all surprising. The decline in NGDP was the largest since the 1930s, and it is out of their nominal earnings that people, businesses, and governments acquire the funds for repaying their debts.

Many have argued that inflation targeting is the best way to avoid unexpected and “unfair” transfers of wealth between creditors and borrowers. However, Selgin (1997) has shown that is true only if the economy's productivity is not also changing, and that in general a nominal GDP target, or a closely related “productivity norm,” would lead to less disappointment among debtors and credits. The basic idea is that changes in productivity alter living standards, in turn changing people's willingness and ability to borrow and lend.

An expected improvement in productivity, for example, will make creditors seek higher returns on their loans, while also making it possible for borrowers to afford higher rates. However, an unexpected improvement will cause lenders to wish they had charged a higher rate. Under inflation targeting that sort of disappointment is not avoided. In contrast, under NGDP targeting the positive productivity shock is offset by an opposite—and equally unexpected—change in the inflation rate, keeping ex post real rates closer to where they would have been if both lenders and borrowers had been equipped with perfect foresight.

Now consider a specific case where nominal interest rates are 5 percent and people expect 5 percent nominal GDP growth composed of 2 percent inflation and 3 percent real growth, and (to give an example the opposite of the one already considered) there is an unexpected negative supply shock that boosts inflation to 5 percent while forcing real GDP growth down to 0 percent. In this case, lenders end up earning a zero real rate of return. But that only makes them suffer along with everyone else. With zero real GDP growth, there is no extra real income to share between lenders and borrowers. Under NGDP targeting, lenders know that each dollar they receive in the future will represent a given percentage of society's total nominal income, while borrowers know they can always pay what is owed. However, if inflation were being targeted at 2 percent, nominal GDP growth would shrink, making it difficult if not impossible for many borrowers to pay off their debts.

Pragmatic Arguments for Nominal GDP Targeting

As compelling as I think the theoretical advantages of nominal GDP targeting are, I have come to believe that there are even more powerful pragmatic arguments for it that mostly revolve around some overlooked practical shortcomings of inflation targeting.

Ben Bernanke has long advocated inflation targeting. But even he must be surprised and disappointed with how poorly it worked during the recent crisis. Three practical issues contributed to this poor outcome. First, real-world measures of inflation are highly subjective and sometimes very inaccurate (see Alchian and Klein 1973). Second, it is difficult to target inflation in a symmetrical fashion, partly because the public does not understand inflation targeting. Finally, inflation targeting encourages policymakers to think in terms of monetary

policy affecting inflation and fiscal policy affecting real growth—a perception that is both inaccurate and potentially counterproductive.

Recall that inflation targeting is about more than just inflation. Advocates like Bernanke see it as a tool for stabilizing aggregate demand, and hence reducing the severity of the business cycle. This is certainly understandable, as demand shocks tend to cause fluctuations in both inflation and output. So a policy that avoids them should also stabilize output.

I have already discussed one problem with this view—namely, the economy might get hit by supply shocks, as when oil prices soared during the 2008 recession. Some of that can be avoided by looking at the core inflation rate. But even the core inflation rate was surprisingly sticky, or slow to fall during 2008–09, even after oil prices plunged. This made it harder for the Fed to aggressively stimulate the economy. It is not hard to figure out what went wrong with demand-side models that predicted inflation would fall sharply during a severe slump; in fact, according to the Bureau of Labor Statistics (BLS), housing prices did not fall. On the contrary, housing prices rose between mid-2008 and mid-2009, despite one of the greatest housing market crashes in all of world history. And they didn't just rise in nominal terms; they rose in relative terms, that is, faster than the overall core CPI. If we take the longer view, we find that house prices rose about 8 percent between 2006 and 2012 (according to the BLS) whereas the famous Case-Shiller house price index shows them falling by nearly 35 percent. That is quite a serious discrepancy, especially given that housing is 39 percent of the core CPI.

Many people might argue that the BLS number is better in the sense that it measures the rental equivalent of housing costs, whereas Case-Shiller shows the sales price, which most consumers don't see in any given year. But the real question is: "Better for what purpose?" People like Ben Bernanke don't favor inflation targeting because they hope to keep consumers happy; they favor it because they hope to stabilize the economy. That means avoiding unemployment as much as possible. The level of employment in the housing construction industry is almost certainly more closely related to the price of new homes than the rental equivalent of apartments in buildings constructed 30 years ago. If you had to predict the crash in housing construction after 2006, which measure would work better—an 8 percent increase in housing prices or a 35 percent decrease?

There are of course errors in the measurement of both inflation and NGDP growth. But there's an important extent to which NGDP is a more objectively measured concept. The revenue earned by a computer company (which is a part of NGDP) is a fairly objective concept, whereas the price increase over time in personal computers (which is a part of the CPI) is a highly subjective concept that involves judgments about quality differences in highly dissimilar products.

Although the core CPI did not decline as quickly as expected during 2009 (due to high housing prices) core inflation did eventually fall to 0.6 percent in the late summer of 2010. That decline caused the Fed to push for higher inflation via quantitative easing, which meant buying bonds to increase the monetary base. In principle, this program should have been completely uncontroversial because inflation was well below the Fed's 2 percent target. Instead, the Fed ran into a firestorm of controversy. The public was outraged to hear news reports that the Fed was trying to raise their cost of living at a time when many people were suffering from the recession.

It is pretty obvious that the public and the Fed were operating under completely different mental frameworks. When Bernanke called for "higher inflation" he meant a higher level of aggregate demand, which economic theory suggests should raise both the inflation rate and, in the short run, the real incomes of Americans. In contrast, when average Americans hear the term "higher inflation," they think in terms of higher food and energy prices (due to a reduction in aggregate supply), which reduces their real incomes. The Fed understood that more spending would mean more inflation but hoped it would also result in greater employment and output.

The Fed does not directly increase inflation by creating more money; rather the Fed raises total spending or aggregate demand. Whether that increase leads to inflation depends on the growth of real output. It is very strange to call the goal of such a policy "higher inflation," because the inflation is essentially a side-effect of the increased aggregate demand—the desired effect of which is greater employment and real growth. Nevertheless, Fed officials routinely talk as if the side-effect were the thing that really mattered. No wonder the public is confused.

According to some news reports, the Fed was taken aback by the intense criticism of QE2, and that this had made them more cautious about doing further stimulus. The dual mandate, which the Fed

interprets as calling for about 2 percent inflation, would seem to have called for (and still calls for) a more expansionary monetary policy. Yet the Fed has held back, despite high unemployment and an inflation rate that has averaged only a bit above 1 percent since mid-2008, when the recession first became severe. It would have been both more accurate and less provocative for the Fed to have said in 2010 that the goal of QE2 was to boost American's nominal incomes, not their cost of living.

Confusion over the nature of inflation targeting creates another political problem: it leads to the perception that central banks control inflation, and the fiscal authorities control real GDP growth. Our textbooks treat monetary and fiscal policy similarly, as two tools for controlling spending. Yet one almost never sees any discussion of fiscal policy from an inflation-targeting perspective. If inflation is above target, the press almost always focuses on what the central bank needs to do. When there is an output shortfall, on the other hand, it's much more likely that people will call for fiscal stimulus. Yet there is absolutely nothing in economic theory that would justify this imagined asymmetry, at least from the perspective of demand side-initiatives like higher government spending.

One example of this confusion occurred in Britain during the recent recession. The pace of recovery there had been especially disappointing. Yet between 2010 and 2012 inflation ran well over the Bank of England's 2 percent target. Admittedly the Bank understood this to be due in part to transitional factors, such as a higher VAT rate and increased oil prices, so it was prepared to tolerate inflation that was modestly above its target. The political pressure caused by the high inflation nevertheless made it unwilling to further boost NGDP growth, which was far below trend. At the same time, the perception that the British recovery was lagging led to further calls for fiscal stimulus, despite Britain's high deficit and debt ratios. But fiscal stimulus cannot boost spending if the monetary authorities are targeting inflation. It's like the legislature stepping on the gas pedal at the same time that the central bank presses on the brake.

The point is that fiscal and monetary policy both work by influencing aggregate demand. If the central bank targets inflation at 2 percent, any fiscal policy that succeeds in increasing aggregate demand, will also tend to boost inflation, causing the central bank to tighten

so as to keep inflation near its target. It's been known for decades that the fiscal multiplier is zero when the central bank targets inflation. But because people have become used to thinking that monetary policy determines the rate of inflation, while fiscal policy determines real growth, they have overlooked this. If central banks instead targeted spending, the futility of fiscal stimulus would be more evident. If, for example, the Bank of England was committed to a 4 percent nominal GDP growth target, and everyone knew it, the government would not be able to argue that by spending more it could make the economy grow faster. Since it obviously couldn't even boost the growth rate of nominal GDP, how could it possibly cause real GDP to go up?

The preceding analysis points to still another advantage of NGDP targeting: such targeting would make it easier for the public to appreciate the need for sound supply-side policies. If the fiscal authorities understood that the central bank was going to allow only 4 percent NGDP growth, then they would know that the only way to boost real growth would be with supply-side policies, even in the short run. Tax reform that lowered MTRs would tend to increase aggregate supply, and hence improve the inflation/output growth split in NGDP growth.

Conversely, bad economic policies would be more difficult to justify. When NGDP is allowed to fall sharply, as when inflation is kept stable despite an adverse supply shock, unemployment tends to rise. This makes it harder to insist on market-oriented policies, which typically call for “creative destruction,” with unemployment in parts of the economy tolerated for the sake of allowing for more expansion elsewhere. When spending collapses generally, however, people will ask “Where do the workers go who have lost their jobs?” It's not an easy question to answer. Nor is it therefore so easy to argue against bailouts and other measures aimed at keeping even those firms or industries that ought to fail from actually failing. In contrast, with NGDP targeting there is never a general collapse of spending, regardless of what's happened to productivity generally or to any particular industry or firm. Therefore with such targeting, bailouts like the recent ones of GM and Chrysler would have been much harder to justify. Since they would not boost NGDP, any extra spending on cars made by these two companies would be fully offset by less spending on other American-made products. NGDP targeting would

help to restore policymaking to a “classical” framework, where decisions to benefit special interest groups would always have relatively visible opportunity costs.

It would also be much easier to avoid bailouts of big banks, because proponents of “too big to fail” could no longer claim that failing to bail out banks would push us into a recession. Indeed with NGDP growing at a steady rate it is much less likely that we would have the sort of contagion of financial failures that could produce a systemic crisis.

And finally, NGDP targeting would help to depoliticize monetary policy. The current ill-defined dual mandate allows each side of the political divide to latch onto its preferred policy indicator and argue that money is either too easy or too tight. Indeed this polarization has been especially pronounced during the Great Recession. NGDP targeting would provide for much greater transparency as to whether policy was overshooting the target, or falling short.

Can We Trust the Fed to Target Any Variable?

Many libertarians are skeptical of the Federal Reserve, and instead favor a more laissez-faire regime, such as free banking. The issues involved here go well beyond the scope of this article. However, I believe there are several ways to reduce the discretion of central banks under an NGDP targeting regime.

One, which I have already mentioned, is the importance of level targeting. Think of level targeting as a way of “keeping them honest.” From the 1960s to the 1980s inflation almost always exceeded the Fed’s policy goal. Whenever the Fed missed they promised to try to do better. But those promises lacked credibility, because the Fed was targeting growth rates, not levels, and so never felt obligated to actually make up for its mistakes. The public became skeptical, and rightly so. At the other extreme, the Bank of Japan (BOJ) has repeatedly fallen short of its inflation targets, has also kept promising to do better, and has also lost the Japanese public’s confidence.

In contrast, if a central bank fell short of its price *level* target by 1 percent every single year, it would lower the inflation *rate* only during that first year. For instance, suppose the BOJ had a price level target of 100. In the first year it falls 1 percent short due to a flaw in

its targeting method, ending up at 99. For it to allow the price level to drop to 98 the next year would mean being short 2 percent at the end of the second year—a failure to honor its commitment. However, if each additional year the BOJ falls 1 percent short of the policy goal, then the CPI will stay at 99, which means that policymakers will actually reach their goal for stable prices in every single year except the first. The public can adjust to any *level* of prices; what causes problems is *unanticipated changes*. The same rationale would apply to level targeting of NGDP.

In previous articles, I have also discussed how central bank discretion could be removed by a policy of targeting NGDP futures prices (Sumner 1989, 2006). The basic idea is to set the monetary base at a level where NGDP growth is expected to be right on target. Each time someone buys an NGDP futures contract from the central bank, their purchase signals worry that NGDP growth is too high, obliging the Fed to restrain money growth. Each sale of NGDP futures contracts to the Fed signals concern of a slowdown, and leads the Fed to inject more base money into the economy. Failure to do so would expose the Fed to potentially unlimited losses.

In essence, the market, not the central bank, would be setting the monetary base and the level of interest rates. Indeed the Fed's only role in this sort of regime would be to set the target path for nominal GDP. The Fed would essentially be defining the medium of account (i.e., during 2014 the dollar might be defined as one seventeen trillionth of expected 2014 U.S. nominal output.) Once the Fed is that far removed from the process, it is relatively easy to move on to free banking.

Conclusion

Many libertarian economists are acutely sensitive to the very real dangers of excessive inflation. But I believe some have a blind spot for shortfalls in nominal spending, which are arguably even more damaging. The United States had a relatively efficient small government policy regime under Presidents Harding and Coolidge. It was far from perfect, but as soon as the Depression began policy became more interventionist—and (with the exception of the dollar devaluation of 1933–34) almost completely counterproductive.

An almost identical sequence of events took place in Argentina during the late 1990s and early 2000s. Argentina grew quite rapidly from 1990 to 1997, partly thanks to neoliberal policy reforms. But Argentine monetary policy became contractionary in the late 1990s and early 2000s, causing a significant decline in nominal GDP. Finally, a new and more left-wing government took command, devalued the currency, and pursued a statist policy agenda. The new regime blamed Argentina's troubles not on tight money, but on its former free market policies, just as FDR had done 70 years earlier. The fall in NGDP also worsened a fiscal crisis. This led the Argentine government to swing to the opposite extreme—printing money to pay its bills. The result was high and rising inflation. The government blamed “capitalists” and put on wage and price controls. More recently, the sharp decline in NGDP in the Eurozone has led to calls for “fiscal union.” This might slightly ameliorate the current crisis, but the resulting increase in moral hazard would be storing up much more severe problems down the road.

Nominal GDP targeting provides the best environment for free market policies to flourish. It removes one of the most powerful excuses for statist policies, the claim that they will somehow create jobs. In the current policy environment, where NGDP growth has fallen far below trend, there is an unfortunate tendency for some on the right to view NGDP targeting at a sort of left-wing proposal, aimed at inflation. In fact, from Hayek in the 1930s, to people like McCallum (1985), Hall and Mankiw (1994), and Selgin (1995) in the 1980s and 1990s, to the so-called market monetarists of today, nominal GDP targeting of some sort has long had strong appeal among economists sympathetic to free markets and low inflation.¹⁰ We need to look beyond the current crisis, and to think long and hard about what sort of pragmatic monetary regime will best serve the economy in the decades to come.

¹⁰Lars Christensen (2011, 2012) coined the term “market monetarist,” and has been a forceful advocate of combining NGDP targeting with a more laissez-faire approach to banking. As far as I know Bill Woolsey (1992) was the first to connect futures targeting with free banking. The number of market monetarists in the blogosphere is growing rapidly, and includes David Beckworth, Lars Christensen, David Glasner, Josh Hendrickson, Marcus Nunes, Nick Rowe, Evan Soltas, Yichuan Wang, and Bill Woolsey.

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FED VERSUS MARKET REGULATION

Jeb Hensarling

Before I get into the body of the remarks, I want to thank the Cato Institute for everything it stands for and everything it has meant to me. As I was walking in the foyer, I noticed a copy of the *Cato Journal* on a table there. I recall as an undergraduate student at Texas A&M University in the 1970s that I took \$25 dollars—and I'm a guy who worked my way through college—of my hard-earned money to invest in the *Cato Journal*. That was money I could have invested in long necks at the Dixie Chicken, our local watering hole. Also, I would like to thank John Allison. If you have not read his book, *The Financial Crisis and the Free Market Cure: Why Pure Capitalism Is the World Economy's Only Hope*, I commend it to you. Finally, I would like to tell you that as chairman of the House Financial Services Committee, before I decide to move out on any particular issue, I certainly glean the scholarship of Cato in general and Mark Calabria in particular.

Before I speak about the topic of the market versus the Fed as regulator, I just want to give a little context to my comments, which is to broaden them out to regulators and regulation in general, because I think many of us have concluded that the great tragedy of the financial crisis was not necessarily that our federal regulators failed to prevent the crisis, but in many respects helped precipitate the crisis (see, e.g., Calabria 2013, Wallison 2013).

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How Federal Regulators Helped Create the Financial Crisis

Many of you are familiar with the narrative, but in brief, we had a government sanctioned duopoly in Fannie Mae and Freddie Mac. Their leverage ratios were minuscule compared to community banks in the Fifth Congressional District of Texas. We know that the so-called affordable housing goals, which started at 30 percent eventually went to 56 percent. The Community Reinvestment Act essentially mandated that financial institutions loan people money to buy homes that they ultimately could not afford to keep.

Speaking of duopolies, or oligopolies, there are the credit-rating agencies. One of the few good things that the Dodd-Frank Act did, and there are very few of them, was to attempt to bring more competition into the credit-rating agency business.

There are a number of reasons why the 2008 financial crisis happened, but it was not due to lack of regulatory authority. The Securities and Exchange Commission had the ability to prevent much of what we saw. I certainly remember the head of the now-defunct Office of Thrift Supervision saying under oath that his agency had all the regulatory authority it needed to prevent the failure of American International Group.

The Fed's Role in the Crisis

Turning to what the Fed did, we obviously know that there was a decision made in early 2008 to bail out Bear Stearns and then, later in 2008, let Lehman fail—so much for forward guidance and the precedent that set. We also know that since the 1970s the Fed had oversight over bank holding companies and was certainly in the position to influence all the lending practices of the bank subsidiaries. Certainly, we know the Fed made a bad prediction on the direction of the housing markets, and we know for many of us who have paid very careful attention to the Taylor Rule that there was a great deviation from that rule leading up to the 2008 financial crisis. We all recall the “Greenspan put,” and we know the Fed was given extraordinary statutory guidance with respect to the Basel capital standards, where sovereign debt (think Greek bonds) were treated as essentially risk-free, as were agency mortgage-backed securities (think Fannie and Freddie).

The Fed's Dual Mandate

We often hear discussion of the Fed's "dual mandate." I would respectfully submit, however, that the Fed has multiple mandates: namely, to achieve long-run price stability, attain maximum employment under Humphrey-Hawkins, promote moderate long-term interest rates, act as regulator of market stability and lender of last resort, and —need I add—is now landlord to the consumer financial protection bureau, just to name a few.

I would respectfully suggest that under divided government, it is going to be challenging to make dramatic changes in the way the Fed conducts its business. Nonetheless, we dream bold dreams in America, so let me offer a handful of policies that the House Financial Services Committee will look at in the short term to try to inject more market confidence and discipline.

Policies Needed to Create Confidence and Market Discipline

First, the Fed needs real transparency. People have to understand what the Fed is doing and on what basis it is making its decisions. I would respectfully suggest that there could be room for improvement in this area. Greater transparency will always be healthy for the Fed, and that is why, under my chairmanship, the House Financial Services Committee will continue our commitment to legislation to audit the Fed, which in this Congress, without former Rep. Ron Paul, has been introduced by Rep. Paul Broun of Georgia.

The Committee wants to ensure that the Fed operates under careful cost-benefit analysis in the exercise of its regulatory authority. It is something that theoretically the SEC and the CFTC are supposed to follow. Thirty years ago, the Fed published guidance in the Code of Federal Regulations suggesting it would abide by cost-benefit analysis requirements promulgated by the White House Office of Management and Budget. Many of us have not seen that in practice and instead conclude that the Fed's outdated and nonbinding guidance is no substitute for a binding statutory requirement.

Second, the Fed must maintain its independence. I submit this need for independence is with respect to monetary policy, not the exercise of fiscal policy, which is what we have seen the Fed exercising recently. Nor does the Fed's need for independence call for independence from the legislative or judicial branches of government.

Third, to ensure greater market discipline, the Committee is looking at the ratio of attorneys to economists among federal agencies. There has been a call to have the Fed engage in “macro-prudential policy” and place more attorneys on the Fed Board of Governors. Indeed, the Conference of State Bank Supervisors has recently issued a report asking President Obama to place more nominees with legal experience on the Federal Reserve Board. I maintain that the Fed must always be led by experts trained in the science of economics, especially those who have some training in the Austrian and Chicago schools of economics.

Fourth, we need to recognize that there are tradeoffs between the Fed’s role as bank regulator and as guardian of monetary stability. The Volcker Rule, for example, will make it more difficult for institutions to serve as “market makers” in corporate bonds and thereby maintain liquidity in that market. If the market for corporate bonds becomes less efficient, the Fed’s ability to translate lower interest rates on Treasury bonds into lower rates throughout the economy will be diminished as this transmission mechanism of monetary policy is disrupted. In short, the Fed must always consider how its regulatory decisions can have negative consequences for its monetary policy objectives.

Fifth, the Committee will look very seriously at the Taylor Rule as a way to improve forward guidance in the conduct of monetary policy. We are very familiar with this rule, which has been around for at least 25 years, and think it can significantly improve Fed policy. In the pages of the *Cato Journal* in 2011, Professor Taylor offered a measured and careful recommendation to encourage the Fed to adopt and communicate monetary policy using a clear rule. That recommendation, representing the culmination of decades of thinking and research in monetary policy rules by Professor Taylor and others in the economics profession, will be the focus of a hearing at our Committee.

Last but not least, I would like to say, the Dodd-Frank Act attempted to constrain the Fed’s emergency authority under Section 13 (3) to bail out nonbanks. The Fed used that authority excessively in 2008, in ways that many have argued overreached its legal authority (see White 2010). Though the Fed has always served as a lender of last resort, it used Section 13 (3) to do two things that we need to ensure the Fed can never do again: it provided support to insolvent firms and it provided support at generous rates. The Dodd-Frank

Act's Section 1101 was intended to address that problem, but it didn't get the job done (see Carnell, Macey, and Miller 2013).

Reexamining the Fed

I was privileged to have breakfast with Chairman Bernanke a couple of months ago and told him we would offer a 100th birthday present to the Fed—namely, the most rigorous oversight plan they have seen in their entire history.

So, I wish to tell you—and we will have the formal rollout in the month of December, which is the Fed's true 100th anniversary—that the House Financial Services Committee intends to reexamine all conventional wisdom dealing with the Federal Reserve without necessarily preordaining the conclusion. William McChesney Martin (1968: 92), a former Fed chairman, once observed that the Fed should “always be engaged in a ruthless examination of its own record.” We plan to help the Fed in that regard. Indeed, we had a hearing yesterday (November 13, 2013) dealing with alternative models of different international central banks. We will be examining the Fed's independence, exactly where that should be properly respected and where it has no proper place. QE3, I assure you, is high on our list of priorities. The impact of picking winners and losers through quantitative easing, in this case seniors and savers being losers, needs to be examined.

Conclusion

The Fed's role in enabling the massive debt that threatens our nation, our future, and our economy will be part of what we examine. We will look at the Fed's contingency planning for the debt ceiling and consider rules to guide monetary policy, including the Taylor Rule. We also will examine the Fed's lender-of-last-resort function (whether or not it has ever been defined), the proper boundaries between monetary and fiscal policy, the Fed's multiple mandates, the entirety of the Fed's 100-year history, and what America looks like since adopting a fiat currency.

The Fed can be a more effective institution if it learns to operate guided by the simple wisdom of Hayek, Friedman, and Von Mises, that markets are ultimately more efficient and effective than central regulators at processing information about value and financial risk. The Federal Reserve Centennial Oversight Project that the Financial

Services Committee undertakes this Congress will help the Fed incorporate this lesson into its work. We will constrain, where appropriate, the Fed's lender-of-last-resort role to help credit and equity markets regulate excessive risk through the pricing system by reducing moral hazard. We will bring greater market transparency to the Fed's process for setting and communicating monetary policy through requiring the use of clear rules, so that markets can better predict and plan for the Fed's future policy course. We will require the Fed to conduct formal cost-benefit economic analyses when it develops new regulations to ensure that the unintended consequences of regulations do not impede market innovations in managing financial risk.

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MARKET DISCIPLINE BEATS REGULATORY DISCIPLINE

John A. Allison

I am going to talk from a different perspective because I am the only person who actually ran a bank that's been speaking today, and from that context I can tell you with absolute certainty that market discipline beats regulatory discipline. In fact, I will argue that regulatory discipline will always fail to reduce volatility and will slow economic growth. These observations are based on my understanding of public choice theory and particularly on 40 years of concrete experience in the banking business.

One observation in my 40-year career at BB&T: I don't know a single time when federal regulators—primarily the FDIC—actually identified a significant bank failure in advance. Regulators are always the last ones to the party after everybody in the market (the other bankers) know something is going on. Thus, in that context, regulators have a 100 percent failure rate. Indeed, in my experience, whenever they get involved with a bank that is struggling, they always make it worse—because they don't know how to run a bank.

An interesting reflection from public choice theory, reinforced consistently throughout my career, is that regulators regulate for the “regulatory good.” They like to talk about the “public good,” and sometimes the public good and the regulatory good may align. But they don't manage for the public good; they consistently manage for the regulatory good.

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Managing for the Regulatory Good

In good times, regulators basically don't regulate banks for safety and soundness. If things are going smoothly in the economy, bank examiners might see something that bothers them in a bank. But if they start raising red flags, bankers have plenty of political contacts and the examiners are going to have a career advancement problem. They can't prove their point because they are guessing what's going to happen in more difficult times. Hence, regulators basically do not regulate from a safety and soundness perspective during good times.

For example, BB&T took over a failed \$25 billion bank (Colonial) with FDIC assistance. Earlier, we consciously decided not to acquire Colonial without FDIC assistance because *we knew it was going to fail*. How did we know? First, it was acquiring bad banks. If you make many acquisitions of bad banks, you end up with a bad bank. Second, in competing with Colonial, we observed they would take "hog shares of high-risk credits" that we wouldn't touch. Third, the CEO was a command-and-control type who could have run a \$2 billion bank but couldn't possibly develop the talent to run a large bank. So BB&T would not acquire Colonial without FDIC assistance. We knew the bank was insolvent. We saw that from the outside. But the regulators missed it, despite having much more inside information.

In addition, regulators are politically driven. Those at the top of the regulatory organizations are political appointees. You don't get to be head of the FDIC without having some political contacts. You don't get to be head of the Federal Reserve without having political contacts. Hence, you have people who come from a political perspective, and regulations change a lot depending on who is at the top. Regulators are driven by what's happening in the current political environment; there is no rule of law.

Regulations under Clinton, Bush, and Obama

President Bill Clinton's big issue was "fair lending." The regulators paid almost no attention to safety and soundness, which worked because the economy was doing well.

Under President George W. Bush, the focus was almost exclusively on the Patriot Act. One of the great myths is that banks were

deregulated under Bush. Yet, three major new laws were passed under his administration: the Privacy Act, Sarbanes-Oxley, and the Patriot Act. There was a massive increase in regulations in the Bush era—the most until the current administration. Banks were not deregulated as the myth goes, they were misregulated. In fact, one of the great myths is that the cause of the 2008–09 financial crisis was a combination of banking deregulation and greed on Wall Street.

There has always been plenty of greed on Wall Street. However, there is not one shred of evidence there was any more greed than usual leading up to the financial crisis. In fact, the financial crisis was caused by a combination of mistakes made by the Federal Reserve and government housing policy. In the early 2000s, we had a housing bubble that had started in 1993. Based on personal income, which determines the ability of a borrower to repay a loan, housing prices were 10 to 15 percent too high in the early 2000s. As the housing market was getting ready for a minor correction, Alan Greenspan engineered negative real interest rates, further inflating the housing bubble, and we ended up with a 30–35 percent correction in the housing market. Of course, the excesses were strongly aided by Freddie Mac and Fannie Mae. Plenty of banks made major mistakes and should have been allowed to fail. However, those mistakes were highly incentivized by government policy. So the recent financial crisis wasn't caused by deregulation or greed, it was caused by bad government policy.

Under President Obama, we have a truly unique phenomenon: an administration that likes *all* regulations. The problem is you can't comply with every regulation because there are just too many. Indeed, the Privacy Act and the Patriot Act are in conflict with each other, which gives regulators a lot of leverage.

The Curse of Overregulation

In addition to regulators being too good in the good times, they are too bad in the bad times. Regulators are blamed for the problems, and therefore grossly overreact. Often the regulatory agencies “retire” their senior people during the good times to cut costs and hire inexperienced young staffers as a crisis unfolds. These people have never made or collected a loan, and have never been in the banking business, but all at once they are experts on banking.

We saw this in spades during the Great Recession. In fact, the recession was much deeper because of the excessive, overregulatory reactions in the lending business. This was a really bizarre phenomenon.

The administration would not let banks foreclose on homeowners, even though they were two years past due on their home mortgage. Yet the administration viewed residential builders as bad people, because they are in business. So the banking regulators unnecessarily put about 90 percent of local residential builders in growth markets out of business. Many of these people had been in business for years. Some of them should have failed, but a lot of them did not need to fail. They were driven out of business by regulators who had no expertise in what they were doing and were just taking signals from the top. BB&T went through the economic corrections of the early 1980s and early 1990s when there was the same type of regulatory overreaction, but the recent overreaction was far more severe.

In the Great Recession, regulators experienced their biggest failure because they spurred an unnecessary panic. The United States needed an economic correction, but not a panic. Much of the damage to the economy came from the Panic of 2008, not from the economic correction. Regulators created a panic because they suspended the rule of law. There was no predictability, no policy, and no plan. During the corrections of the early 1980s and '90s, for all the foibles, at least banks knew what the rules of the game were. This time, there were no rules of the game. Regulators saved Bear Stearns, which everyone in the market knew could not possibly be a systemic risk. After regulators saved Bear Stearns, the market assumed they would save all large firms. But then they let Lehman fail. The regulators let Wachovia fail and tried to sell it to Citigroup, which everyone in the market knew was weaker than Wachovia. In late September 2008, regulators paid the uninsured depositors of Washington Mutual in full, which had not been done in the past. The Washington Mutual bondholders suffered far greater losses than anticipated due to this decision, which then caused the capital markets for banks to collapse.

When the rule of law fails, panic sets in, and that's exactly what happened. Unlike free markets, in which individuals are responsible and have an incentive to correct mistakes, panics almost

always involve some kind of government interference in the adjustment process.

The Failure of Mathematical Modeling

On a related point, there has been a massive failure of mathematical modeling (see Dowd et al. 2011, Dowd and Hutchinson 2013). The Fed's models failed, and all the large financial institutions that failed were experts at mathematical models. We were told by regulators multiple times that BB&T ought to have models like Wachovia, Citigroup, and Bank of America, all of which had major problems during the correction. Mathematical modeling was forced on the banks and then the banks lulled themselves to sleep believing their models were properly assessing risk, which justified taking excessive risk. What is really ironic is that the Federal Reserve is now forcing all large financial institutions to manage by mathematical models, which will ultimately create significant risk in the financial system. Modeling can be used as a background tool for managing risk, but overreliance on models leads to dangerous decisions.

One of the major problems is that mathematical risk models always assume normal distributions, which have small tails—because if they had “fat” tails no one would pay any attention to the models. Of course, what happens is the tails (the unexpected, extraordinary events) are always bigger than predicted by a normal distribution, and tails are the only events that matter. However, the biggest issue is that mathematical models delude managers into believing they are managing risk and they become overconfident. This overconfidence creates a massive incentive to take too much risk because your models indicate you can manage the risk. Of course, in the long term, if managers take on too much risk, they eventually will pay the price.

The Fed now is forcing all large financial institutions to use the same mathematical models, which means all banks are going to make the same mistakes. This same type of approach led to excessive risk taking in the subprime lending business. The concentration of risk created by regulatory mathematical modeling significantly increases the overall financial system’s risk.

Another example of the danger of regulation in modeling relates to use of mathematical modeling for small-business loan decisions. Small-business lending is part art and part science. The practical

effect of mathematical modeling in the case of small-business lending is that small-business creation is at an all-time low. It is not that existing small businesses can't get loans. Rather, it is that the entrepreneurs who come in with venture capital ideas—some of which may be very successful based on the judgment of the loan officer—may not meet the lending standards under mathematical modeling. In my banking career, I made a lot of loans to small businesses, some of which were extraordinarily successful and created thousands of jobs. Today, if I were a small-business lender, I couldn't make those loans because they would not meet the mathematical standards forced on bankers by regulators. These models cannot grasp the importance of an innovative idea or the commitment of an entrepreneur to get the job done. Practically speaking, small-business lending standards are the tightest in many years.

Unintended Consequences of Regulation

Under the new consumer compliance provision of Dodd-Frank, the so-called qualified lending standards are very loose. In fact, the standards are below subprime, which makes the progressives happy. However, the paperwork is extraordinarily complex. Indeed, if the banks make a mistake on the paperwork, the borrower does not have to pay the loan and the bank is fined. Consequently, banks are no longer going to make consumer real estate loans in their branches, which will make it more costly and more difficult for even qualified borrowers to get loans.

Another unintended consequence of overregulation is the negative impact of Dodd-Frank on economic growth. Regulators cannot know what risks banks ought to take. Regulators don't have special insights; only markets can discipline banks to make rational lending decisions. Banks need to experiment with different risk parameters and let markets guide them. Forcing everybody to take the same risks and adopt the same standards radically reduces economic growth. I would argue Dodd-Frank and its implementation by the Federal Reserve have had a bigger negative impact on economic growth than Obamacare.

It is ironic to have the Fed printing money willy-nilly and then have regulators making it hard for banks to make loans to small businesses, which are the engine of job creation in the United States.

The Free-Market Solution

What is the solution? My solution is pretty radical and is outlined in my recent book (Allison 2012). First, I would get rid of government deposit insurance. Bert Ely (1994) has developed a concept that would work for the privatization of deposit insurance for small depositors, which is the proper role for deposit insurance. Second, I would get rid of the Federal Reserve because the volatility in the economy is primarily caused by the Fed. Sound money matters. When the Fed is radically changing the money supply, distorting interest rates, and overregulating the financial sector, it makes rational economic calculation difficult. Markets do form bubbles, but the Fed makes them worse.

We need a private, free-banking system based on a market standard such as gold. If the United States had continued with the classical gold standard instead of having instituted a government money monopoly in 1913, we would have learned through experimentation, as all markets do, and would have a radically better financial system and higher economic growth today.

In the absence of ending the Fed, the United States should raise capital standards for banks to 15 to 20 percent of assets. Prior to the Fed, banks maintained a 20 percent capital ratio. In the recent crisis, banks with strong capital positions practically never failed. We should raise capital standards, but it is even more important to eliminate burdensome regulations—including Dodd-Frank, the Community Reinvestment Act, and Truth in Lending. About 25 percent of a bank's personnel cost relates to regulations. Banks cannot pay the regulatory costs and have high capital standards. That's why Dodd-Frank cannot work. Regulators want banks to raise their capital standards while simultaneously complying with a vast array of costly new regulations. Ironically, this is killing community banks. Bureaucrats are forcing consolidation in the banking industry—because even though in theory small banks are immune to many regulations, in practice regulators are not going to let a small bank do what big banks cannot do.

I would raise capital standards and let markets discipline banks. Those reforms—not more regulation—would reduce volatility, incentivize rational risk-taking, and thereby create better economic growth. Free markets work; why wouldn't they work in the banking business?

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HOW SHOULD FINANCIAL MARKETS BE REGULATED?

Kevin Dowd and Martin Hutchinson

It is hard to imagine a more stupid or dangerous way of making decisions than by putting those decisions in the hands of people who pay no price for being wrong.

—Thomas Sowell

Financial regulation is a recurring and central issue in contemporary policy discussions. Typically, leftists want more of it, while proponents of free markets want less, or preferably, none of it. We would suggest, however, that the central issue is not whether markets should be regulated, but by whom—by the market itself, which includes self-regulation by market practitioners, or by the state or one of its agencies. To put it in Coasean terms, what is the most appropriate institutional arrangement by which markets—including financial markets—*should* be regulated?

This question is of fundamental importance to a sound retrospective assessment of the Federal Reserve and is a prerequisite for sound analysis of contemporary reform issues.

To answer this question, we should first consider what the term “regulate” actually means. The primary and oldest meaning is “to

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govern or direct according to rules.”¹ However, the term is often used in modern discussions to mean “control by government agencies.” This is a very different meaning, not least because government bureaucrats often follow no rules themselves. Instead, they have a vast amount of discretion to do as they please, make up the rules as they go along, and issue lots of regulations in the process.

Thus, regulation pertains to rules, but the term “rule” is itself ambiguous. Sometimes the noun ‘rule’ means a bedrock principle, but in other cases it refers to a stipulation from a rulebook. In the former sense, a rule is long-lasting and there are not too many of them; an example might be “Thou shalt not kill.” In the latter sense, a rule is reminiscent of the growing micro-regulations that abound in modern life. In this sense, a rule might merely be bureaucratic discretion written down.

It is then clear that all conceivable systems have rules or regulation in one form or another and the question at issue is not *whether* to have rules or regulation but, rather, *what form* they should take.

In this article, we explore this issue in the context of financial regulation in the United States—and, more precisely, we compare the very different systems of financial regulation that existed before and since the founding of the Federal Reserve System a century ago. We examine these systems from the perspective of how well they managed to constrain (or alternatively, encourage) excessive risk taking on the part of financial and other institutions, and we are particularly interested in contemporary systems of government-sponsored financial regulation such as Basel, Dodd-Frank, and the financial regulation provided by the monetary policies of the Federal Reserve itself.

The storyline is one in which risk-taking discipline of the original system was eroded over time by a series of government interventions that not only kicked away the earlier constraints against excess risk taking but strongly encouraged such risk taking, and so

¹The etymology is also revealing. The English term “regulate” comes from the late Latin *regulat*, meaning “directed” or “controlled,” but originates from the Latin verb *regulare*, whose root is the noun *regula* or “rule.”

made the financial system increasingly unstable. In the process, the “tight” rules and self-managing character of the earlier system gave way to more active management (or rather, mismanagement) and growing discretionary (and largely unaccountable) power on the part of the bureaucrats who ran the system with their ever-longer rulebooks. In short, a basically good system became bad, and then worse.

We also emphasize the importance of the monetary backdrop. In the old system, the discipline of the gold standard served to provide a stable monetary environment that helped to rein in excessive risk taking. Once the Fed was established, however, it began to manage the system and first supersede and then replace the gold standard. It then pursued activist monetary policies that produced boom-bust cycles, with periods of low interest rates and loose credit feeding speculative bubbles and inflation, and leading to one crisis after another.

How could this happen? The answer is the usual suspects—the influence of bad ideas and interest groups subverting the coercive powers of the state for their own ends.

Before the Federal Reserve: Regulation by the Market

In the years before the Fed, regulation was provided by the market itself—that is, by the big players operating under competitive conditions. When crises occurred, they would be dealt with by industry leaders or by clearinghouse associations (see Timberlake 1984). These provided emergency loans and in some cases issued emergency currency. A distressed institution would seek assistance from the relevant club, and club leaders would consider the request and respond in their own interest. They would take account of the applicant’s financial health, its reputation, and the overall impact of their decision, including the impact of possible localized contagion if they allowed an institution to fail. An institution that was in otherwise good health, and had been well run and had a good reputation, would be likely to get a favorable response. A badly run and ill-regarded institution would not. The good were helped and the bad were thrown to the wolves. Crises were quickly resolved and any contagion, where it occurred at all, was limited. The most famous example was the resolution of the 1907 crisis, orchestrated by J. P. Morgan from

his personal library, while the government played no active role at all.²

There was little or no government involvement in resolving financial crises, although government intervention and legal restrictions were often important contributory causes of them. This said, by modern standards there was limited government involvement.³

It is worth pausing to consider the main features of this type of regulatory system, if we can even call it that:

- There was little formal regulation in modern sense.
- Such regulation as existed was created and operated by private bankers' clubs.
- Rules were usually informal and left considerable room for discretion on the part of decisionmakers. Indeed, their rulebooks are best understood as codes of good practice or guidelines that evolved in response to changing circumstances and lessons learned. Rules were highly functional.
- Rules were created by industry practitioners who understood their own business, operated under unlimited or extended personal liability, and placed great emphasis on reputation, both personal and institutional.
- The rule-making process was self-interested and constrained both by the profit motive and by market forces. Those involved understood that bad regulations were costly and that they themselves would bear the cost: this was why rules were few

²The role of the government in this crisis is highlighted by a nice anecdote. Once the terms of the deal that was to end the crisis had been agreed to by the bankers meeting in Morgan's library on November 3, one of the participants advised him to consult President Theodore Roosevelt about it. "But what has the president got to do with it?" asked Morgan indignantly. He was then warned that the centerpiece of the deal—the acquisition of Tennessee Coal & Iron by U.S. Steel—was in violation of the Sherman Act and the deal would be undermined unless the president agreed to waive any prospect of federal prosecution, which Roosevelt then did. (See Bruner and Carr 2007: 131–33.) In other words, the government involvement in ending the crisis of 1907 boiled down to it agreeing *not* to attack the deal by which the crisis was resolved.

³This is not to suggest that U.S. bankers operated under laissez-faire. They operated under severe amalgamation restrictions that prevented interstate and even some intrastate banking. These rules prevented banks from reaping the full benefits of economies of scale and increased their vulnerability. They also operated under the legislative restrictions of the National Banking System, which also created considerable instability. By contrast, the contemporaneous Canadian banking system was free of these restrictions and both much stronger and more stable.

and the regulatory burden light. There was also a process by which bad rules would be identified and weeded out. One could say that the rule-generation process was modest and subject to a robust error-correction mechanism—namely, the market itself.

- The competitive process also applied to the regulatory systems themselves: competition encouraged good innovations, which would be widely copied. Individual member institutions also had the option of opting out or joining other regulatory clubs; they could also set up new clubs of their own.
- Participants operated against the backdrop of the monetary discipline provided by the gold standard. By limiting money and credit, the gold standard helped to counter speculative excess, allowing overextended banks to fail and encouraging the survivors to conduct their business in a more responsible and less system-threatening way. The discipline of the gold standard also meant that interest rates and the cost of credit were largely beyond the control of individual institutions and more in line with market fundamentals than was later the case.

Each of these features is very different from what we see in the modern system. Underlying this system—indeed, making it possible—was a conventional wisdom that was much more pro laissez-faire than that prevailing today. Associated with this ideology were high levels of personal liability and personal responsibility that created strong incentives to keep costs down and rein in excess risk taking. These incentives created a system that had strong governance features and was highly effective—though by no means perfect—in controlling risk taking and handling financial crises when they occurred.

We now discuss how these key features were each overturned.

The Establishment of the Federal Reserve System and an Expansionary Fiat Monetary System

As a preliminary, we should emphasize that the period before the Fed was not some monetary idyll; far from it. There were repeated experiments with central banking in the earlier years and a considerable amount of monetary instability throughout much of the 19th century. Among the most notable examples were the crash of 1819, caused by the monetary excesses of the Fed's predecessor, the

Second Bank of the United States; the disruption caused by the suspension of specie payments and the move to a wartime economy with the onset of the Civil War in 1861; and the crisis of 1873, which was due in no small part to the U.S. Treasury's greenback scheme and by government promotion of the Northern Pacific Railroad.

The United States formally adopted the gold standard only in 1879—a move intended essentially to revert to the status quo ante bellum, but with the important difference that the new system was a *de jure* gold standard and not a bimetallism that functioned *de facto* as a gold standard. However, the gold standard was still highly controversial and bitterly opposed by the silver movement in the last decades of the 19th century—and became firmly established only with the victory of William McKinley over William Jennings Bryan in the presidential election of 1896 and the subsequent passage of the Gold Standard Act of 1900.

By then Britain had been on the gold standard continually and successfully for almost 80 years with only one major crisis—that of 1825—compared to the succession of major crises that had plagued the United States over the same period.

The Panic of 1907 led a few years later to the creation of the Federal Reserve System by an act of Congress in December 1913. The Fed opened its doors in 1914. Its principal purpose was to provide emergency currency and a lender of last resort (LOLR) function, which conventional wisdom wrongly presumed had been handled badly by the private sector. The Fed was intended to operate subject to the discipline of the gold standard. However, the Fed had barely begun its operations when the First World War broke out. Belligerent countries suspended the gold standard and the United States soon found itself the only major country still operating on it.

Inevitably, the Fed had too much discretion and was too big a player to be passively disciplined by the gold standard—and was soon engaging in active monetary policy. This was very apparent in the later 1920s, when Benjamin Strong's policy of low interest rates helped fuel the contemporary boom and subsequent bust. There followed the catastrophe of the 1930s, to which the Federal Reserve's failure to provide emergency liquidity to the banking system—remember this was what the Fed had been set up to do—was a major contributing factor. The response to this failure was to increase the Fed's power, centralize the Fed's administration, and greatly expand financial regulation. The most notable examples were the passage of the

Glass-Steagall Act, separating commercial and investment banking (and decapitalizing the latter, which seriously hampered recovery), and the establishment of federal deposit insurance. The Fed then blundered again when it doubled reserve requirements in 1936–37, which helped kill the nascent economic recovery and push the economy into renewed recession.

In the meantime, the feeble international gold standard of the interwar years—a much watered-down version of the classical gold standard of pre-1914—had come and gone. Only the United States had remained on gold, but in 1933, President Franklin D. Roosevelt issued an executive order effectively prohibiting private holdings of gold, and the next year he revalued the official price of gold from \$20.67 to \$35 dollars an ounce—that is, he devalued the dollar against gold.

The new Bretton Woods system set up after the Second World War was a gold standard only in the weakest possible sense. It was merely a dollar standard with a commitment by the Fed to maintain the price of gold, in a gold market from which private individuals and institutions were almost entirely excluded. There followed the loose monetary policies of the 1950s, and it was soon obvious that the United States had a mounting inflation problem.

In *A Program for Monetary Stability*, published in 1960, Milton Friedman provided a memorable assessment of the government's record to date in stabilizing the U.S. economy:

The Great Depression did much to . . . reinforce the now widely held view that inherent instability of a private market economy has been responsible for the major periods of economic distress experienced by the United States. On this view, only a vigilant government, offsetting continuously the vagaries of the private economy, has prevented or can prevent such periods of instability. As I read the historical record, I draw almost the opposite conclusion. In almost every instance, major instability in the United States has been produced or, at the very least, greatly intensified by monetary instability. Monetary instability in its turn has generally arisen either from governmental intervention or from controversy about what governmental monetary policy should be. The failure of government to provide a stable monetary framework has thus been a major if not the major factor accounting for our really severe inflations and depressions [Friedman 1960: 9].

Post-1913, much of this instability was created by the Fed, and it is fair to say that the Fed's record has not improved in the half-century or so since Friedman wrote those words.

The monetary acceleration continued in the 1960s. This led to rising inflation and the stock market surge of the late 1960s, which was in many ways a repeat of the late 1920s. This bubble burst with the Penn Central failure in 1970 and its attendant wave of brokerage bankruptcies. By this point, the Federal Reserve was having great difficulty maintaining its Bretton Woods gold peg, and in August 1971 President Nixon abandoned the peg and let the price of gold float. The United States was now on a fiat currency without even the pretence of any link to gold.

The way was now open for the highly inflationary policies of the 1970s and the necessary but painful monetary correction by Paul Volcker from 1979 onward. Fast forward now to the late 1980s: inflation has been brought down and Volcker has been replaced by Alan Greenspan as Fed chairman.

Greenspan then introduced the "Greenspan put"—the policy of propping up the stock market if it should plummet—in the aftermath of the stock market crash of October 1987. This was followed by further monetary easing in 1991. By the mid-1990s, however, Greenspan was complaining of "irrational exuberance" in the stock market. He responded by *reducing* interest rates, thus stimulating the boom of the late 1990s; the centerpiece (U.S.) of which was the tech boom that burst in 2001. He then responded by a *more* aggressive monetary policy that produced an even bigger boom culminating in the crisis of 2008–09. His successor, Ben Bernanke, then responded to that crisis with an *even more* aggressive monetary policy—in the process stimulating the biggest bubbles of all time and leaving policymakers with a huge headache.

Such policies led to an ever more damaging boom-bust cycle and to the state of affairs described by Andy Haldane, the Bank's of England's executive director for financial stability. Speaking to the UK Parliament's Treasury Select Committee in June 2013, he said that the "biggest risk to global financial stability right now" is that posed by inflated government bond markets across the world. He then told astonished British MPs: "Let's be clear

We have intentionally blown the biggest government bond bubble in history.”⁴

The same could be said for the policies pursued by the Federal Reserve: the financial system wouldn’t be so unstable if the Fed hadn’t tried so hard to stabilize it. The Fed’s response to the bubbles it has created is to blow even harder and hope for the best. The Fed has got itself into a corner and has no credible strategy to get itself out. We know that the latest bubbles must burst at some point and when they do interest rates are likely to rise sharply as bond market investors attempt to dump their holdings. When that happens the financial system will collapse, again. The temptation will then be to prop up bond prices by monetizing what could well be the entire government debt, at which point the Federal Reserve’s balance sheet would explode from \$4 trillion to \$16 trillion or more almost overnight and inflation will be off to the races.

Monetary policy has thus become progressively more destabilizing and now poses an unprecedented threat to the U.S. economy. Federal Reserve officials have no credible solutions to the problems they have created. Instead, they merely offer lame excuses and ask us to trust them one more time as they seek to gamble their way out and nothing is done to hold them to account. Fed chairmen have appropriated enormous power to themselves, and it could reasonably be said that the Fed chairman now has more power over the U.S. economy than the president. In these circumstances, it is hardly surprising that policy discussions are increasingly dominated by “cult of personality” nonsense. No matter how smart Alan Greenspan, Ben Bernanke, and Janet Yellen are, none of them predicted the 2008–09 financial crisis.

The Federal Reserve as Lender of Last Resort

As we have seen, before the Fed, last-resort lending was managed by the big players. If an institution sought assistance, the big players would decide whether and on what terms to provide it. However, once a central bank is established with its monopoly privileges, then

⁴We do not wish to single out Haldane for criticism. On the contrary, he is almost alone among central bankers in having both the intelligence and the courage to address the real problems that others deny.

the last-resort function inevitably passes to it—in part because other banks are restricted in their freedom to issue liquidity, but also because this is now the explicit responsibility of the central bank. But once the LOLR becomes a matter of central bank policy, what should that policy be?

The classic answer was suggested by Walter Bagehot in *Lombard Street* (1873). He suggested that the central bank should provide last-resort support to solvent but illiquid institutions at a penalty rate against prime collateral. The penalty rate would discourage such requests (and make them genuinely last-resort), and the requirements that the bank be solvent and offer first-class collateral should protect the central bank against possible losses.

The existence of a central bank LOLR function gives rise to two related problems, however. One problem is that of moral hazard: banks might count on that support and behave less responsibly. The other problem is that of how to credibly limit central bank support *ex ante* to discourage such irresponsibility. These two problems are intimately related. While a central bank might talk tough before the event about how it would not bail out badly run banks, how it responds in the heat of a crisis is another matter, where the pressure is on to arrange a hurried rescue and never mind any threats it previously made to let badly run banks fail. *Ex ante*, bankers know this, and might reasonably dismiss such threats as lacking credibility and then do whatever they want. This leads to a game of chicken that is almost impossible for the central bank to win, and also to a big-risk moral hazard problem.

There is an interesting analogy here. Back in the 18th century, the British navy had a problem with weak commanders. A case in point was Admiral John Byng. An inexperienced desk officer appointed commander of the Royal Navy's Mediterranean fleet when the Seven Years' War broke out in 1756, he failed to fully engage a slightly superior French fleet at the Battle of Minorca. Instead, he retreated to Gibraltar after an inconclusive battle, as a result of which Minorca fell to a French invasion three weeks later. Public opinion in Britain was outraged and Byng was court-martialed, found guilty of “failing to do his utmost” to avert the loss of Minorca, and shot. It was this episode to which Voltaire referred in a famous passage in *Candide* two years later: “In this country [Britain] it is good, from time to time, to kill an admiral *pour encourager les autres*.” Byng’s punishment may have been a trifle harsh,

but it worked—and no British fleet ever again shied away from engaging a superior enemy force.

Reverting back to modern bankers, the Byng example suggests that incompetent bankers should be shot. We would not quite go that far, although another 18th century punishment, the stocks, is tempting. However, our point is simply that they should be punished, not rewarded, for their incompetence. The obvious way to do this is to impose some personal penalty, such as the loss of a personal bond.⁵ Incentives matter.

There is no credible solution to this problem short of abolishing the central bank. Indeed, it is interesting to note that Bagehot himself acknowledged this point. As he wrote toward the end of *Lombard Street*:

I know it will be said that in this work I have pointed out a deep malady, and only suggested a superficial remedy. I have tediously insisted that the natural system of banking is that of many banks keeping their own cash reserve, with the penalty of failure before them if they neglect it. I have shown that our system is that of a single bank keeping the whole reserve under no effectual penalty of failure. And yet I propose to retain that system, and only attempt to mend and palliate it.

I can only reply that I propose to retain this system because I am quite sure that it is of no manner of use proposing to alter it. A system of credit which has slowly grown up as years went on, which has suited itself to the course of business, which has forced itself on the habits of men, will not be altered because theorists disapprove of it You might as well, or better, try to alter the English monarchy and substitute a republic, as to alter the present constitution of the English money market, founded on the Bank of England [Bagehot 1873: 331–32].

In short, Bagehot himself offered his rule as a second-best solution to a problem that shouldn't have existed in the first place,

⁵There are various ways in which this could be done. Ideally, one could roll back unlimited liability, at least for banks. Another possibility, put forward by UK MP Steve Baker (Con, Wycombe) in 2012, is to impose a regime of extended personal liability on bank directors, with safeguards attached such as the requirement to post personal bonds that would be forfeit if the bank got into difficulties. Critics might argue that measures such as these would mean that banks would never apply for assistance, but that is exactly the point: we don't want them to.

and could easily be remedied by abolishing the privileges of the central bank.

The LOLR remit then expanded over time. The highlights of this process include the bailouts of Continental Illinois in 1984, LTCM in 1998, and then those of much of the banking system in 2008–09, by which point “too big to fail” (TBTF) was now firmly established as a cornerstone of policy toward the banking system.

The history of the central bank LOLR thus embodies an interesting policy logic. We wish to discourage banks getting themselves into difficulties, so we rule out the first-best solution, free banking. This is mistake number one. We then offer them help instead of punishment when they get into difficulties: mistake number two. When they do get into difficulties, we rarely apply the Bagehot Rule itself, but bail them out instead: mistake number three.⁶ Never mind all those earlier promises that next time we *really are* going to let badly run banks fail. Instead, the banks see those promises as exactly what they are—hot air—and we duly find ourselves with the albatross of TBTF stuck around our necks and a huge incentive for banks to take irresponsible risks.⁷

Federal Deposit Insurance

Federal deposit insurance was established in 1934 under the provisions of the Banking Act of 1933. Its proponents offered an apparently self-evident justification that it would help the banking system by removing any incentive on the part of depositors to run. Yet, federal deposit insurance was bitterly *opposed* by the bankers themselves. It was, said the president of the American Bankers Association, “unsound, unscientific and dangerous” (*New York Times* 1933: 14). Opponents argued that deposit insurance was bad because it creates major moral hazard problems. In particular, it incentivizes bankers to take more lending risks and to run down their banks’ capital, both of which would weaken their banks and make the banking

⁶So the net effect of the Bagehot Rule was to provide a thin end of the wedge by which the LOLR function had become its opposite, the Bailout of First Resort. Old Bagehot must be turning in his grave.

⁷Note here the underlying “bad idea”—namely, that there has to be a central bank LOLR function because the market on its own can’t provide emergency liquidity or its own LOLR. Yet this idea flies in the face of the evidence that the market *did* provide its own LOLR in the absence of a central bank—and this assistance was more successful precisely because it was limited.

system less rather than more stable. They also pointed out that past experience with compulsory deposit insurance systems at the state level showed that it didn't work for exactly these reasons.⁸

A good example was Texas in the 1920s. To quote one contemporaneous assessment of this experience:

The plan made too many banks and too few bankers. All kinds of incapable people tried to start a bank under the protection of the fund. The system gave a false sense of security—people looked to the fund for protection and paid no attention to the soundness of the banks themselves, nor to the ability of the managers. Prosecution of bank wreckers and crooks was made impossible. The depositors got their money from the fund, so they were not particularly interested in prosecuting the unscrupulous or incompetent men who caused the banks to fail. Such an unsound system of banking weakened the financial structure of the entire state [quoted in Salsman 1990: 54].

As Salsman (1990: 54) aptly put it, “Federal deposit insurance was instituted in 1934 under political pressure and expediency, despite . . . prescient warnings and frequent references to the most basic rudiments of economics.”

It turned out that the critics were right. Banks’ capital ratios fell by more than half in just over a decade, and regulators were never able to reverse the trend to capital deterioration created by deposit insurance (Salsman 1990: 56–57). The adoption of deposit insurance also led over time to major changes in the banking industry itself, which became less conservative and more prone to risk taking. The eventual outcome was the great deposit insurance crisis of 1980s and early 1990s and the destruction of much of the American thrift industry.⁹

⁸For more on U.S. experiences with state deposit insurance, see Calomiris (1989, 1990).

⁹Space precludes us from discussing some of the other ways in which ill-judged policies contributed to this crisis. These include the impact of Regulation Q combined with the highly inflationary Federal Reserve policies of the late 1970s, which pushed many banks and thrifts into insolvency. There was the impact of the increased deposit insurance ceiling—raised from \$40,000 to \$100,000 in 1980—not to mention the fact that the deposit insurance premium was at a flat rate rather than risk-adjusted, which exacerbated the moral hazard associated with deposit insurance. There was also the impact of regulatory forbearance, in which regulators let insolvent institutions continue in operation in order to avoid short-term strain on the deposit insurance fund, only to result in larger losses later on.

The “bad ideas” here are that banking is inherently unstable and, relatedly, that that instability manifests itself in the vulnerability of the banking system to runs—a vulnerability that can remedied by deposit insurance removing the incentive of depositors to run.

Ironically, just as the problems of deposit insurance were becoming evident in the early 1980s, mainstream economists were persuading themselves that we really *did* need deposit insurance after all—and never mind the basic rudiments of moral hazard economics or even its track record.

The seminal event was the publication in 1983 in the *Journal of Political Economy* of the Diamond-Dybvig (DD) model, which offered a justification for deposit insurance based on the fallacious premise that the banking system was inherently unstable. This model rapidly gained mainstream acceptance and is still accepted by the bulk of the economics profession as providing the standard justification for it.

Their reasoning goes as follows. Imagine that we live in a neoclassical economics world where we make up simplified models to capture the essence of an economic problem. The model is our analytical framework and is intended to guarantee rigor. In this model, individuals live for two periods and are given endowments at the start of period 1. They have access to a technology that will yield a return in period 2, but don’t know in which of the two periods they will want to consume: these consumption preferences are only revealed after they have invested. At that point, an investor is revealed as either type 1, who wants to consume in period 1, or type 2, who wants to consume in period 2. Individuals can always invest in their own back yard and consume whenever they want, but in that case, a type 1 investor would never earn any return, because he would have to dig up his investment and consume it before it had had time to produce any yield.

DD now suggest that everyone could be better off ex ante coming to a mutual insurance arrangement in which they insure each other against the risk of turning out to be a type I investor. DD call this arrangement a “bank.” The arrangement works if the proportion of type 1 investors is known, but the DD bank is then exposed to a run problem if the proportion of type I investors is not known. Everyone knows that the bank does not have the resources to redeem all its deposits at the promised rate if everyone decides to withdraw in period 1, because the underlying investment has not yet yielded a

return but the bank has committed itself to pay some return to depositors who withdraw in the first period. This leads to the possibility that individuals might get spooked and decide to redeem their deposits. To prevent a system-wide bank run, the government would intervene and offer a deposit guarantee. Everyone could then breathes a sigh of relief, and the fear of a run goes away. Those who wish to consume early can do so and, thanks to the guarantee, the others can be confident that their deposits will be safe at the end of period 2.

Unfortunately, there are not one but three serpents lurking in this Garden of Eden. The first is that the model involves a *deus ex machina*—a methodological “no no” because it means that the model is logically inconsistent. The problem here is that the deposit insurance mechanism has to be feasible in the context of the assumed model. So how would this mechanism work? Presumably, once the last type 2 depositor had withdrawn and the proportion of type 1 vs. type 2 depositors is revealed, then the government would be able to track everyone down and arrange for the transfer payments between them to honor the deposit guarantee. However, the model itself presupposes that individuals *cannot* be traced once they leave the bank—it was exactly the absence of any mechanism to track them down afterward that was used to justify the existence of the bank in the first place. In short, DD assume that such a mechanism does not exist when they motivate the existence of their bank, but assume that such a mechanism *does* exist when they propose their solution to the inherent instability to which their bank is prone.

Well, either the mechanism exists in the model or it does not. If it does, then the model’s private sector can also use it and create a run-proof and certainly different institutional structure to the one postulated by DD. In this case, there is no need for deposit insurance. If the mechanism does not exist, then neither the government nor anyone else can make use of it either. In this case, deposit insurance would not be implementable however much it was “needed”—it would just not be possible. In a nutshell, in this model, properly considered, deposit insurance is either not needed or impossible to implement. Take your pick. Either way, the model can’t be used to justify it.¹⁰

¹⁰For a more extended treatment of these issues, see Dowd (1992).

Even if we ignore the point that the model is inconsistent, there is a second problem. Let's suppose for the sake of argument that DD are correct that what is needed is a collective guarantee along the lines of their deposit insurance scheme. Since this supposedly gives a welfare-superior outcome, then everyone in their society will agree to it voluntarily and there is no need for any compulsion by the government. In other words, the market left alone would deliver their preferred outcome—that is, we would have private rather than government deposit insurance. So their model, taken at face value, gives no justification for any compulsory system of deposit insurance.

The third problem is obvious to any banking professional though apparently not to many academic financial economists: the bank in their model has no capital. Such an institution is not a bank in any true sense of the term, even within the rarified confines of a neoclassical economic model. It is a mutual fund that tries to ape a bank by fixing the values of its liabilities despite having uncertain asset returns and no capital. Although DD call this institution a “bank,” just calling it a bank does not make it one. A true bank is a financial institution that issues both debt (deposits) and equity. If DD had called their financial institution a mutual fund instead of a bank, and had then assumed that their mutual fund was going to issue fixed-value liabilities, the problem with their financial intermediary would have jumped out: you cannot have a financial intermediary with fixed liabilities, assets that vary in value, and no capital and not expect it to be prone to runs.

With this point in mind, consider an extension to the DD environment. Suppose we have a type 3 agent who also has an endowment but who differs from the other agents in knowing that she will not wish to consume in period 1. This agent can then use her endowment to create a financial institution that has the capital to offer credible guarantees to the type 1 and type 2 agents. The institution can now be described as a bank in a recognizable sense, and the type 3 agent can be described as the banker. We then have an institutional structure that resembles the banking systems we observe in the real world—in particular, we have deposits, equity capital, depositors, and bankers. And guess what? Assuming the banker has enough equity capital, then the promised returns on early-withdrawal deposits can be credibly met even if everyone runs on the bank. There is then no reason for any of the type 2 agents to panic. In plain English, extend the DD model to allow for bank capital and the DD problem of a run-prone financial intermediary disappears.

Again, there is no justification for deposit insurance. Instead, depositors are reassured by bank capital—provided that the banker has enough of it, but this is just a modelling assumption.¹¹

In short, there are only five things wrong with the Diamond-Dybvig justification for bank deposit insurance:

- It is logically inconsistent.
- Even taken at face value, it provides no justification for a compulsory scheme, since everyone would agree to it.
- It has nothing at all to say about banks—except those with zero capital, and these should not be in business anyway.
- It ignores moral hazard issues.
- It is at odds with the historical evidence that deposit insurance does not work.

Any one of these problems ought to preclude the model from serious consideration, and yet this model is *still* the standard justification for deposit insurance—another bad idea that has captivated the somnolent economics profession.

Modern Financial Regulatory Systems (I): Features

Modern financial regulatory systems have quite different features from the club-based systems of over a century ago: excessively long rulebooks, high and growing costs, poorly designed rules, gameable rules, and bad thinking.

Excessively Long Rulebooks

Perhaps their most striking features are their size and their astonishing rate of rule production. In an article on Dodd-Frank mischievously subtitled “Too Big Not to Fail,” in early 2012, *The Economist* noted:

The law that set up America’s banking system in 1864 ran to 29 pages; the Federal Reserve Act of 1913 went to 32 pages; the Banking Act that transformed American finance after the Wall Street Crash, commonly known as the Glass-Steagall act, spread out to 37 pages. Dodd-Frank is 848 pages long. Voracious Chinese officials, who pay close attention to regulatory developments elsewhere, have remarked that this

¹¹An example is provided by Dowd (2000).

mammoth law, let alone its appended rules, seems to have been fully read by no one outside Beijing (your correspondent is a tired-eyed exception to this rule).

As if this wasn't bad enough, the article goes on to observe that

size is only the beginning. The scope and structure of Dodd-Frank are fundamentally different to those of its precursor laws, notes Jonathan Macey of Yale Law School: "Laws classically provide people with rules. Dodd-Frank is not directed at people. It is an outline directed at bureaucrats and it instructs them to make still more regulations and to create more bureaucracies." Like the Hydra of Greek myth, Dodd-Frank can grow new heads as needed [Economist 2012].

Industry experts have suggested that the eventual Dodd-Frank rulebook might run to some 30,000 pages, although we are tempted to suggest that when it hits that target it will just continue to grow. As Gordon Kerr (2013), notes: "The size of this mountain task is not simply immense, it is unscalable."

Another example is Basel. This originated in the aftermath of the serious disturbances to banking and currency markets that followed the Herstatt bank failure in 1974. The resulting Basel Committee on Banking Supervision was to provide a cooperative forum for the central banks of member countries to discuss banking supervisory matters, and its initial focus was merely to establish rules for bank closures. In the early 1980s, however, the committee became increasingly anxious about the capital ratios of the major international banks deteriorating at the same time as the international environment was becoming more risky. The committee sought to reverse this deterioration and strengthen the banking system—never mind the awkward fact that this deterioration was in large part due to the incentives created by government deposit insurance and the expanding LOLR function—while working toward greater convergence across different countries' national capital requirements. Thereafter, the committee experienced one of the most remarkable cases of mission creep in history. Over time, the Basel system transformed into a transnational regulatory empire that spawned a vast cottage industry of parasitic "Basel specialists" whose sole purposes were to interpret and implement the ever-expanding Basel rulebooks. This Basel empire is growing at a phenomenal rate post the utter disaster of

Basel II—and, thanks to its own repeated failures, is likely to expand much further yet.

High and Growing Costs

There has also been a remarkable growth in the budgets, not to mention the number, of regulatory agencies. Consider:

- The Securities and Exchange Commission budget request for financial year 2014 is \$1.67 billion, up 42 percent from 2012, and up 91 percent since 2007, versus 13 percent cumulative inflation according to official CPI statistics.
- The Commodity Futures Trading Commission budget request for financial year 2014 is \$315 million, up 58 percent from 2012, and up 407 percent since 2007.
- The Office of the Controller of the Currency budget request for financial year 2014 is \$1,043 million, up 69 percent since 2007.
- The new Consumer Financial Protection Bureau budget request for 2014 is \$497 million—and this agency didn't even exist in 2011.

There are also the costs of the Federal Reserve (with system expenses up 31 percent since calendar 2007) and of Basel—and goodness knows what they might be, although we can be confident that they will be very high.¹²

We should keep in mind that these are only some of the direct costs of regulations. We also need to consider the costs of compliance on the part of regulated firms, who must employ their own armies of compliance officers and establish cumbersome compliance procedures. Moreover, there are the *indirect* costs of these regulations—namely, the costs of the damage they do, including the costs of badly designed rules and the costs of crises created or bungled by incompetent regulators.

Poorly Designed Rules

Modern systems are littered with poorly designed rules. Some of our favorites are zero-risk weighting of sovereign bonds, pressuring

¹²We are not aware of estimates for the United States, but a credible estimate for Europe puts the cost of Basel III at more than 70,000 full-time private sector jobs (Härle et al. 2010).

soundly run banks to take greater risks, regulatory endorsement of the Gaussian (normal) distribution, and regulatory endorsement of the Value-at-Risk (VaR) measure of risk and the mathematical modelling behind it.

Zero-Risk Weighting of Sovereign Bonds. In the original Basel Accord, or Basel I, the debt of OECD governments was assigned a zero risk weight. This implies that all such debt, including Greek government debt, was assumed to be riskless. Its effect was to artificially encourage banks to hold higher levels of government debt than they otherwise would, and was a major contributor to recent EU banking problems. When the Eurozone sovereign debt crisis escalated a couple of years ago, many banks then suffered major and otherwise avoidable losses on their holdings of government debt. This rule has been repeatedly criticized, but is *still* on the books.

Pressuring Soundly Run Banks to Take Greater Risks. In private correspondence, John Allison gives an entertaining story of how regulations impacted his bank, BB&T (see also Allison 2013). This is a conservatively run institution that did not suffer a single quarterly loss since the onset of the crisis. The bank did not have highly sophisticated risk management systems. It did not need them because it did not take excessive risks. The risk models it then submitted to the Fed under the risk supervisory process used its own loss experience, which was much lower than the industry average. However, supervisors rejected their models and demanded that the bank use more sophisticated models and industry loan-loss experience instead of its own. This requirement saddled the bank with an unnecessary model development cost of over \$250 million and a higher regulatory capital charge—and will force the bank to take more risk to pay for the extra costs involved. In short, in the interests of promoting good risk management and discouraging excessive risk taking, the Federal Reserve forced a well-run bank to adopt highly expensive risk management technology that it neither wanted nor needed, imposed higher regulatory capital requirements that were not justified by the risks the bank wanted to take, and will then force the bank to take extra risks that it *didn't* want to take in order to recoup its higher costs.

Regulatory Endorsement of the Gaussian Distribution. The most widely used statistical distribution is the Gaussian, or normal, and this is the standard distribution used in risk management too. However, the Gaussian is suitable only for statistical problems relating to the central tendency of the distribution, such as problems

involving means. It works in such situations by virtue of the Central Limit Theorem. However, in risk management we are interested in the tails of the distribution and this theorem does *not* apply to the tails, which are governed by the very different Extreme Value Theorem. In fact, the Gaussian assumption gives *extremely* poor estimates of tail probabilities.

To give an example, in August 2007 there was talk of hedge funds getting hit by “25 sigma” events—losses that were 25 standard deviations away from expected losses. It was repeatedly said in the media that these were so extreme that one might have to wait 10,000 or 100,000 years to expect to see such losses on a single day. However, such claims were manifestly wrong because the losses suffered by the hedge funds were not in fact that rare.

But now ask the following question: How long would we have to wait to see one such daily loss if the world *were* Gaussian? The answer is $1.309e+135$ years—that is, 1,309 years, but with the decimal point moved 135 places to the right (see Dowd et al. 2008: 3). This number is about equal to the number of particles in the universe multiplied by the number of nanoseconds since Big Bang multiplied by all the atoms in all the bodies of everyone who has ever lived times multiplied by a few trillion, give or take a few zeros. The probability of observing such losses is about on a par with seeing Hell freeze over. The take-home message is that since such losses are not that uncommon, the Gaussian is totally unsuitable for estimating tail risks.

Regulatory Endorsement of the VaR Risk Measure and the Mathematical Modelling behind It. The VaR (Value-at-Risk) measure of risk is a percentile on a probability density function that gives the cutoff to the relevant tail, and is used to determine banks’ regulatory capital requirements. Unfortunately, it is of very limited use for banks’ financial risk management because it does not tell us anything meaningful about the tail itself—that is, the VaR is blind to tail risks. The VaR is rather like a chocolate tea pot: it looks good with all that fancy math until it is actually stressed with a little hot water. There is also evidence that the bigger, more complex and more expensive, VaR models perform worse than much simpler ones (Berkowitz and O’Brien 2002). Any benefits from all that extra complexity appear to be more than outweighed by the many implementation compromises that “sophisticated” models inevitably entail.

It is important to stress that most of these problems have been known for a long time, and yet these rules remain on the books.

Gameable Rules

Even worse than poorly designed rules are poorly designed rules that are *gameable*. These are highly destructive because they encourage the looting of bank capital and the furtive offloading of risks onto other parties, often with serious systemic implications. The following are several examples, all of which have regulatory approval.

Capital Plundering or How to Destroy Securitizations. A major feature of Basel is the way in which positions hedged with credit derivatives get a risk-weighted capital charge of 0.5 percent, whereas the standard default charge for most positions is 8 percent. This opens up opportunities for clever financial engineers to come up with scams in which portfolios that would otherwise attract healthy capital charges can be reclassified as hedged for Basel purposes and the capital released for “better” uses—such as paying bonuses to the clever financial engineers who designed them and their managers (see Kerr 2010; also Kerr 2011, 2013). The banks that employ them are then left seriously capital-depleted even though their risk-adjusted capital numbers are, if anything, improved.

Hidden Hypothecations. This is another set of scams—examples include “failed sale” and some covered bond securitizations—in which banks furtively pledge assets to counterparties while the assets ostensibly remain on their balance sheets. The banks then enter into arrangements with other counterparties who do not realize that those assets are not recoverable in subsequent bankruptcy proceedings. Such hypothecations deceive the later counterparties, who don’t realize how weak their counterparties really are, and are in essence fraudulent (see Dowd, Hutchinson, and Kerr 2012 for more details).

Hidden Re-Hypothecations. Many transactions involve the posting of collateral by investors who assume that their collateral is safely tucked away in a vault with the institutions they entrusted it to. The reality is that collateral is often secretly re-hypothecated—quietly posted elsewhere—and it is not uncommon for the same collateral to be re-hypothecated a dozen times or so.

This problem became apparent with the MF Global meltdown in late 2011. To quote one informed commentator:

MF Global’s bankruptcy revelations concerning missing client money suggest that funds . . . were instead appropriated as part of a mass Wall Street manipulation of brokerage rules that allowed for the wholesale acquisition and sale of

client funds through re-hypothecation. A loophole appears to have allowed MF Global, and many others, to use its own clients' funds to finance an enormous \$6.2 billion Eurozone repo bet. If anyone thought that you couldn't have your cake and eat it too in the world of finance, MF Global shows how you can have your cake, eat it, eat someone else's cake and then let your clients pick up the bill [Elias 2011].

The magnitude of this problem is enormous:

Engaging in hyper-hypothecation have been Goldman Sachs (\$28.17 billion re-hypothecated in 2011), Canadian Imperial Bank of Commerce (re-pledged \$72 billion in client assets), . . . Oppenheimer Holdings (\$15.3 million), Credit Suisse (CHF 332 billion), Knight Capital Group (\$1.17 billion), Interactive Brokers (\$14.5 billion), Wells Fargo (\$19.6 billion), JP Morgan (\$546.2 billion) and Morgan Stanley (\$410 billion) [Elias 2011].

In other words, re-hypothecation is yet another disaster waiting to happen.

SPV Financial Alchemy. There is, finally, the old classic of SPV financial alchemy.¹³ You start with a portfolio of credit-risky bonds. In fact, even better if it is a portfolio of very credit-risky bonds: in this game, the junkier the bonds, the better the alchemy works. Let's say that this portfolio would attract a particular credit rating, C, say, which is the lowest S&P rating north of default. You now set up a special purpose vehicle (SPV), which buys the portfolio and issues tranches claims against it. The trick is in the tranching: the junior tranche protects the senior tranche by absorbing the first losses, and only after the junior tranche is wiped out do claimants to the senior tranche lose anything. A not atypical arrangement is a 20/80 split between junior and senior tranches, after which the senior tranche attracts an A, even AAA, rating, and can be flogged off to investors accordingly. And so a pile of junk—financial lead—is converted into 80 percent gold and only 20 percent lead, even though the risks in the underlying pool remain exactly as they were. You then repeat the process again on the junior tranche and others like it, and repeat as many times as you like, each time converting more and more of the

¹³This section draws on Dowd and Hutchinson (2010).

toxic waste into investment-grade investments in a manner reminiscent of the way in which the mafia make the proceeds of crime respectable by repeatedly laundering it. Unfortunately, when a crisis occurs, the financial magic is apt to suddenly wear off and much of the “gold” then reverts to its original leaden state—and investors discover the hard way what they had really invested in.

Again, we emphasize that each of these practices—and many others like them, and they are very widespread—greatly increase systemic instability in the banking system.

More Bad Thinking

Underlying badly designed rules is some seriously bad thinking.

A Regulatory Risk Management Standard. A major objective of modern financial regulation, especially Basel, is the promotion of a regulatory risk management standard. At first sight this objective might seem reasonable—it connotes the benefits of, say, standards for accounting or physical measurement—but the reality is that it flies in the face of how markets actually work and embodies a major fallacy of composition.

Consider the following: If we were dealing with a single institution, we might advise it to move out of risky positions when a crisis occurs. This makes sense for a single player but the market as a whole cannot divest itself of risky positions—someone has to hold them. There is, consequently, a fallacy of composition in which the individual institution can sell, but the market as a whole cannot. The collective attempt to dump such positions then sends prices down sharply and creates a vicious spiral, in which the collective attempt to move out of risky positions makes those positions even riskier. The fundamental problem is, then, that the encouragement (by regulators or anyone else) of a *single* risk-management strategy itself destabilizes the market. Market stability requires players who pursue different strategies: when many firms are selling in a panic, we need other institutions willing to move in and buy.¹⁴

¹⁴This example is a perfect illustration of how the Basel system tends to promote systemic instability. Going further, *any* weaknesses in the Basel rules will have systemic potential. Any weakness in those rules is likely to affect all banks at much the same time, whereas the same weakness in any one institution’s risk management will be unlikely to have any systemic impact.

Financial Regulation Should Mimic the Market. A common assertion among central bankers and financial regulators is that financial regulation should somehow mimic market incentives. One distinguished exponent of this view is Alan Greenspan, who really should know better. Speaking at the Chicago Fed Conference on Bank Structure and Competition in May 1997, he said:

I believe that in many cases, policymakers can reduce potential distortions by structuring policies to be more “incentive-compatible”—that is, by working with, rather than around, the profit-maximizing goals of investors and firm managers. . . . I readily acknowledge this is often easier said than done. Nevertheless, I believe some useful guiding principles can be formulated.

The first guiding principle is that, where possible, we should attempt to strengthen market discipline, without compromising financial stability . . . A second guiding principle is that, to the extent possible, our regulatory policies should attempt to simulate what would be the private market’s response in the absence of the safety net [Greenspan 1997].

But this argument leaves the goal wide open: if you *want* market incentives, simply *have* market incentives and be done with it.

The fallacy here is that regulators can have their cake and eat it too. They don’t want genuine free markets because they would entail unpleasant outcomes like bank failures—and the regulators themselves would be out of a job. So they imagine that they can avoid such unpleasantness by establishing a bank safety net to ensure that banks don’t fail. This seriously distorts the incentives that banks face, and they then imagine that by some regulatory sleight-of-hand they can recreate the incentives created by fear of failure in a regime where they themselves have removed that fear.

Scientism. A veritable minefield of problems relate to the regulators’ (and industry’s) addiction to scientific thinking—the naïve application of physical science models and ways of thinking to social science problems where they do not belong. This mindset is wrong for a whole host of reasons, but let’s just cite the following four:

- It assumes that social processes such as markets can be described by stable laws of motion. However, stable laws exist in physics but not in markets: market processes are changing all

the time. Any relationships that do get picked up by empirical methods are fleeting and apt to break down, especially when market participants attempt to use them. For example, market participants are apt to model stock price processes and use their models to develop trading strategies, but those very strategies change the stock price process itself.

- It fails to take account of the reality that many risks—in fact, most of those that really matter—are not quantifiable at all. These are the “unknown unknowns” famously defined by Donald Rumsfeld. Modelling such risks is impossible by definition.
- It ignores that effective risk management is often undermined by senior management. The problem with good risk modelling is that it leads to high estimates of financial risk and hence high capital charges. This ties up capital and curtails risk-taking, both of which reduce bonuses—and this will never do. In most banks, an overly diligent risk manager risks confrontation with his or her superiors and will likely soon be out of a job.
- Last but not least, scientism in finance—which usually goes by the name quantitative finance—is insanely wedded to the VaR risk measure and the Gaussianity assumption.

It is almost superfluous to point out that scientific thinking is a key reason why risk modelling—by the regulators or the industry—almost never works.

Constructivist Mindset. Underlying scientism is the constructivist mindset with its tendency to believe in “planned” solutions. Suffice here to note that the problems with this mindset were beautifully set out in a well-known passage from Adam Smith ([1759] 1976: 380–81):

The man of system is apt to be very wise in his own conceit; and is often so enamoured with the supposed beauty of his own ideal plan of government, that he cannot suffer the smallest deviation from any part of it. He goes on to establish it completely and in all its parts, without any regard either to the great interests, or to the strong prejudices which may oppose it.

He seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider

that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might choose to impress upon it.

One of the many curiosities with this mindset is that it imagines that there is some perfect solution out there that is superior to whatever the market can provide—this is just taken from granted as an article of faith—and that all that is needed is to delegate some body of experts to identify and implement it. The resulting solution comes back obviously full of holes (e.g., Basel II), and those in charge are then *surprised* when it does not work. Their response is to repeat the exercise again but typically on a more grandiose scale. The new solution is a bigger failure and they repeat the mistake again, and again. There is no reflectivity or learning by experience built into the process. Instead, there is an unchallenged assumption that there is no other way to think about the problem and the naïve belief that “we will get it right this time” without ever pausing to consider why it didn’t work all those times before. We then have another instance of Einstein’s notion of insanity—repeating the same mistake but each time expecting an outcome different from all the previous ones.

Modern Financial Regulatory Systems (II): Rule-Generation Process

It is also interesting to consider the process by which the rules are generated. The first point to recognize here is that those who generate the rules do not bear the costs of the rules they produce. On the contrary, it is in their interest to produce long rulebooks to justify their own existence and argue for more resources to produce even longer rulebooks. Modern financial regulatory systems have a built-in incentive to produce massive and growing oversupply, and the correction mechanisms that used to constrain rule-generation no longer exist. Those involved are no longer governed by the profit motive, and regulated firms can no longer opt out or set their own competing regulatory clubs. If we ever hope to tame these systems, we have to find some way to ensure that those who create these rules bear at least some of the costs of the rules they generate.

A second point is that the earlier learning mechanisms that governed rule-generation no longer exist. Since there is no competition amongst rule-generators, it is no longer possible to rely on competition among alternative regimes to eliminate bad rules and promote good ones. We are then in the classic command economy situation where we no longer know how many bakeries or what the price of bread should be, since we have suppressed the only mechanism that could tell us. We are then dependent on the wisdom of bureaucrats to make these decisions for us.

The main exception is competition at the international level—competition between the various national regulatory bodies—so how do we deal with that? The answer is that we seek to *suppress* that competition too in the name of “harmonization.” Instead of leaving the United States, the European Union, Japan, and others free to offer competing regulatory systems, with the jurisdiction with the better practices gaining some advantage, and in so doing pressuring the others to follow suit and improving the quality of regulation overall, we suppress that process and hand over the harmonization process to a committee instead. Once again, we replace a good rule-generation process with an inferior one.¹⁵

A third point is that the rule process becomes a politicized committee process that is accountable in the main only to itself. The process is then subject to all the pitfalls of committee decisionmaking: a tendency to duck difficult issues, engage in horse-trading, and promote excessive standardization; a vulnerability to politicization and domination by powerful individuals with their own agendas; and a vulnerability to groupthink and a proneness to go for solutions that look good on paper but don’t work in practice. It also leads to overemphasis on a culture of compliance with no thought given to the costs involved. When it comes to risk issues, it often leads to a total obsession with risk modelling and capital management—which they don’t understand anyway—with those involved becoming so bogged down with the risk metrics that they lose all sight of the risks. It is also often the case that the rules are so obviously poorly put

¹⁵The real issue is not harmonization at all: competing rule-making systems tend to harmonize anyway. Instead, the real issue is the *process* of harmonization. This is overlooked by the “planners” who can only see one route to harmonization and have conveniently hijacked the term itself. As they repeatedly argue, Who could be against harmonization? But such propaganda misses the point.

together that those involved are too embarrassed to defend them afterwards, even though they signed off on them.¹⁶

There is, thus, a serious accountability gap that can't be resolved unless there is some mechanism to make the individuals involved personally responsible.

To make matters worse, modern regulatory systems are also prone to capture:

- Financial firms have vastly greater resources, so they can hire the best talent and assemble expert teams in relevant areas (e.g., financial modeling, accounting, and law) giving them the ability to outgun the regulators, especially on complex technical issues, and set the agenda. By comparison, regulatory bodies are often short-staffed and have inadequate research support. Consequently, regulatory officials are often outnumbered and outgunned in meetings. They are also hampered by a steady exodus of their staff, who take their skills and institutional knowledge to the private sector, where they are far better paid.
- Firms are often able to hold carrots in front of individual regulators with the prospect of lucrative future jobs. As a result, regulators are often reluctant to challenge firms for fear of jeopardizing their own prospects.
- Financial firms wield big sticks; they have great influence and powerful friends, who can (and sometimes do) bring pressure to bear and, where necessary, intimidate individual regulators who get in their way. Their greater resources also allow firms access to superior legal firepower, which means, in practice, that they can often get their way merely by threatening the regulators with legal action.
- There is the cozy relationship between the financial industry giants, the regulatory system, and the government. Key players move back and forth between all three, leading to industry capture, not just of the financial regulatory system, but of the political system too.

¹⁶ We are reminded of an anecdote about a senior Basel official at one of the big risk conferences before the financial crisis. Challenged to defend the (then) new Basel II rulebook of more than 1,250 pages of mind-numbing gobbledegook, he sighed and admitted, "It does rather look as though it was written without adult supervision."

The regulatory system is also captured by the regulators themselves, who use it to promote their own interests—to promote an agenda that emphasises their importance, promotes their power, and gives them more resources.

Nor should we forget that the regulatory process is also captured by politicians who use it for their own ends: to promote reforms that they have rarely thought out, to grandstand, and to help friends in the industry who pay their campaign contributions.

The Volcker Rule provides a perfect example. This is an offshoot of Dodd-Frank that had the worthy intention to ban proprietary trading by financial institutions on government support, and hence stop at least one avenue by which traders could speculate for personal gain at the expense of the taxpayer. Threatened with the loss of one of its favorite lunch buckets, the industry responded by lobbying extensively for exemptions. In so doing, they “took a simple idea and bloated it into a 530-page monstrosity of hopeless complexity and vagueness”—effectively killing it off by filling it full of holes (Eisinger 2013). The regulators themselves supported this process for their own ends: they stood to gain from more regulations and the resources that go with them, and from an extension of regulatory discretion.¹⁷ Neither the industry nor the regulators had any stake in making the Volcker Rule effective, so the end result—the appearance of the Volcker Rule, but without the substance—is hardly surprising.

Note how this arrangement satisfies all three principal participants: the politicians get their legislation and are seen to be doing something (and never mind what), while the industry and the regulators get their way in ensuring that the Volcker Rule is unworkable—and the fact that this arrangement is horrendously costly and doomed to failure doesn’t matter to any of them.

Regulatory capture is also the main reason why so many bad regulatory practices persist, despite their weaknesses being well known.

¹⁷The regulators preferred to implement the Volcker Rule in a “nuanced fashion,” intending to distinguish between intentional and unintentional prop trading, a barmy idea that would make enforcement impossible unless a miscreant trader was considerate enough to leave an incriminating e-mail trail. However, a “nuanced” implementation does have the advantage of giving great scope for discretion and enabling regulators to argue for more resources. Remember that Volcker’s original idea was for a *simple* rule that left no exemptions and no room for ambiguity.

They persist because their weaknesses serve the purposes of key interest groups. An example is the Basel rule giving credit derivatives a 0.5 percent capital weight, which enables financiers to construct all manner of dubious securitizations, such as the “how to destroy” scam mentioned earlier. Other examples are the regulatory endorsement of the Gaussian assumption and the VaR risk measure. These lead to major underestimates of true risk exposures but are convenient for the industry because they lead to low capital charges. Capital that should be used to buffer banks against risk can then be siphoned off as dividend and bonus payments, and senior management can play dumb when the bank later collapses and the taxpayer is required to pay for the bailout.¹⁸

Putting these points together, we have an undisciplined rule-generation process that is out of control. Everyone including the regulators complains that the rules are burdensome, excessive, and often make no sense—and yet the system produces ever more of them. They also lose any contact with their underlying supposed rationale—to control risks, protect investors and so forth—and often become counterproductive. In the end, the process of rule-generation becomes the end in itself. We then get to the point where there are so many rules, so many consultation papers, so many meetings, so many agendas and so many *changes* in agendas, that even the regulators who produce all this gumpf can no longer keep up with the juggernaut that they have set in motion. Nevertheless, the regulatory apparatus continues to grow, and it doesn’t matter that the regulatory burden continues to expand or that none of this regulation actually works.

Basel II is a case in point. This was in essence just thousands pages of regulatory gibberish with the ostensible objective of ensuring that the international banking system would be safe. It was rolled out in June 2004 and had just been adopted—in the EU and Japan, though not yet in the United States—when the crisis hit and the banking system collapsed. In their resulting panic, bank regulators across the world then rushed out many thousands of pages of new draft rules, plus many more pages of discussion and consultation documents. Indeed, so great was the deluge of regulatory material that by spring

¹⁸This said, other rules serve the interests of the government. The Basel zero weighting of OECD sovereigns is a case in point. This was useful to governments because it artificially boosted the demand for government debt.

2010 observers were jokingly referring to it being tantamount to a Basel III. By the fall of that year, however, Basel III had become a reality and the joke was on the jesters. But the *real* jesters are those telling us that the solution to all that gobbledegook was now to have even more of it, crafted on the fly under crisis conditions by the same people who had gotten it wrong the previous time, not to mention the times before that. And remember that Basel II had been produced over the course a fairly quiet decade, whereas Basel III was the product of a few months' panic.

If one thing is for sure, it is that this ever-inflating system will certainly fail again. When it does, we can expect it to further ratchet up its expansion—and presumably again and again, assuming the whole system does not collapse before then—until the parasite has weakened its host so much that the host can no longer function.

This example reminds us that modern financial regulatory systems are not only prone to failure but actually *thrive* on it. In any sensible system, failure would lead to some error correction or negative feedback. However, in modern financial regulation—not to mention that of the 1930s—the opposite is the case. When it fails the response is not “Let’s get rid of all that useless regulation because it has failed,” but rather “Let’s create a regulatory system that works.” In practice, this always gets hijacked into “Let’s have even more of it.” Instead of being held to account, they use the crisis they help create to push for even more power and resources and fob us off with excuses and promises that the new system really will work next time. When it comes to monetary policy and financial regulation, it is truly the case that nothing succeeds like failure. It is no wonder, then, that regulation has such a tendency to ratchet up.

There is also the problem of there being no mechanism to make rules or policies consistent. Indeed, consistency becomes impossible. Faced with rules that clash, those who apply the rules—the regulators—are then increasingly free to pick and choose which rules to cite or which to apply. Defenders of the regulatory system can do the same: whatever the problem, they can point to some rule that addresses it—and never mind that this solution is contradicted by some other provision somewhere else. They can argue, with the appearance of plausibility, that their regulatory systems address any and all problems, and they would usually be right, on paper—provided one ignores all those inconvenient contradictions or the track record of repeated failure. We are tempted to describe this as

a perfect example of Coasean textbook economics. But it is in fact far worse than Coase ever imagined.

If regulators can pick and choose which rules to cite, or to apply—and who *outside* the regulatory system can keep up with rules to challenge them?—then the whole process becomes one of regulatory discretion and there are no longer any rules in the proper sense of the term. We then have the appearance of rules but the reality of unaccountable discretion on the part of those managing the system: they can do whatever they want. Ironically, the rulebook becomes a license for almost unlimited discretion; it is then literally “discretion written down”—and there is no mechanism to hold regulators or policymakers to account.

It gets worse. The system has rules, but they are superseded by discretion, which is to say, the system doesn’t really have any rules at all. At the same time, there is a huge regulatory burden, so rules *do* exist in that sense—and they are ineffective too. It is hard to imagine a system less fit for purpose.

And this takes us to the most sinister and most damaging result of unaccountable officials doing whatever they want: the subversion of the rule of law. If we have so many rules that no one else can keep up with them, and if the regulators are free to pick and choose the rules or policies they apply, exploiting inconsistencies as they see fit, and if there is no effective mechanism to hold them to account, then we are no longer living under the rule of law; we are living under a regulatory dictatorship.

The good old system didn’t have any of these problems because it had features that the modern systems so conspicuously lack: incentive structures and accountability mechanisms that worked, and underlying those, the rule of law.

Conclusion

In concluding, we would emphasize two points. The first is that the modern system has not only kicked away most of the constraints against excessive risk taking but positively incentivizes systemic risk taking in all manner of highly destructive ways. These include:

- The replacement of a monetary regime in which money managed itself to one that requires management, leading to a central bank with a proclivity to inflate the currency and engage in alternate policies of boom followed by bust.

- The encouragement of excessive risk taking by a greatly expanded LOLR function and by the destructive incentives created by federal deposit insurance.
- The almost innumerable ways in which capital regulation, designed to counter such risk taking, has exactly the opposite effects.

Underlying the LOLR function, deposit insurance, and financial regulation generally, is a fundamental moral hazard issue—that each of these, in different but reinforcing ways, incentivizes bankers to take excessive risks because they reap the short-term benefits but offload subsequent losses onto others, most notably, taxpayers.

Each of these features, and the problems they entail, reflects the most fundamental point of all—namely, that the modern system of a central bank and armies not only of regulators but of regulatory bodies—has all but destroyed the old governance systems that used to keep risk taking in reasonable check.

We have gone from a system that managed itself to one that requires management but cannot be managed. We have gone from a system that was guarded by market forces operating under the rule of law to one that requires human guardians instead, but we have still not solved the underlying problem of how to guard the guardians themselves.

The outstanding issue of the day is, therefore, very simple: how to get back from here to there—preferably before the whole system collapses. Abandoning bad ideas might be a good start.

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THE CASE FOR A CENTENNIAL MONETARY COMMISSION

Kevin P. Brady

By every economic measure, our nation is presently mired in a disappointing economic recovery. In fact, ours is the weakest recovery of the past half century. Uncertainty reigns as the purchasing power of the dollar declines. What ails us goes well beyond federal fiscal policy, and it is certainly not the result of an irrational marketplace. What ails us goes much deeper to our nation's monetary policy, which is well overdue for a review.

The Growth Gap

In tracking our economy, the Congressional Joint Economic Committee, which I chair, has highlighted a disturbing and growing trend, which we refer to as "the growth gap." The growth gap can be seen as the gap between where our economy is today compared with where it would be if we had experienced an average post-1960 recovery.

How large is the growth gap? In the near term, as of January 2014, we are missing \$1.21 trillion of real GDP from America's economy, and missing 4.4 million private sector jobs, just from an average recovery. If you compare the current disappointing recovery with the robust Reagan recovery, the figures are even more

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startling: \$1.84 trillion in lost output and 6.95 million private sector jobs missing from our economy.

In the long term, the numbers are even more dismal. Last year, the Congressional Budget Office reduced its estimate for future growth in potential real GDP from 3.2 percent to 2.2 percent. A 1 percentage point difference may not sound like much, but it is huge. Over the long term, a 1 percent growth gap is the staggering difference between a \$50 trillion economy and an \$80 trillion economy that is 60 percent bigger in 2062.

These are big numbers, and it is often difficult to translate such numbers into digestible bits. So, what exactly does the growth gap mean for American families? To the average family of four today, they are missing more than \$11,000 from their real disposable income that could go toward their housing, dreams, and education, or even pay for higher health care costs under the Affordable Care Act. This is a big hole, and too many families have been left behind in a major way.

Wall Street has done well in this recovery. From the end of the recession through November 2013, the S&P500 Total Return Index was up 100.8 percent. I want to see Main Street do just as well. Among our problems right now is that our current monetary policy has tilted the playing field in favor of Wall Street and away from average working families in America.

The Fed's monetary policy, in my view, has harmed American families. Keeping the federal funds rate at the zero bound for the past five years and building excess liquidity on the Federal Reserve's balance sheet from quantitative easing have kept interest rates at extremely low levels for a long time. The Fed's policies have discouraged savings, and pushed American families into riskier assets. Seniors and savers, from whom I hear frequently in my town hall meetings, attest to the harm caused by the actions of the Fed.

Yet these adverse effects of the Fed's monetary policy constitute only a partial aspect of the dangerous course that has been charted. The fact remains that the experimental policies embarked upon by the Fed have created new economic and fiscal risks:

- Open market policies have created the conditions that might lead to the next financial bubble in stocks, the bursting of which would devastate retirement accounts.
- Private sector business investment, which is the key to job creation, has likewise been hampered by the economic uncertainty from the Fed's policies.

- And the Fed's monetary policy has masked a dangerously high federal deficit by keeping interest payments at artificially low levels, therein enabling more programmatic spending than would otherwise be tolerated.

The benefits today of quantitative easing in the real marketplace are zero, in my view, and the risks continue to grow.

For most of 2013, we lived in a world that I would call "the opposite market." When the jobs numbers, or the quarterly economic data, came in each month, if the numbers were bad, the market would rally because markets perceived that the Fed stimulus would continue. That is not the sign of a healthy recovery either here in the United States or globally. Perhaps we can hope that some sanity was restored in December when the Fed announced that they would begin to taper quantitative easing and the markets responded favorably.

Inflation Risk and the Purchasing Power of the Dollar

There is another lingering risk stemming from the Fed's monetary policy: the risk of inflation. Defenders of the Fed's discretionary quantitative easing policy suggest that the policy carries little inflationary risk, and that inflation has yet to surface. However, inflation is a term that is sometimes used by ordinary people and professional economists to describe different concepts, and misunderstandings can sometimes arise. To most people, inflation refers to a general increase in the prices of goods and services as measured by such indices as the Consumer Price Index or the Personal Consumption Expenditure (PCE) Price Index. From this perspective, which the Fed currently shares, inflation is low to nonexistent. Yet, inflation can also refer to a rapid increase in asset prices, as in the case of the housing bubble in the last decade. To Austrian economists, inflation can also refer to an increase in the monetary base by a central bank.

With respect to inflation, I believe the critical issue is whether the purchasing power of the dollar is being maintained. The evidence is not heartening. In fact, since President Richard Nixon closed the "gold window" on August 15, 1971, causing the Bretton Woods gold exchange standard to collapse, the purchasing power of the dollar has declined by 83 percent.

I am concerned that the Fed's current policies of quantitative easing and maintaining extraordinary low interest rates may be providing the fuel for igniting high inflation in terms of consumer prices.

As monetary economist Mickey Levy (2013) observed in a paper for the Shadow Open Market Committee: “The Fed has kept the funds rate below inflation since 2008, the longest period in recent history. The last period of such a long sustained negative real funds rate was in 1974–1977, and it resulted in double digit inflation.”

Price inflation is a real wealth-destroying, market-distorting phenomenon that undermines hard work, savings, and productive investment while rewarding financial speculation. Though the Federal Open Market Committee still does not see price inflation on the horizon, the question remains as to how quickly and effectively the Fed would respond if inflation were to take hold.

Leaving aside the purchasing power of the dollar, price inflation as measured by the PCE price index is being kept in check. There are three primary reasons why this is occurring: First, the fear of another financial crisis has led banks to increase excess reserves to levels substantially higher than existed before the 2008 financial crisis. Second, families and businesses have paid off a large part of their debt and continue to deleverage, thereby reducing the demand for new loans. Third, banks have been reluctant to make new loans given the uncertainty over implementation of the Dodd-Frank legislation.

Now that the fear of another crisis is receding and deleveraging has largely run its course, at some point we will see an increase in lending. The excess reserves on the Fed’s balance sheet are the fuel for price inflation. As they are lent out, we could see significantly higher price inflation, which is terribly destructive to prosperity. It robs the paychecks and wallets from working families, and the real net worth of many Americans will significantly decline. It is time for a review of how we conduct our nation’s monetary policy.

A Timely Review of Monetary Policy

A Centennial Monetary Commission (H.R.1176) is needed now. One hundred years into the Fed’s existence, we are well overdue for a thorough review of the structure and goal of our nation’s monetary policy. Originally, the Fed’s mission was to provide an elastic currency to combat seasonal financial issues, but the Fed’s mission has grown over the years. Today, some policymakers in Washington and New York would like to see the Fed manage nearly every aspect of the U.S. economy.

Others, like me, think the Fed should create a financial climate where the market is allowed to work; the Fed doesn't pick winners and losers, especially among the credit markets; and families can have some confidence that their hard work and their savings will be preserved through maintaining the purchasing power of the dollar over time. That, in my view, is the foundation for the strongest economic growth for this country.

The Joint Economic Committee has put forth great effort examining the basic question, which is: What must we do today to ensure that America has the strongest economy through the 21st century? How do we have another, a second American century? For starters, it is critical to have the right fiscal policy in place, but it is also absolutely critical that we have the right monetary policy in place as well.

In thinking about a national monetary commission, one must start with the question: What are the characteristics, and what is the design of a commission that produces a solid result? First, it has to be open-process, which I would call brutally bipartisan. It has to be equally balanced between parties, equally balanced between policymakers within Congress, and include bright minds and thinkers outside of Congress as well. It needs to allow a fair fight, in which the best and brightest ideas on monetary policy going forward can prevail.

The Centennial Monetary Commission, which presently has more than 30 cosponsors, would review America's economic performance since the Fed's creation in 1913, carefully examining output, employment, inflation, and financial stability. All points of view would be discussed with respect to the proper role envisioned for our central bank. The desirability of adopting monetary policy rules—including a gold standard and nominal GDP, inflation, or price level targeting—would also be considered.

After weighing the above factors, the Commission would recommend to Congress a course for U.S. monetary policy going forward—a course that would include recommendations on what is the right legislative mandate for the central bank, what is the best operational regime, and what boundaries should exist with respect to securities and purchases in the Fed's open market operations.

Fortunately, we are coming to a point of discourse about the Federal Reserve where we can have serious policy discussions about the Fed, its mandate, and the back-and-forth debate over the virtues

of a rules-based versus discretionary monetary policy. The present question is not whether the Fed ought to be abolished; the question—in which both the political left and political right should have a strong interest—is how do we make sure that the Fed has the proper mandate and the best foundation to help us secure another American century.

Conclusion

As we have just marked the 100th birthday of the Federal Reserve Act, and given the financial crisis that we have been through and the extraordinary measures that have been taken by the Fed since 2008, there will never be a more appropriate time to review the Federal Reserve and our nation's monetary policy.

I am hopeful that a Centennial Monetary Commission will allow us to reengage not just the best minds and the most diverse thinking about the Fed, but also reengage Congress in our constitutional role over monetary policy.

Now is the time to act. More and more, especially since the 2008 financial crisis, normal people in average walks of life are raising their hands at my town hall meetings and asking, “Who is the Federal Reserve, and why can they do what they’re doing?” Such questions are a great sign of a healthy curiosity in the interest of not only who the Fed is and what it is doing, but also of a growing understanding that the Fed is affecting all of our lives, often in a way that most families cannot imagine.

I am hopeful the Centennial Monetary Commission can help bring the role of the Fed to life for real people, living real lives and facing real problems, so that they can understand just how the Fed’s decisions affect them. When we pull back that curtain and we have this healthy, constructive, thoughtful discussion, we can find a way forward for the central bank—for the Fed—that actually plays a role that helps to enhance the opportunities for families in America. Now is the time to move forward.

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PROSPECTS FOR FUNDAMENTAL MONETARY REFORM

Gerald P. O'Driscoll Jr.

The intellectual climate has never been more open to a critical analysis of existing monetary institutions both here and abroad. When the Germans agreed to a monetary union, they were promised that they would keep the Bundesbank; only the name would be changed to the European Central Bank. Instead, Germans with whom I have spoken now think they got the Banca d'Italia. In the United States, before the financial crisis, the Federal Reserve was held in high regard by the public. Now, at least in some circles, “the Fed” has become a term of opprobrium, not unlike “the IRS.”

Since the financial crisis, the entire monetary and financial system has come under increased scrutiny and criticism.¹ That includes not only central banks but also the private banking system, which is part of the money-creation process. Central banks are at the heart of the monetary and financial system, however, and they will be my focus.

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¹In November 2013, the Mercatus Center at George Mason University hosted a conference titled “Instead of the Fed: Past and Present Alternatives to the Federal Reserve System.” That conference critically examined the historical performance of the Fed, prospects for improving that performance, and possibilities for fundamental reform. Also in November, *Cato Unbound* featured four essays on “The Federal Reserve at 100” (O'Driscoll Jr. et al. 2013).

I do not want to exaggerate the degree of criticism of central banks. Among academic economists at large and in much of the financial system, the Federal Reserve is still generally held in high regard. The latter is easy to understand, since the Federal Reserve bails them out and supplies them with nearly free money. The affection for the Federal Reserve among academics was best analyzed a number of years ago by Milton Friedman (in Fettig 1993) and detailed by Larry White (2005). They noted that a large percentage of monetary economists are employed by the central bank. Many others are consultants and invited to Federal Reserve conferences. People do not bite the hand that feeds them.

Relative even to the recent past, however, the prospects for serious discussion of monetary reform are bright. The work done over the years by scholars, many of whom have spoken at Cato's Annual Monetary Conference, contributed to these improved prospects.

In this article, I make a case for fundamental monetary reform, explain the critical problems that call for monetary reform, examine reform alternatives, and discuss prospects for reform. I also propose a strategy to improve the prospects for fundamental reform.

U. S. Monetary Commissions and Reform

National monetary commissions, like the Centennial Monetary Commission proposed by Rep. Kevin Brady (R-TX), have a long history in the United States. They signify that the demand for fundamental reform has caught the attention of the political system, but that the consensus required for legislation has not yet emerged. Congressman Brady and his colleagues have heard the call for change, but the nature of the preferred change is not yet clear. Further, the monetary system is a highly technical issue and one not readily addressed in the normal legislative process. A commission report can not only provide a path to reform but also provide political cover to make difficult choices.

These factors are evident in the structure of the Centennial Monetary Commission Act of 2013 (H.R. 1176). First, there are 13 “findings” that establish a need to consider reform. Then there is a call to “evaluate operational regimes,” of which 6 are listed. The Commission is charged with recommending a course for monetary policy. Then there are the details on membership and reporting. The Act envisions that a Commission Report, which would delve

into the technicalities of monetary reform, could form the basis of legislation.

The Act notes that “following the financial crisis known as the Panic of 1907, Congress established the National Monetary Commission to provide recommendations for the reform of the financial and monetary systems of the United States.” Those recommendations became the basis for the 1913 legislation creating the Federal Reserve System.

The National Monetary Commission was created by the Aldrich-Vreeland Act of 1908. Republican Senator Nelson Aldrich of Rhode Island was its chairman. At a secret conference of bankers on Jekyll Island, Georgia, in November 1910, a plan for what became the Federal Reserve System was hatched. That plan, dubbed the “Aldrich Plan,” was eventually submitted to Congress (Bruner and Carr 2007: 145).

The Aldrich Plan was viewed correctly as a (big) bankers’ plan. In 1910 the Democrats took control of Congress, and in 1912 Woodrow Wilson was elected president. Progressives, now in control of Congress and the presidency, were (incorrectly) viewed as hostile to big banks (Kolko 1963). Carter Glass was the chief congressional sponsor of the Federal Reserve Act and naturally did all he could to disguise the Act’s origins in the Aldrich Plan. Paul M. Warburg, the true author of the Aldrich Plan, later detailed “the near-identity of the two” (Friedman and Schwartz 1963: 171, n. 59).

Long before the National Monetary Commission, there were earlier efforts at reform. There were alliances, political movements, and even political parties (the People’s or Populist Party) formed to effect monetary reforms. In 1897, a group of bankers and businessmen in Indianapolis established their own monetary commission. There was a plan for an asset-backed currency, the “Baltimore Plan,” put forward by the American Bankers Association at its convention in October 1894 (Friedman and Schwartz 1963: 117–18). For one reason or another, these early efforts never bore fruit. Some, such as the Baltimore Plan, would likely have avoided the Panic of 1907 if it had been in place.

If history is a guide, money matters must get worse before they can get better. Discussions, analysis, and a plan can mean that when crisis hits, there will be a way forward. The trick is to get the plan right so that we are really moving forward and not down a policy dead end.

Alternative Reform Proposals

The most basic distinction between monetary regimes is between a regime of discretionary monetary policy and one governed by rules. It is difficult to conceive of a regime of pure discretion in which the monetary authority followed no rules or regularities in their actions. It would be a regime of pure randomness.

R. S. Peters (1958: 5), in *The Concept of Motivation*, observed:

Man is a rule-following animal. His actions are not simply directed towards ends; they also conform to social standards and conventions, and unlike a calculating machine he acts because of his knowledge of rules and objectives. For instance, we ascribe to people *traits* of character like honesty, punctuality, considerateness and meanness. Such terms do not, like ambition, or hunger, or social desire, indicate the sort of goals that a man tends to pursue; rather they indicate the type of regulations that he imposes on his conduct whatever his goals may be.

Peters' analysis suggests that central bankers will evolve some kind of rule even if there are no rules with which to work initially. Three decades ago, Axel Leijonhufvud (1984: 23) proposed viewing the modern fiat money regime as "a random-walk monetary standard." David Fand (1989: 23), elaborating on Leijonhufvud's standard, noted that "the only rule governing [the Federal Open Market Committee's decisionmaking process] is that, at each point in time, those who are responsible for monetary policy choose the convenient and expedient thing to do." It is a minimalist concept of rule-following behavior, and it is not unreasonable to designate such a regime as one of discretion.

The 100-year history of Federal Reserve policy is not an attractive one.² Most studies of it start by writing off the Great Depression. The two wartime experiences are treated as exceptional periods (with justification). Periods of monetary stability get down to a relatively few years in the 1920s, the post-Accord period in the 1950s, and the Great Moderation in the mid-1980s to the mid-2000s. In each period, the Fed was rule-bound though the rules differed: in the

²My historical sketch is heavily influenced by Allan Meltzer's verbal summaries of the results of his 3-volume *History of the Federal Reserve*. Friedman and Schwartz (1963) is also relevant.

1920s, the Fed was governed by the modified gold standard; in the 1950s, there was a fiscal rule of balanced budgets (after the Korean War), imposed by President Dwight Eisenhower, a deficit hawk; and in the Great Moderation, the Fed appeared to be following what is now called the Taylor Rule—a self-chosen and self-enforced rule.

In the monetary literature, the Federal Reserve's good performance is attributed to the Treasury Accord of 1951 and the central bank's newly achieved independence. Cargill and O'Driscoll (2013: 419–20) argue that the decade of the 1950s does not provide evidence that the Federal was independent, or that independent central banks provide superior inflation performance. Any central banker would have had a relatively easy job with the "Eisenhower Rule." Once Eisenhower left office, the long-time Federal Reserve chairman of that era, William McChesney Martin, was willing to accommodate Kennedy-Johnson fiscal activism and inflation ensued.

The brief periods of superior Federal Reserve performance buttress the findings of rule-based models. Moreover, the three episodes suggest that there may be a variety of rules consistent with monetary stability: a gold or commodity standard, a fiscal rule, and a modified monetarist rule. What is important is that a viable rule was in place that constrained central bank policymakers.

As to the fiscal rule specifically, I suspect one must be in place for any monetary rule to work well. The Great Moderation was overall a period of fiscal balance, or at least an improving fiscal outlook, and ended, coincidentally or not, when fiscal deficits began growing again. A commodity standard requires and facilitates balanced budgets. As Lawrence H. White notes (2012: 420), "A gold standard does help to ensure budget balance in the desirable present-value or long-run sense, by requiring a government that wants to sell its bonds to stay on a fiscal path consistent with full repayment in gold."

Classical fiscal theory evolved against the background of a commodity standard. From 1789 into the 1950s, a budgetary pattern emerged. "Deficits emerged primarily during periods of war; budgets normally produced surpluses during peacetime; and these surpluses were used to retire debt created during war emergencies" (Buchanan and Wagner 1977: 12). The constraints of a commodity standard helped promote balanced budgets over time. Classical fiscal theory emerged to rationalize practice.

Once Keynesian ideas gained political currency in America, ideas of fiscal prudence changed. If peacetime deficits can be monetized,

it is difficult to conceive how adherence to balanced budgets could be permanently reinstated. They were briefly in the 1990s with divided government. The Republicans gained control of the House of Representatives in part by promising a balanced budget. President Clinton was being advised by Treasury Secretary Rubin to balance his budget. Political forces aligned on that question. President George W. Bush had no such commitment. Instead, he implemented a new entitlement program (Medicare, Part D) and engaged in costly wars. There was no external constraint, such as that provided by a commodity standard, to keep fiscal discipline in place. History indicates that a durable commitment to balanced budgets requires some type of commodity standard. At least that is what has worked in the past.

Preconditions for Reform

Public choice considerations must be factored into any discussion of monetary policy generally and monetary rules specifically. To work as designed, a monetary rule must be incentive-compatible—that is, it must be consistent with the interests of monetary policymakers and the political powers to which they must respond. In the United States, that consists of politically appointed members of the Board of Governors, the presidents of Reserve Banks, members of Congress (especially the committees of jurisdiction over the central bank), and, realistically, the president. This mix produces the monetary “rule” of convenience and expediency identified by Fand.

More concretely, the Federal Reserve has focused on employment and only incidentally on prices. I speak here of deeds not words. Concern over prices appears in the speeches of every Federal Reserve official. The inflation record reveals that such concerns are not generally salient. Only when inflation hits high levels and produces political discontent does the Federal Reserve act against inflation. The Volcker Fed of the 1980s was an inflation-fighting Fed because high inflation changed the political calculus. Fighting inflation gained political support. The changed political calculus helped elect Ronald Reagan president, and he backed Paul Volcker’s continued anti-inflation policy. That policy had begun under President Carter.

The Federal Reserve will be buffeted by shifting political winds and respond in expedient ways so long as it is not rule-bound. It is the

existence of a monetary rule that enables it to resist political pressures to stimulate employment, or, as it now does, to supply credit to favored sectors like housing. The requirements of even the modified gold standard enabled the 1920s Federal Reserve to resist calls to stabilize agricultural prices. Low budget deficits in the 1950s kept pressure off the Federal Reserve to engage in expansionary monetary policy. History repeated itself in the 1990s as budget balance was restored and the Fed's following a Taylor Rule produced the Great Moderation.

Rules enable central banks to operate in a way that may be described as independent. As Adam Smith and the classical economists observed, it is the natural tendency of governments to spend in excess of revenues. Good rules help a central bank resist political pressures to inflate to pay for spending. Absence of a rule does not enhance, but rather erodes central bank independence (Cargill and O'Driscoll 2013).

Monetary policymakers must be rule-bound for the same reason that ordinary government officials must be bound by the rule of law. As the Founding Fathers well understood, preserving liberty depends on having institutions in which even bad men can do little harm. Public institutions designed to allow good men to do great things give too much power to fallible human beings.

Public choice arguments are complemented by informational arguments. These were at the heart of Milton Friedman's monetarism and Hayek's work earlier. They both argued that there are ineluctable informational problems that render discretionary monetary policy impossible. Neither suggested that monetary policy actions had no effects. Quite the opposite. Both men believed that money had powerful impacts on the economy. But both argued we do not have sufficient information about the structure of the economy and agents' expectations to improve economic outcomes in a *systematic* way. Friedman (1961,1968) summarized these arguments most cogently. A brief quotation from an early monetary work of Hayek anticipates Friedman's later, more thorough statement of the information problem. According to Hayek (1933: 23), "The one thing of which we must be painfully aware at the present time . . . is how little we really know of the forces which we are trying to influence by deliberate management; so little indeed that it must remain an open question whether we would try if we knew more."

Once one states a preference for a rule-bound monetary regime, the obvious questions are (1) which rule? and (2) where does the rule come from? In the monetary literature today, we have rule conflict. The failure of monetary economists to agree on a rule helps perpetuate monetary discretion.

I submit the second question has priority because, in answering it, we narrow or expand the choices. Most advocates of rules derive them as propositions of models. I propose instead that we choose from what has worked historically. The two procedures are not necessarily at loggerheads. Models can help us understand what worked. I have identified three different rules in effect during the relatively brief periods of monetary stability under the Fed: the modified gold standard of the 1920s, the fiscal rule of the 1950s, and the Taylor Rule accompanying a new fiscal discipline.

I would add an obvious fourth rule: the classical gold standard of the 19th century. In the United Kingdom, it was in effect from the end of the Napoleonic Wars until World War I. In the United States, it was in effect from the end of the Greenback period in 1879 until World War I.³ Before the Civil War, the United States was on a bimetallic standard.

The United Kingdom had the longer historical experience under the gold standard. From roughly the end of the Napoleonic Wars until the eve of World War I, the price level was essentially unchanged. Prices fluctuated in between, but inflationary episodes were chiefly associated with wars. The same was true in the United States. Other countries adopted the gold standard at different points in the 19th century. The UK experience was a gold standard with a central bank. The U.S. experience was a gold standard without a central bank. There was only the brief period from the Federal Reserve's creation at the end of 1913 to the beginning of World War I that the Federal Reserve was operating within the classical international gold standard.

A Note on Free Banking

Free banking, in its simplest terms, is a system of banking without a central bank. More important, it is a system of monetary freedom and competitive issuance of currency. Under a free banking regime,

³From a legal or de jure perspective, the classical gold standard didn't come into play until passage of the Gold Standard Act of 1900.

the monetary and banking systems are the product of market forces; the rules that emerge meet the market test. They are the product of the same evolutionary process that develops for all other goods in a market economy. That process addresses directly my second question: from whence does the monetary rule come? To the greatest extent possible, rules in money and finance should be market-generated.

Any move toward monetary freedom requires the end of legal restrictions—such as legal tender laws and anti-private coinage statutes—on competitive money. Moreover, as we have seen recently, anti-money laundering statutes can be used to suppress competitive money issuance (White 2014).

A Strategy for Fundamental Reform

I now turn to strategic issues. For 31 years, Cato’s Annual Monetary Conference under the direction of Jim Dorn has become an indispensable intellectual assembly for all those interested in ideas and analysis of monetary issues. Jim has been catholic in his choice of topics, particularly when viewed over the course of three decades. He has provided intellectual diversity in monetary debates available nowhere else.

The question is how to get from a discussion of issues to a reform plan. How do we get from talk to action? The competition of ideas at Cato has made the conference a success. What I propose is taking up some of those ideas and moving forward with them. I see the Brady Bill proposing a Centennial Monetary Commission as a step in the right direction—toward mutually reinforcing monetary and fiscal rules.

To get from talk to action, I propose that those committed to actual monetary reform plan to meet regularly, along the lines of the Shadow Open Market Committee. They would meet not to discuss current policy but to devise a concrete plan for monetary reform.

We are not at the point where the goal can be accomplished in one grand event, like Jekyll Island, but only in a series of meetings with a core group of stable participants. Again, my model is the SOMC. The meetings should be under the auspices of an institution like Cato. These meetings would complement other monetary events. The meetings could also provide useful background research for the Centennial Monetary Commission. Then we could move from discussion, to a plan, and finally to its implementation in legislation.

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WHY THE FED'S MONETARY POLICY HAS BEEN A FAILURE

R. David Ranson

Passing its 100th birthday, the Federal Reserve is receiving unprecedented scrutiny. We (the public) are living through the consequences of its attempts to bolster the U.S. economy through exceptionally low interest rates and the conversion of great quantities of debt to money. Although these efforts are ongoing, we are disappointed. Even with the help of strenuous actions on the fiscal side, economic and credit-market recovery from the recession of 2008–09 was notoriously slow. It took 15 quarters for U.S. real GDP to pass its pre-recession high in the fourth quarter of 2007, compared to only 7 quarters following the deep recession of 1981–82. On a per capita basis, there was an even starker contrast between the two recoveries. Moreover, the Fed remains a suspect in the genesis of the financial crisis that precipitated the Great Recession. The ultimate test of its role as overseer and regulator of the commercial banking system met with a very poor result.

Questions concerning the Fed's record can be asked at two levels: (1) Has the economic outcome been poor because the Fed made too many errors of judgment? Or (2) were its policies based on erroneous beliefs about how the economy works? If either is true, with or without mistakes, perhaps the Fed's efforts were

inherently ineffective. My view that monetary policy might even have contributed to economic stagnation comes from several concerns:

- Fed thinking about the credit market is at odds not only with Adam Smith's Invisible Hand, or its modern reformulation by Hayek in terms of market price signals, but with standard microeconomics.
- Expectations that current monetary policy tools will have the desired effects on credit volume and economic growth lack straightforward empirical verification in the long sweep of U.S. history.
- As a creation of the banking industry, the Fed long ago became its designated protector. It is motivated to give priority to prolonging the life and maintaining the profitability of existing financial institutions even where that might conflict with competition and general economic health.
- In decisions relating to inflation and unemployment, the Fed overrelies on "headline" statistics of public debate that have been politicized and tend to obscure more than they reveal.

I address these considerations in turn.

Fed Policy versus Free-Market Thinking

The U.S. economy is broadly capitalist and competitive, and Americans have a respect for the invisible guiding hand of market forces. To place a central bank in a governing role at the hub of the monetary system represents an opposite philosophy. In no other major sector is the general level of prices pegged and re-peged by federal authority. It's the antithesis of free-market thinking to imagine that the Fed has unique or superior knowledge to impose an interest-rate structure that will better allocate credit.

Banks claim unique status in the economy. Politicians see them as a fragile credit-allocation mechanism without which the economy could barely even function, but which require government assistance and supervision. In no other industry is there general acceptance of need for a supplier or demander of last resort.

Even in a credit crunch like the one that hit in 2007, it's unclear what the Fed's injections of funds did to help. They were designed to ease the stress felt by banks caught with assets for which there was

no demand at acceptable prices. But the economic collapse came anyway.

Despite the common usage of the ambiguous word “liquidity,” making cash plentiful is not the same as making markets liquid. A liquid market is one in which there are plenty of willing buyers and sellers and the volume of transactions is sufficient to allow each investor to trade without materially affecting the price. An illiquid market is one in which buyers and sellers are temporarily holding back from normal trading and prices are pushed around by individual transactions.

A “liquidity crisis” is something else again: a situation in which financial firms are scrambling to find enough cash to conduct their operations without incurring losses that threaten their solvency. In one sense, the market paralysis of 2007–08 can be analyzed as an information problem. Financial markets were illiquid because their participants had become highly uncertain about the value of many of the assets that they would normally be trading. Neither injections of funds nor interest-rate cuts could dispel the confusion. Indeed Treasury and Fed actions and inactions added an extra layer of uncertainty.

As experience has since confirmed, not even a zero rate stimulates the broad use of credit in the economy. From the viewpoint of microeconomics that should not be surprising. To expect otherwise could only make sense if borrowers are assumed to drive the credit market while lenders and savers are passive. What policymakers cannot grasp, apparently, are the elementary economics of a market that is not permitted to clear.

From early times, maximum prices imposed by law have famously led to hoarding, shortages, and smuggling. Symmetrically, minimum prices have led to underutilization and spoilage. Fixing the lawful price of any commodity, product, or service leads to either one wasteful disequilibrium or the other. A rate close to zero for short-term credit incapacitates the market-price mechanism and hurts the economy by forcing markets to allocate capital arbitrarily or politically.

The economic effects of Fed interest-rate control differ from those of a legally mandated zero interest rate. The Fed constantly intervenes in the wholesale securities markets to buy or sell whatever amounts are sufficient to peg the rate near zero, allowing borrowers and lenders to respond as they please. The question is not simply one of shortage or glut, but of a misallocation of the country’s resources.

The gasoline market in Mexico could be a parallel. Government-owned oilfields produce petroleum that reaches the public in the form of fuel at an artificially low price. Microeconomics dictates that Mexicans overconsume gasoline as a result, leading to waste in their energy and energy-using industries. Similarly, the Fed's zero interest-rate policy misprices credit, causing industries throughout the economy to misallocate it. In either case, the economy's productivity is degraded.

Artificially low interest rates permit borrowers who should not be borrowing to get funds from lenders who shouldn't be lending to them. They crowd out some potential borrowers and lenders who could have produced credit for more productive purposes. Common language calls this situation "cheap money." The marginal cost of borrowing is cheap for the lucky recipients, of course, but not for the economy as a whole.

Because the capacity of the economy to create credit is finite, credit needs to be allowed to flow to the most productive uses that markets can discern. A distortion of market interest rates imposes unseen costs on the nation generally.

Empirical Verification that Monetary Policy Works

There is a dearth of historical evidence that Fed tools have had the economic effects that are now so widely expected. The simple empirical facts about the way monetary policy actions have been correlated with the economy receive surprisingly little public attention (see Ranson 2013 for highlights of the empirical evidence outlined here).

Monetary policy can be quantified in two basic ways: quantity and price. The Fed's effort can be expressed by the volume of money that is created or which is added to its assets or the liabilities side of the banks' balance sheets. Or it can be measured in terms of the changes it induces in the price structure for credit.

On the price side, a decline in the Fed's target short-term interest rate is widely believed to boost the economy. But historical correlations over long periods of time tell a different story. Allowing for leads and lags, both increases and declines in interest rates have led ultimately to lower output. And whereas active use of monetary policy is supposed to stabilize the economy's performance, ups and downs in short-term rates are associated historically with growth that is not only slower but more volatile.

On the quantity side, an increase in the monetary base or in bank reserves is widely presumed to lead to a better economy. But historical correlations between the growth rates of the monetary base and the economy are inverse. Proponents of quantitative easing can interpret this as reverse causation, that is, from the economy to policy. But the corresponding correlation of monetary base growth with a variety of inflation indicators is positive. To make sense of that, the direction of causation must go from policy to the economy. Whatever the correct dispositions of chickens and eggs, the evidence falls far short of providing clear validation for the Fed's current policies.

Needless to say, the econometric literature on monetary policy goes far beyond the analysis of simple correlations. Its practitioners (including the Fed's own staff) advocate "structural modeling" and some occasionally dismiss simple correlations as inconclusive. I have multiple responses to this objection.

First, throughout the observational sciences, all correlations are inconclusive by their nature—and not just for chicken-and-egg reasons. How can the complex be easier to interpret than the simple? The more intricate the evidence, the more scope there will be for doubt and dispute.

Second, structural models are an intensely disputable basis on which to justify policy. Different researchers have different prior beliefs that lead them to formulate different structures and draw different conclusions from the same evidence. The Fed's own "dynamic stochastic general equilibrium" models are a case in point of the built-in assumption that the economy is predictable and monetary policy is effective.

Third, simple correlations come to us from direct observation unbiased by any assumed structure. Other observational sciences cite them routinely and take them seriously—as do economists too, when it suits them.

Fourth, structural modeling is a field to which only a select body of professional economists has access. The broadest possible public needs to know the simple empirical facts, and should share the task of recognizing and interpreting them.

Politicization of Monetary Policy

The Fed is a political enterprise. Realists must question whether central banks have the objectivity to adhere to principle in times of

crisis or economic malaise. The doctrine of “regulatory capture” supports casual impressions that the Fed is always mindful of the health and profitability of the commercial banks that are its clientele. It is as likely as not to be swept up in a financial panic. Supportive actions get high priority. Under criticism Fed leaders have resisted this suspicion, but one instance may illustrate why it should not be dismissed.

In 2007, as signs of a banking crisis began to increase, the Fed started cutting interest rates. In November outgoing St. Louis Fed president William Poole told the Cato Institute that “the Fed never bails out any party—even banks—with capital or any sort of guarantee. . . . Whenever the Fed steps in to deal with financial instability its intent is to stabilize the overall economy, not just one segment of it, such as Wall Street.” Poole (2007) supported his point with stock-market evidence: “I reviewed all stock market declines of at least 10 percent going back to 1950, along with actions by the Federal Open Market Committee over the same span. The data prove that the FOMC has not lowered interest rates in systematic fashion at the time of stock market declines.” Poole was right about the general stock market. But in the process of taking another look at the evidence, I used a more specific index of bank stocks to detect the existence of a threat to bank profitability and solvency. By that measure, the banking industry got into most trouble in 1990–91 and 2000. Following both of those periods large Fed rate cuts took place. From more systematic tests I found a consistent relationship between bank stock prices and Fed interest-rate policy (Ranson 2008).

Fed interest-rate cuts, whether or not they are needed or efficacious for the economy, have enabled banks to work their way out of threats to their collective balance sheets. By cutting rates the Fed steepens the yield curve and widens the spread between the rate at which depository institutions lend and the rate at which they borrow. If rates are pushed below the levels at which they would stand if the Fed did not intervene, that’s an implicit subsidy.

Tyranny of the Status Quo

Over time, political philosophies influence what economic statistics are used and how they are interpreted, adding to a kind of tyranny of convention in economic diagnosis. And in tracking the economy, the Fed is obliged to follow convention like any

government agency. But distortions can arise where measures of economic performance have been designed by government for the benefit of government. They are capable of obfuscating policy failure and holding back its recognition.

The Fed is unwise to evaluate the progress or success of its monetary policy based on uncritical use of statistics that receive the overwhelming but superficial attention of the media. Headline statistics for the labor market, for example, have given the impression that progress is being made because the number of workers defined as “unemployed” has declined relative to the so-called labor force. Early in the recovery, Fed statements identified an unemployment rate of 7 percent as a sign that the economy would have advanced to the point that it might back off.

Transcending arbitrary definitions of the labor force and the number of unemployed, harder numbers point to a very different judgment. In more than four years, the ratio of employment to population of working age has barely even begun to recover from its collapse in the recession. Several measures of this ratio all dropped by about one fifth during 2007–09, but the slow speed of their improvement since the bottom suggests that it will take a further decade or two to reapproach prerecession levels.

The central headline statistic on the basis of which the Fed makes decisions and judges its success is the rate of inflation. The annual change in the official consumer price index is presently so low that policymakers can use it to argue that the inflationary effect of what the Fed has done can be disregarded. Or even that the specter of “deflation” still looms, thus appearing to require increased doses of the same policies.

Whether we have a historically high or historically low inflation rate is less clear than is widely realized, and in light of the low-inflation assumption in Fed thinking deserves much more scrutiny.

It's imperative to begin by recognizing that inflation is an ill-defined concept. There exists no single inflation rate that everyone could accept as authoritative. As the Austrian-American economist Gottfried Haberler warned more than 80 years ago, “The relative position and change of different groups of prices are not revealed, but are hidden and submerged in a general index” (Haberler 1928: 444). Inflation varies from one group of people to another, one place to another and one economic activity to another. The inflation rate

for goods, especially technological goods, is very different from the inflation rate for services.

All in all, what is glibly called *the* rate of inflation is a fiction and can be actualized only as some kind of average price increase in an astronomical number of consumer products and services. One definition of inflation may produce estimates that are much higher than those from another. Beyond that, the headline consumer price index, along with the personal consumption deflator and other derivatives, slips by major conceptual difficulties. The CPI consists mainly of large numbers of price quotations that barely change at all from month to month. That's not because markets aren't changing, but rather because of greater reliance on posted prices than actual transactions. Except for well-defined commodities, personal observation suggests that the nature and features of consumption goods are changing all the time. Few price changes can be measured without ambiguity.

Most important, the consumer price index is overhauled and redefined periodically in the political arena. Against good practice in statistics, the official history of the cost of living is a cobbling together of a series of different indices, each of which had temporary official status at one time. Different iterations give amazingly different estimates of inflation (see Williams 2012). Addressing such objections points toward an inflation rate that is much more fluid than the official one—and historically above average. By placing such an ambiguous index at the center of its deliberations the Fed may have misled both itself and the public.

Conclusion

The Fed's decisions are hampered by the need to preserve banks that are “too big to fail” and by flawed methods of evaluating the labor market or the cost of living in public discourse. But there are reasons to fear that, even if all obstacles could be corrected, there is something inherently ineffective about the Fed's current monetary policies. The assumption that they have stimulated or bolstered the economic recovery is based much more on doctrine than on evidence.

When a policy is unsuccessful, policymakers should rethink it and try something different. But that is unrealistic here. Opponents of existing policy argue that it has failed because it is wrong. Supporters counter that it needs more time to work, or has been deployed on an insufficient scale.

In adversarial politics the broad direction of economic policy has become a philosophical choice. The two sides are separated by a fence that divides advocates of “big government” from “small government,” egalitarians from libertarians, and so forth. This impasse is the result of politics and will have to be resolved by politics. Only the electorate can change the broad direction of unsuccessful policy, because its authors will not.

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THE FEDERAL RESERVE AND THE DOLLAR

Lewis E. Lehrman

To evaluate the history of the Federal Reserve System, we cannot help but wonder, whither the Fed? and to consider wherefore its reform—even what and how to do it. But first let us remember whence we came one century ago.

The End of the Classical Gold Standard

No one knew better than Jacques Rueff, a soldier of France and a famous central banker, that World War I had brought to an end the preeminence of the classical European states system and its monetary regime—the classical gold standard. World War I had decimated the flower of European youth; it had destroyed the European continent's industrial primacy. No less ominously, the historic monetary standard of commercial civilization had collapsed into the ruins occasioned by the Great War. The international gold standard—the gyroscope of the Industrial Revolution, the common currency of the world trading system, the guarantor of more than 100 years of a stable monetary system, the balance wheel of unprecedented economic growth—was brushed aside by the belligerents. Into the breach marched unrestrained central bank credit expansion, the express government purpose of which was to finance the colossal budget deficits occasioned by war and its aftermath.

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The Rise of Discretionary Central Banking

With the benefit of hindsight we can see that quantitative easing (QE) was actually inaugurated with World War I. We can see also that discretionary central banking in the United States coincided with the founding of the Federal Reserve System. After the banking panic of 1907, the Federal Reserve Act of 1913 was designed to provide “an elastic currency” but also to reinforce the international gold standard. Thus, Federal Reserve sponsorship of floating exchange rates in 1971 would become one of the great ironies of American monetary history.

To interpret the financial events associated with the Great War and their effect on the ensuing 100 years, my colleague John Mueller and I have highlighted two crucial events of 1913. First, of course, was the establishment of the Federal Reserve System, and second, the publication by the young John Maynard Keynes of his book, *Indian Currency and Finance*. The inauguration of the Federal Reserve and the intellectual foundation provided by the monetary ideas of Keynes, taken together, soon gave rise to a perfect intellectual and financial storm—a storm which would last a century.

The Influence of Keynes

Keynes had argued in his book *Indian Currency and Finance* that whether a central bank holds its reserves in gold or in foreign exchange “is a matter of comparative indifference,” and that “in her Gold-Exchange Standard, . . . India, so far from being anomalous, is in the forefront of monetary progress” heading toward “the ideal currency of the future” (Keynes 1913: 30, 259, 36). In this prewar book, Keynes foresaw the interwar reserve currency roles of sterling and the dollar—an official reserve currency system that Keynes and other British monetary experts succeeded in pressing the European Great Powers to adopt at the Genoa Conference of 1922. By displacing the classical gold standard, and by avoiding deficit settlements in gold, it is no secret that Keynes hoped to forestall repayment of huge sterling debts held by other countries in the form of sterling foreign exchange reserves. Moreover, in the absence of the reserve currency roles of the dollar and sterling, the wars, budget deficits, and balance of payments deficits of the Great Powers could not be so easily financed, except by onerous taxation. Would a postwar democratic people vote in the majority to tax themselves for these purposes? If not, would

the inevitable outcome of government policy be inconvertibility, floating exchange rates, and discretionary central banking? We shall see.

Rueff's Dissent

In 1932, ten years after Genoa, and after Britain had abandoned sterling convertibility to gold in 1931, Rueff analyzed the real-world problems of Keynes's reserve currency theory, and he described the role of the gold exchange standard, a reserve currency system based on sterling and the dollar, in causing the 1930 financial crisis and the Great Depression. Briefly, Rueff ([1932] 1964: 52–53) pointed out that when a monetary authority accepts dollar or sterling claims for its official reserves, instead of settling its balance of payments deficits in gold, purchasing power “has simply been duplicated, and thus the American market is in a position to buy in Europe, and in the United States, at the same time”—tending to cause asset or price inflation. The same was true of the British market. Conversely, the sudden, rapid liquidation of official sterling and dollar reserves could cause equally rapid shrinkage of the banking and credit system, leading to deflation and depression as in the 1930–33 episode.

In disagreement with Keynes and Irving Fisher (whose monetary theories would later be adopted by Milton Friedman), Rueff argued that in a reserve currency system “high-powered” money must include both domestic and foreign official monetary liabilities. After World War II, the same gold exchange standard, based this time on the unique reserve currency role of the dollar, was reestablished at the heart of the Bretton Woods international monetary system. Though it was an improvement on the interwar monetary system, Rueff correctly predicted (and tried to prevent) the dissolution of Bretton Woods, which, after perennial foreign exchange crises, collapsed in 1971.

I cite Rueff's experience during the interwar period because, among other major events, he was involved in the successful stabilizations of the French franc after the two World Wars. As secretary of the French Treasury, and as deputy governor of the French central bank, his hands-on experience reinforced his path-breaking views on monetary economics. I recommend his theoretical and policy studies not least for the practical reason that his genius inspired two vital restorations of franc convertibility to gold and renewed French economic growth in 1926 and 1959, even as Great Britain failed in 1925,

and the United States in 1971. Rueff's success, I believe, was in part due to the fact that he was not only a gifted monetary economist but a successful practitioner, whereby he had shorn himself of the illusions of his academic counterparts.

Considering his more than 20 publications, a few of which have been translated to English, I can focus only on several Rueffian axioms—especially those linked to central banking. I shall try to put them in the context of one century of Federal Reserve operating techniques and their results.

Axiom 1: Central Banks Cannot Determine the Quantity of Money in Circulation

If a country decides to establish a central bank, Rueff's fundamental rule by which to guide the central bank is to understand that no central bank, not even the mighty Federal Reserve System, can determine the quantity of money *in circulation*—except perhaps in a totalitarian social order. In taking this position, Rueff departed from then-ascendant Keynesian orthodoxy. Rueff and Keynes debated one another on monetary economics as did Rueff and Irving Fisher, whose monetary theories Milton Friedman later modified, and they used the terms money and cash balances interchangeably. As Rueff pointed out in his trenchant summary of their differences, “The Fallacies of Lord Keynes’ General Theory” (Rueff 1947), “for Keynes, the quantity of money which the banking system has created is a datum. The total amount of individual cash holding has to be adapted to it. I am convinced, on the contrary, that it is the total of cash holdings desired by individuals which, thanks to the mechanism of [monetary] regulation, determines the quantity of money in circulation” (Rueff 1947: 357). Keynes declared in chapter 13 of *The General Theory* that “the quantity of money is not determined by the public.” Moreover, he presumed that the authorities can “control the activity of the economic system by changing the quantity of money” (Keynes [1936] 1965).

In the end, neo-Keynesians and monetarists who believed that the central bank can determine the quantity of money in circulation—and thereby successfully “govern” the economy—could not deny the evidence of reality. Taking only one example, between 2008 and 2013, the Federal Reserve more than quadrupled the monetary base, but the quantity of money in circulation (say M1) increased only a

small fraction in proportion to the central bank's monetary base. Subsequently, the CPI increased on average only 2 percent annually. There has, of course, been a great asset price inflation, but economic recovery has been the slowest of the postwar years.

Does it matter that the Federal Reserve cannot determine the quantity of money in circulation? Consider what happens when the Fed suppresses interest rates to near-zero and issues massive amounts of new money and credit to pay for purchases of Treasury and mortgage-backed securities during periods of sustained quantitative easing (2008–13). But market participants may not desire to hold all of the new money and credit issued. The market outcome must be interest rate arbitrage by speculators and investors who get the new credit first. But interest rate suppression and sustained, excess, undesired money are the necessary conditions of asset or price inflation, since interest rate arbitrage causes total demand for higher yielding assets to exceed total supply, the interest rate arbitrage thus causing mainly asset price inflation. Banks, brokers, and speculators, with marketable collateral and ready access to the banks, commandeer the new credit at near-zero interest rates. With cheap new money the financial elites buy and arbitrage, worldwide at little risk, all relatively undervalued financial assets, foreign exchange, commodities, real estate, farmland, and art—any asset they believe will protect against future asset and price inflation and is likely to be profitable during the period where asset prices are sustained by quantitative easing. Since the consumer price index or consumer products are not the betting objects of banker-broker-investor speculation, the illusion persists of low inflation (as it is conventionally measured by the CPI). But economic wealth does not consist only of current consumption goods. Commodities, real estate, and financial assets, which may be considered claims on future consumption goods, are articles of wealth desired in the market. Thus, a great global asset inflation can hoodwink the population and the government economists whose defective economic models are focused not on the inequalities of asset wealth caused by interest rate suppression and QE but, rather, on the CPI (i.e., consumption goods). As in the past, only when the asset bubble bursts will the scales drop from their eyes—and after the damage is done.

Moreover, there is a profound difference between Fed-issued nominal cash balances and the subsequent purchasing power of the real cash balances remaining after the asset price inflation

is complete. Asset (and price) inflation—occasioned by interest rate suppression and excess nominal cash balances put in circulation—is proportional to the difference between the nominal cash balances issued by the banking system and the amount of cash balances market participants *desire* to hold. The undesired difference is offloaded on assets or goods. After the (asset or price) inflationary process is complete, the nominal cash balances then in circulation have been depreciated in purchasing power—to the level of real cash balances. In a word, the market process of quantitative easing in the long run depreciates the purchasing power of the dollar, whether in terms of current consumer goods or assets representing claims on future consumer goods, or both.

Conversely, when market participants as a whole, for whatever cause, desire to increase their cash balances, then the price level must fall as market participants sell assets and also refrain from buying, in order to raise the cash balances they desire to hold. In this deflationary case, the purchasing power of the dollar would be rising. This was the case in 2008.

If then, a central bank cannot determine either the quantity of money in circulation or the rate of economic growth, what according to Rueff can a central bank realistically do? To conduct operations of the central bank, there must, of course, be a target. But if the target is manifold—embracing price-level stability, full employment, and interest rates deemed consistent with a certain level of money and credit—central bankers must know not only the magnitude of the quantity of money actually desired in the market but also the future desire to hold cash balances. It is true that central and commercial banks supply cash (and/or credit) balances, but it is individuals and businesses in the market—the users of money—who decide for themselves the cash balances they wish to hold or to spend. This they do for their own multiple preferences.

Axiom 2: Use the Bank Rate to Adjust the Demand and Supply of Money

Jacques Rueff took pains to clarify the nature and limits of central bank powers in the form of another general axiom: use the discount or “bank rate” to adjust the demand and supply of money (i.e., cash balances). Because the money stock cannot be precisely determined by the Federal Reserve, nor can it determine precisely the rate of

inflation and economic growth, it follows that the monetary policy of the central bank should not target the money supply, rate of interest, rate of inflation, employment, or economic growth. But if the goal of the central bank were to rule out sustained inflation and deflation—that is, a market-based policy consistent with the optimum use of the factors of production associated with steady economic growth—then, the operating target of the central bank must simply be to influence the supply of cash balances in the market such that they tend over time to equal the level of desired cash balances. Such a goal is scaled to the humble wit of man. To attain this goal the central bank must abandon hyperactive open-market operations (e.g., QE) that give off false price signals and more than anything else destabilize both the financial and economic markets.

Instead the central bank, having abandoned open-market operations, must then remobilize the discount rate. The central bank would set the discount rate above the market rate when, for example, the price level is rising—providing money and credit only at an interest rate that is not an incentive to create excess cash balances. In fact, sustained, undesired, excess cash balances constitute the necessary condition of inflation. Indeed, if the principal target of a workable monetary policy were a stable monetary order, long-run stability of the general price level, and optimum economic growth, the banking system should supply bank credit and currency in the amount approximately equal over time to the demand for them. Now, if the supply of cash balances is approximately equal to the desire to hold them, the price level must tend toward reasonable, long-run, stability. So too the monetary order. If there were no excess cash balances, there would be no excess demand, and thus, there could be no sustained rise in the price level. Moreover, with such a target there should be no sustained deflation caused by scarcity of desired cash balances. Because, in scarcity circumstances associated with incipient deflation, the central bank would lower the discount rate below the market rate and monetize eligible, liquid financial claims offered to the central bank—thereby supplying scarce cash balances to the participants in the markets who desired them.

Axiom 3: A New Quantity Theory of Money

Rueff's monetary theory and policy finally came to grips with—indeed, it modified—the famous and controversial Law of Markets of

Jean-Baptiste Say, abuilding of course on Say's insights but perfecting the flawed quantity theory of money.

Irving Fisher had carefully distinguished between money and bank credit in stating his famous “equation of exchange” in *The Purchasing Power of Money* (Fisher 1911): $MV + M'V' = PT$, where M is the supply of money, M' the supply of bank credit, and V and V' referred to the “velocity of the circulation” of money and bank credit, respectively. For Fisher, unlike modern monetarists, P and T referred to the price and transactions volume of all wealth exchanged for money—including financial claims and capital goods, not just the final products of labor and capital (or to use more recent terminology, of human and nonhuman capital). Later monetarists, following Milton Friedman, lump the M 's and V 's together so that they refer to composite money-plus-credit aggregates and use the formula $MV = PY$, where P and Y refer only to the price and volume of final output of goods and services, measured for example by GNP or GDP. Rueff pointed out that Fisher's (and by extension, Friedman's) Equation of Exchange is always true, “because it simply states that the amount of payments made over a certain period is identically equal to the value of goods paid for during this period. However, the Equation of Exchange, like the quantity theory, calls for a basic reservation as regards the meaning to be ascribed to it. As a matter of fact, in the form in which we have stated it, and contrary to what is too commonly believed, the equation of exchange does not allow for any causal interpretation. In particular, nothing in this theory would justify the assertion that changes in the quantity of money should always be the cause of variations in the general price level” (unpublished Lehrman Institute translation, in Rueff's *Collected Works*, Vol. 1: 19–20). As an empirical matter, Rueff found that V and V' tended to vary with the business cycle—rising and falling with wholesale prices (endogenous more than exogenous or causal).

In *A Monetary History of the United States, 1867–1960*, Friedman and Anna Schwartz (1963) lumped together money and credit into aggregates they called the “money stock,” and strongly implied exactly the causal relation between money and income against which Rueff had warned. Friedman and Schwartz (1963: 676) write:

Throughout the near-century examined in detail we have found that: 1. Changes in the behavior of the money stock have been associated with changes in economic activity,

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money income, and prices. 2. The interrelation between monetary and economic change has been highly stable. 3. Monetary changes have often had an independent origin; they have not been simply a reflection of changes in economic activity. These common elements of monetary experience can be expected to characterize our future as they have in the past.

It may be argued that Friedman's "highly stable interrelation" between monetary and economic change was mostly a function of the relative stability of the classical gold standard and the gold exchange standard during much of the period Friedman studies. Thus, Friedman's expectation—that such stable "monetary experience" under different forms of the gold standard and fixed exchange rates would "characterize our future"—could not survive his successful campaign to destroy the attenuated vestiges of the true gold standard incorporated in the Bretton Woods gold-exchange standard, inaugurating the era of inconvertible currencies and floating exchange rates (1971–present), associated as it has been with increased monetary and economic instability.

Rueff (1927, 1945, 1947, 1949, 1955) reformulated the quantity theory of money in the following proposition: aggregate demand is equal to the value of aggregate supply, augmented (+/−) by the difference in the variations during the same market period, between the quantity of money in circulation and the aggregate cash balances desired. Rueff's macroeconomics, unlike that of Keynes, starts from the bottom up, not the top down.

Rueff begins by noting that the equilibrium of the quantity supplied (s) and demanded (d) in the market for any good can be described as:

$$(1) d = pq = s,$$

where p and q are the price and quantity actually exchanged. This is what is described by normal supply and demand curves. We assume that prices are flexible, or that the period under consideration is long enough so that p and q reach equilibrium.

If we sum up the demand and supply of all goods exchanged, we get:

$$(2) D - PQ = S,$$

where D is the total demand of money against goods, S is the total supply of goods exchanged, and P and Q are indexes of the

average price level and the volume of goods sold in a given period, compared with some base period. (Actually, Rueff's equation is $D = kPQ$, where k is a constant relating current dollars to the values of P and Q in the base period. To keep the notation simple, I have assumed that $k=1$, and that the price index $P=1$ to begin with.)

Rueff showed that when P and Q are weighted by the volume of each good actually exchanged, their value is independent of shifts in demand among the various goods exchanged. And so "the general price level index varies directly with total supply of goods against money, and thereby conforms to the general law of supply and demand, like all particular prices" (Rueff 1927: vol. 2: 19).

In short, the change in the price level is equal to the difference between total demand and total supply:

$$(3) D = Q + dP, \text{ or, } D - Q = dP.$$

So we find Rueff, in 1927, discarding the crude quantity theory of money, and speaking in terms of aggregate demand a decade before Keynes. And he points out that the price level is inversely related to the total supply of goods, five decades before the American supply-siders with their "policy mix."

As Rueff summarized his formulation worked out in *Social Order*,

The quantity theory of money can be stated as follows: the general price level varies only as a result of the difference between the simultaneous variations of the total amount of total actual cash balances and total desired cash balances. As long as the variations of the former equal the variations in the latter, the general price level is indifferent to supply and demand, because if supply increases, demand increases accordingly. Similarly, the general price level is indifferent to an increase in the quantity of money in circulation so long as such money is desired [Rueff 1949: vol. 3: 4–5].¹

If the price mechanism is reasonably free and the factors of production are reasonably mobile, Rueff's axiom, or equation of

¹Rueff's equations were put in more familiar modern form in Mueller (1991:17–27; 2010: 341ff).

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exchange, best describes what actually happens in a dynamic free market of ubiquitous monetary exchange. Rueff demonstrated that in a free economy Say's Law does tend to operate—namely, that the total value of supply tends to equal the total value of demand—provided the market for cash balances tends toward equilibrium, thus ruling out sustained inflation and deflation. Rueff emphasized that it is the difference between the variations of the quantity of money and the demand for cash balances during each market period that renders Say's Law an imperfect, theoretical representation of a monetary economy. It must be said that Rueff's monetary theory and policy applies both to regimes of monetary convertibility, and to those which mimic them, as did the pre-Bretton Woods currency systems, reserve currency systems themselves, as well as the post-Bretton Woods dollar-based international monetary system. In each case, money might be brought into existence by the monetization of gold or an inconvertible financial claim (e.g., a U.S. Treasury security).

In a reserve currency system “high-powered” money must include both domestic and foreign official monetary liabilities. This broadening of the monetary base modifies Rueff's equations regarding the supply and demand for money, as Mueller (1991, 2010) has pointed out. To explain inflation in dollar terms, we need to include the increase in foreign official dollar reserves because this represents an excess supply of money, which is prevented by foreign central-bank intervention from leaving the dollar market.

In equation 4, the change in official dollar reserves (dR_s) is “excess money,” equivalent in its effect to an undesired increase in the money supply (M):

$$(4) D - Q = dP = dM - dL + dR_s.$$

The domestic monetary base (M_0) plus foreign dollar reserves (R_s) equals what Mueller and I have called the World Dollar Base ($\$M_w$). So in Rueff's balance between total supply and total demand we replace dM with $d\$M_w$:

$$(5) D - Q = dP = d\$M_w - dL.$$

But Rueff's theory suggests that empirically sound monetary analysis must speak also when necessary of the World Euro Base, World Peso Base, etc.

The Case for Gold

It should be said that modern monetary policy ignores Rueff's fundamental propositions—the result being, as the evidence shows, one century of financial disorder that every careful student may judge for himself. For example, it was conventional wisdom of the monetarists, led by Milton Friedman, to presume that they could regulate inflation, the growth of the economy, the monetary base, or the total quantity of money in circulation through a so-called money stock rule—by manipulating central bank open market operations such that the money stock or the monetary base would grow, say 3 percent annually. In practice, the evidence presented at this conference shows that the Federal Reserve has failed—only one salient example being the disastrous episode of 1979–82. With remarkable humility, Friedman gave his considered, final judgment on the issue in a *Financial Times* interview (London 2003): “The use of the quantity of money as a target has not been a success.” However, Friedman’s nemesis, the neo-Keynesian revival, despite its abject failure in the 1960s and 1970s, has now mutated into the combination of unrestrained fiscal policy, budget deficits, and unprecedented quantitative easing in order to finance government spending and the mortgage industry, debilitated as it is by government control.

So we ask, in the light of the Fed’s failure, is there a better way, grounded in the evidence of monetary history? There is, of course, an available and an availing historic monetary regime—the classical gold standard—that has been tested for centuries in the market place. The essential, institutional mechanism of the classical gold standard is to define a unit of money (the monetary standard) equal to a weight unit of gold. Two of the many merits of such a monetary standard, in virtue of convertibility and the market mechanisms it sets in motion, are to regulate and to limit irresponsible central bank and commercial bank discretion, such that the monetary standard and price level may be reasonably stable over the long run.² Or in the alternative, one could establish and maintain currency convertibility to gold in a regime of free banking with no central bank. Here, it must be added that free financial markets are inherently stable—provided the indispensable free market institution of bankruptcy is fully effective, banking-system discretion is limited by the rule of

²On the case for gold, see Lehrman (2012, 2013) and Paul and Lehrman (1982).

currency convertibility to gold, and official reserve currencies are ruled out.

But academics have argued for more than a century that the gold standard, though a proven, long-run price level stabilizer, absorbs too much real resources in the process of gold production and is therefore, in economic and social terms, too costly. This is a false proposition. Milton Friedman (1960) estimated the resource cost of a gold standard to be about 2.5 percent of national income, whereas subsequent detailed analysis by Lawrence H. White (1999: 48) suggests much less, probably closer to 0.025 percent. This discrepancy was apparently caused by the rapid growth of gold money provided by private dishoarding in a stable monetary system and, as White notes, by the market-based conservation of the gold monetary standard through fractional reserve banking (Friedman assumed a 100 percent gold-backed currency).

As any active, financial market participant learns the hard way, such a *de minimis* cost of a reliable monetary standard would be but a minor fraction of the immense transaction and uncertainty costs borne by the manipulated, volatile, floating exchange rate system of more than four decades. Despite all denials, the competitive currency depreciations characteristic of today's floating exchange rate system are, without a doubt, designed to transfer unemployment to one's neighbor and, by means of an undervalued currency and customs regulations, to gain share of market in manufactured, labor-intensive, value-added, world traded goods. If these competitive depreciations and undervalued pegged currencies are sustained, floating exchange rates, combined with the twin budget and balance-of-payments deficits will, at regular intervals, blow up the world trading system.

This is so partly because the American budget deficits and balance-of-payments deficits were—and still are—almost automatically financed by new money and credit issued by the Federal Reserve, by the global banking system, and by the perverse mechanisms of the reserve-currency regime based on the dollar. These *de facto* U.S. government credit cards supply money and credit without limit to the U.S. government, thus jamming the balance-of-payments adjustment mechanism, as dollar balances accumulate in the official reserves of foreign monetary authorities. These dollar reserves, held in the trillions by foreign monetary authorities, are not inert. They are immediately reinvested, directly or indirectly, in the dollar market for

U.S. securities, financing the growth of government. Moreover, from 2000 until the financial crisis in 2008, foreign dollar reserves were increasingly invested in higher yielding federal agency securities thereby directly financing the housing bubble.

Under the classical gold standard, market mechanisms sustained the effective balance-of-payments adjustment mechanism and global rebalancing. In an imperfect world, peopled by imperfect men and women, the classical or true gold standard—without official reserve currencies—is the least imperfect monetary regime of history. Proven in practice, mutual convertibility of major currencies to gold (i.e., a common global monetary standard) established a coherent, equitable, trustworthy monetary regime by which to mitigate the curse of financial bubbles and currency wars. It was a regime designed by subtle and supple market-based rules to bring about global trade and financial rebalancing and sustain a reasonably stable price level over the long run—such a stable, global monetary order being based on stable exchange rates. The extraordinary economic outcome was the end of the perennial Malthusian era and the onset of steady, long-term economic growth.

Thus, do I argue that by means of the restoration of the true gold standard among the key currency areas, rapid economic growth would resume worldwide—and be sustained. Many gold standard restorations of the past, even in the most dilapidated conditions of inflation, deflation, and depression, have led to robust economic growth—the chronicles of which led to a Nobel Prize for Thomas Sargent in 2011. For establishment economists now to say that such a restoration is politically impossible is to venture into political forecasting—a doubtful enterprise, given their dismal record of economic forecasting.

Historical precedent suggests that after restoration of convertibility, inflation-hedging in unproductive assets would diminish. Anticipating a stable monetary order and a stable general price level, trillions of immense new savings would be channeled by market participants out of global financial arbitrage, speculation, and inflation hedges, into long-term capital markets—there seeking real returns from increased long-term investment in human and fixed capital. Increased savings from income, secured against inflation, would surely augment the flood-tide of investment. Such an outpouring of capital into productive investment must necessarily remobilize sustained demand for unemployed labor at rising real wages in order to work the new and more productive plant and equipment. Indeed,

under the true gold standard, the global economy, as a whole, may even attain balance-of-payments surplus—equal to the increase in official, monetary gold reserves—and thus attain once again the much sought-after global rebalancing; in this case, vis-à-vis worldwide gold producers and dishoarding.

Conclusion

Historical evidence has pronounced its judgment upon the Federal Reserve System—the institution into whose hands Congress entrusted the fiduciary responsibilities of a great nation’s monetary standard, and of its monetary and banking institutions. Let it be said, however, that the men and women of the Federal Reserve System have presided with good intentions. But those intentions beg the issue. No observation could illustrate more decisively the most fundamental of American propositions: that ours is a nation of laws, not of men endowed with good intentions and unlimited discretion to rule over us without our consent. American history reminds us that the solution to the problem of unrestrained central banking lies with the unique power given to Congress under the Constitution (Article I, Section 8) to regulate the value of money and establish the monetary standard, and thus to undertake monetary reform.

I do not underestimate the level of statesmanship required to undertake monetary reform. But we must never forget that it is the constitutional right—and duty—of Congress to ensure sound money. The many failures of central banking, the Fed’s increasing power and privileges acquired during the recent financial crisis, and the detrimental effects of a pure fiat money regime need to be remedied. We have now experienced the defects of one century of American central banking—and the predatory consequences of almost one-half century of American inconvertible paper money.

Under these circumstances, surely we must give thanks for the statesmanship of Rep. Kevin Brady (R-TX), chairman of the Joint Economic Committee, for sponsoring the Centennial Monetary Commission Act of 2013, which aims to study the Federal Reserve System in order wisely to reform it.

America has never yet failed to restore itself. At this centenary of the Federal Reserve Act, I must believe we do have it within our poor powers to restore a monetary system worthy of a great people, a great nation, and a peerless Constitution.

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BOOK REVIEWS

Rise of the Warrior Cop: The Militarization of America's Police Forces

Radley Balko

New York: Public Affairs, 2013, 383 pp.

Criminal justice reform has been gaining momentum in Washington, attracting policymakers from both sides of the aisle. Draconian mandatory minimum sentences, overcrowded prisons, and bloated criminal justice budgets have made reform a bipartisan issue. This is undoubtedly a positive development, but—as is typical with the political process—the most popular reforms are not enough. Most of the political capital and rhetoric focuses on “back-end” criminal justice reforms, such as sentencing reform, early release, and alternatives to incarceration. While these reforms are sorely needed, the “front end” of the criminal justice system—criminal laws, the courts, and policing itself—also needs thorough examination. Radley Balko’s *Rise of the Warrior Cop* is an exemplar of what these assessments should look like in the American context.

So many popular policy solutions today seem cut and dry. Whether it’s the War on Drugs, Obamacare, or the Federal Reserve System, critics can look at where a bad policy started, put a finger on it, and say, “That’s where the government went wrong. If we undo it, things will be better.” With police militarization, neither the cause nor the solution is so simple, and Balko goes to great lengths to show why that is.

Starting with patrols in ancient Rome, to the shire reeves in medieval England (where we get the word “sheriff”), to slave patrols in antebellum America, and through to modern times, *Rise of the Warrior Cop* traces the evolution of policing from a community institution to a governmental entity. In the past 40 years in the United States, there has been a dramatic change from flatfoots walking the neighborhood beat to aggressive teams serving warrants on nonviolent suspects with the help of armored personnel carriers, flash-bang grenades, and battering rams. Through each decade since the 1960s, Balko explains how these changes took place.

Looking at police officers’ Internet message boards where cops talk shop, or even at many police departments’ websites, one may reflexively blame the officers for this change. Plenty of police talk about suspects as if they were enemies to be resented and destroyed. Some don camouflage gear and pose with their militaristic hardware, becoming virtually indistinguishable from a military assault team. SWAT teams were the brainchild of former LAPD police chief Darryl Gates, and some might want to place the fault with him.

While Gates bears a lot of responsibility for police militarization, laying the blame at his feet alone, or even just at the feet of police officers, is too simplistic. “If anything, this is an anti-politician book,” Balko writes.

The social upheaval of the 1960s frightened a lot of Americans. Riots, looting, rising crime rates, and other social unrest made people feel unsafe and thus crime-fighting became a hot-button political issue. To address those concerns, politicians sold themselves as “law and order” candidates, passing harsher legislation to show that they were doing something to deter crime and thus to make citizens safer. Being considered “soft on crime” likely contributed to resounding electoral defeats, thus incentivizing both political parties to up the spending and the rhetoric against crime. In the late 1960s and into the 1970s, politicians at local, state, and federal levels began to link drugs to the public’s fear of crime, and the War on Drugs went into full swing. Drug dealers and users were demonized and became convenient targets for politicians who ramped up enforcement by using tactics long barred by American law.

The complicity that has enabled police militarization extends not only to the police and politicians but to the courts as well. The Supreme Court has played a role in eroding the Castle Doctrine,

which was passed down from English common law (and, as Balko notes, is an idea that dates back to at least Cicero) and holds that a person should be safe from government interference within one's home except in very limited circumstances. If the home must be breached, then it should be done without violence unless absolutely necessary. Today that doctrine is essentially a dead letter. Police routinely use destructive tactics against nonviolent suspects who have not been convicted of a crime. Court-created Fourth Amendment doctrines like "exigent circumstances" that allow warrantless police entry and "good-faith exceptions" to the exclusionary rule have helped eliminate the traditional protections of the home. Those exceptions are read broadly by most courts, allowing police officers to violate these once-sacred spaces almost habitually.

Those changes were not put forth unanimously, however. Balko highlights some of the champions who stood up against the incursions on our rights, such as North Carolina Senator Sam Ervin, who blocked, if only temporarily, liberty-stripping legislation in Congress. Others, like Justice William Brennan, dissented from Supreme Court decisions that put the country on the trajectory toward where cops are often indistinguishable from soldiers. And while the prospects of meaningful rollback of police militarization seem unlikely in the immediate future, using the arguments brought to bear by Senator Ervin and Justice Brennan 40 years ago may prove persuasive to a new generation of Americans.

Rise of the Warrior Cop is an excellent history of the militaristic evolution of American policing. No one political party is responsible for today's predicament, and there was no defining moment that policymakers can revisit to restore the institutional humility that once made the police respect a citizen's front door. But there are steps politicians can take to rein in the broad powers currently trusted to police, and *Rise of the Warrior Cop* points to several.

Many other troubling facets of our criminal justice system—such as racial disparities in enforcement and incarceration, lifelong disfranchisement for felony convictions, and police corruption—deserve as much attention, research, and understanding as Balko brought to this topic. His book is a must-read for anyone concerned with the state of American criminal justice, its reform, and the manner with which police officers treat the general public.

Jonathan Blanks
Cato Institute

Foreign Policy Begins at Home: The Case for Putting America's House in Order

Richard N. Haass

New York: Basic Books, 2013, 208 pp.

For the better part of a decade, the United States has been mired in mediocrity, settling for what feels like a new normal of low economic growth, stagnant wages, political intransigence, and an unending war or terror. Many think America's better days are behind it. Richard Haass, the president of the Council on Foreign Relations, disagrees. In *Foreign Policy Begins at Home*, Haass attempts to reverse American defeatism and assuage fears of American decline, arguing instead that the United States is simply underperforming, suffering from "American made" problems that can be corrected by restoring the "foundations of its power." He explains that America's true strength abroad comes from its strength at home, and if America is to provide global leadership it "must first put its house in order." While much of *Foreign Policy* focuses on policy prescriptions that would restore American strength, the true contribution of the book is its explanation of why such a strategy is needed.

Haass uses the opening chapters to convince readers that American leadership abroad is essential because, to Haass, it is the only option. Only America has the "capacity, habits, and willingness" necessary to lead in a nonpolar world in which the "potential for disorder is considerable." Other nations lack the ability, the desire, or both, to do so.

While Haass overstates the looming dangers of a nonpolar world, he correctly describes it as a forgiving place from America's perspective. Even after two prolonged "wars of choice," an economic crisis, and poor leadership and mismanagement from Washington, the United States holds considerable advantages over other nations: the strongest military, the largest economy, a stable political system, a commitment to the rule of law, and an abundance of natural resources—to name a few. And when you consider the difficulties facing other nations—the frailty of China's economy and political system, Russia's dependence on petrodollars, Europe's general economic malaise and disjointed structure, Japan's aging population, and India's corruption and lack of critical infrastructure—it is clear that a direct challenge to America is unlikely.

Haass is correct, the United States faces no existential threats. The countries often cited as potential rivals to America are more concerned with internal issues, and they currently lack the ability to project power over great distances. Moreover, according to Haass, those countries are dependent on the international system for their own well-being and are therefore “disinclined to attempt to disrupt an order that serves their national purposes.” Thus, Haass asserts, America has the space to fix what ails it, and it should take advantage of the opportunity to revamp both its domestic and foreign policy strategies because “changing just one would be desirable but insufficient.” America must rebuild at home and refocus abroad, a strategy Haass calls “restoration.”

For Haass, a foreign policy of restoration would require America to be much more restrained in how it acts abroad, relying more on diplomatic and economic means to influence others rather than military means. America would avoid nation building, wars of choice, and would focus its resources on areas where U.S. interests are most vital—namely, the Asia-Pacific and the Western Hemisphere (and away from the Middle East). It would work with others to promote trade and foreign investment, fight terrorism, and deal with issues emanating from weak states. And it would largely disavow faux doctrines of democracy promotion, humanitarianism, and counterterrorism, instead taking on such missions only when costs are low and probability of success is high.

Some of Haass’s other foreign policy suggestions, however, seem to be at odds with his wise prescription of restraint. Because he accepts the conventional wisdom regarding the dangers posed by a nuclear Iran and by North Korea, or posed to allies like Israel, South Korea, and Taiwan, Haass advocates policies that could go badly awry. He warns against striking Iran, but should Israel strike Iran, “the United States would want to do all it could to limit Iran’s reaction, making it clear it would pay a far higher price if it acted in a manner that drew the United States into the conflict.” Haass also leaves the door open for a U.S. strike against Iran. He stresses that the bar for initiating a strike should be high but admits that a strike would still be a war of choice, something he advises against and condemns throughout the book.

Haass supports maintaining a U.S. troop presence in South Korea to deter what would be a potentially costly war between North and South. He goes on to say that America “must communicate sufficient

resolve to its friends and allies, so as not to encourage aggression against them, but not unconditional resolve, lest potentially lead them to undertake provocative or even reckless behavior.” Where does Haass get his optimism? Balancing between “sufficient resolve” and “unconditional resolve” will be difficult, perhaps impossible. More likely, the United States will overcommit to its allies and either be drawn into an unwanted conflict or be seen as an unreliable friend and a weak nation.

Many of Haass’s more hawkish suggestions rest on assumptions that he never seems to question. For example, he never asks if U.S. allies are strong enough to protect themselves without security guarantees. Moreover, the same forces that Haass insists would prevent other nations from disrupting an international order “that serves their national purposes” largely eliminate the need of the United States to be the guardian of international stability.

With respect to domestic policy, Haass outlines several key areas in which the United States should take immediate action: debt and deficit reduction, energy, K-12 education, infrastructure, and immigration. Generally, his suggestions are a moderate’s greatest hits: reduce the debt through a balanced, “Simpson-Bowles” type approach; increase the domestic supply of carbon fuels though responsible extraction while implementing policies and regulation to reduce domestic demand; reform education to fit today’s job market; reform and rationalize the legal immigration system while securing the borders; and invest money in roads and bridges. Haass insists that his recommendations, including those regarding economic policy, would create a more resilient country that could better withstand large disasters, whether man-made or natural.

In his attempt to placate all sides, however, Haass at times contradicts himself. He advocates a business-friendly tax and regulatory system while also calling for a carbon tax that would put undue burden on American businesses. Haass also argues that the reputational damage done to America’s economic and political system could make others “much less likely to adopt open economic and political models and instead opt for more statist systems with less scope for individual freedom and markets,” but he says this while simultaneously advocating top-heavy policies in America. For example, Haass supports the federal government using money to incentivize states to adopt national education standards (Common Core), as well as

calling for greater fuel efficiency standards for motor vehicles and appliances.

The author's most meaningful policy contributions involve the defense budget. In discussing debt and deficit reduction, Haass calls for defense spending cuts of 5 to 10 percent. This is too modest a figure for a country that exists in a relatively safe world, and it is certainly too modest for a country that is in need, as Haass feels it is, of significant fiscal restructuring. But for an admitted "card-carrying member of the foreign policy establishment" and a former Bush official, calling for such a reduction is a step in the right direction. Haass also insists that the military entitlement system, which is "consuming an ever larger and unsustainable share of the total defense budget," needs to be reformed, an issue on which most people privately agree but few have the courage to say aloud.

Haass should also be applauded for highlighting issues rarely discussed in foreign policy circles but that are crucial for a country running massive deficits. Haass points out that U.S. debt, which should include local and state debt along with that of government-sponsored enterprises, is much higher than commonly reported. He also explains the importance of the bond market and interest rates to America's fiscal health.

One of the major shortcomings of *Foreign Policy* is the amount of time Haass spends addressing the issue that he deems the cause of most of America's ills: a broken political system. He spends a brief chapter outlining what he sees as the major problems: gerrymandered districts, a political funding system that hinders the development of broad coalitions, vast media options that create a more divided and less knowledgeable public, and special interests that have crowded out the general interests. But his recommendations seem uninspired. Some are plausible, such as making it easier to bring bills to the floor, reorganizing congressional committee structures to reduce overlapping jurisdictions, and increasing fast-track authority for trade deals. Others, like abolishing the Electoral College, are nonstarters. One of Haass's suggestions, making it easier to vote on presidential appointees, was recently adopted by the Senate, though the change to the filibuster rules seemed only to exacerbate political tensions.

Haass spends even less time on the lack of strong leadership, arguably the issue that undergirds America's broken politics. He describes the type of leadership needed as a "willingness to

advocate policies that are inconsistent with the narrow interests of many groups and individuals but that would be good for the society and country as a whole,” and he believes that such leadership is a prerequisite to restore the foundations of America’s power. He goes on to admit, however, that it would be difficult for anyone fitting such a description to survive in today’s political environment.

Despite its shortcomings, *Foreign Policy* is a worthwhile read for anyone wanting to know more about the world and the issues America currently faces. Richard Haass adequately defends his central thesis: American leadership is needed but can only be provided if America is strong at home. His policy recommendations would go a long way to restore American strength at home and abroad. But his suggestions should not go unchallenged. Haass would have been better served to question his assumptions about the dangers posed by a nuclear Iran, North Korea, and climate change. Once one realizes that those issues, like many others, are overhyped, then the conclusion is clear: America could do even less abroad and put its house in order more quickly than Richard Haass appreciates.

Travis Evans
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Why Capitalism?

Allan H. Meltzer

New York: Oxford University Press, 2012, 143 pp.

Allan Meltzer is one of the world’s most distinguished monetary economists and financial system experts. He is also a font of horse sense when it comes to how societies work and how they fail.

In *Why Capitalism?* Meltzer has assembled a number of short studies of policy, the good and the bad, tied together by an aphorism from Immanuel Kant: “Out of timber so crooked as that from which man is made, nothing entirely straight can be carved.”

The quote comes from Kant’s essay “Idea for a Universal History from a Cosmopolitan Point of View,” and it addresses a deep problem of politics: “Man is an animal which, if it lives among others of its kind, requires a master. For he certainly abuses his freedom with respect to other men, and although, as a reasonable being he wishes to have a law which limits the freedom of all, his selfish animal

impulses tempt him, where possible, to exempt himself from them. He thus requires a master, who will break his will and force him to obey a will that is universally valid, under which each can be free. But whence does he get this master? Only from the human race. But then the master is himself an animal, and needs a master.” Kant called that “the hardest problem of all” and concludes that “its complete solution is impossible.”

Meltzer calls that “the Kantian problem” and from it he draws implications about the legal and regulatory frameworks of modern economies. One cannot expect moral perfection from human agents; we’re all imperfect. Focusing on incentives that are likely to produce desirable outcomes is far more reasonable than exhortations from imperfect humans to imperfect humans to follow the rules because they are right in and of themselves. It’s not that Meltzer is against exhortations; it’s just that he thinks they’re less likely to get the desired results than institutional designs that incorporate incentives for desirable behavior and disincentives for undesirable behavior.

Of course, that presumes that there is some consensus on the desirable and the undesirable. Meltzer deals with that issue by implicitly assuming that we prefer prosperity over poverty and then arguing that a relatively limited government (rules of the game plus public goods plus some income redistribution) is necessary for the goals he stipulates. According to Meltzer, “Governments have a role in promoting growth and living standards—they are responsible for safeguarding the political infrastructure under which savings can best increase and generate productive investment. Governments exist to foster property rights and freedom of choice, encourage competition internally, where possible, and externally (free trade abroad), facilitate growth by providing quality education (South Korea’s postwar record of educating millions has been spectacular), maintain the rule of law, and reduce uncertainty about the future.” That’s an aspirational statement of what Meltzer believes good government will do, but not necessarily why “governments exist,” since plenty of governments are primarily predatory rather than providers of services. Meltzer also directs his attention to the design of social policies—such as those intended to reduce smoking, alcohol consumption, and narcotics use—and alerts advocates of such policies to the dangers of perverse incentives.

Meltzer favors regulated markets, in the sense that markets are subjected to rules. That gives him the opportunity to discuss what

rules will achieve desirable outcomes. As he argues, the cause of the recent financial crisis was not a lack of regulation: “All financial markets have been heavily regulated for decades.” The problem was inept regulation that did not take into account Kant’s maxim. Poorly designed regulations will be circumvented and, in the case of the Basel Accord governing bank capital adequacy, that led to “evasion that was nontransparent.”

Meltzer offers several statements of his “laws of regulation” in the book:

- “Lawyers and bureaucrats regulate. Markets circumvent regulation.”
- “Regulations that are costly to comply with and to administer make circumvention easier.”
- “Regulations are static. Markets are dynamic. If circumvention does not occur at first, it will occur later.”
- “Regulation is most effective when it changes the incentives of the regulated.”

Meltzer applies those maxims to a wide range of topics, including economic growth, income distribution, bailouts and the policy of “too big to fail,” deposit insurance and banking reserve ratios, and other issues. He also offers quite interesting essays that deal with the growth of U.S. budget deficits, discretionary monetary policy, the Phillips Curve, stagflation, foreign aid, and his prophesied return of inflation.

*Why Capitalism?*⁹ offers a short (143 pages), readable, and timely collection of insights from a distinguished economist. It’s accessible throughout and a valuable application of a principle attributed to Napoleon Bonaparte: “Never ascribe to malice that which is adequately explained by incompetence.”

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Change They Can’t Believe In: The Tea Party and Reactionary Politics in America

Christopher S. Parker and Matt A. Barreto

Princeton, N. J.: Princeton University Press, 2013, 361 pp.

Political science professors Christopher Parker and Matt Barreto investigate the causes and consequences of support for the tea party

movement in their book *Change They Can't Believe In: The Tea Party and Reactionary Politics in America*. They suggest the tea party is a reactionary right-wing movement, akin to the 1920s Ku Klux Klan, that perceives “the election of Barack Obama, the first black president of the United States,” to represent change that “threatens to displace the segment of America that the Tea Party has come to represent: mostly white, middle class, middle-aged men.” Specifically, they suggest tea partiers believe Obama’s position as the most powerful person in the world threatens to “undermine their sense of social prestige” and that tea partiers fear they will no longer receive “the deference to which they have become accustomed” as members of the white majority. Throughout their work, there are a number of methodological problems that lead them to overemphasize the role of racism and social dominance in the tea party movement and place too little emphasis on the economic complaints of the movement.

In this review, I will focus on three main points: their test of whether the tea party is comprised of “reactionary” or “responsible conservatives,” their statistical methods testing if racism and a preference for social dominance drive tea party supporters, and their comparison of the tea party to the Ku Klux Klan of the 1920s.

The authors prematurely reject the argument that the tea party is primarily motivated by genuine concerns about spending, the size and scope of government, and taxes in part because they rely on a problematic comparison of local tea party group websites to the *National Review Online* (NRO). From this analysis, they conclude the movement is a contemporary manifestation of paranoid reactionary conservatism.

If the tea party is sincere, argue the authors, then it should be comprised of what they call “responsible conservatives” who prioritize “maintaining order and stability while allowing at least incremental change as a means of avoiding revolutionary change.” Responsible conservatives should also “accept gracefully social and economic changes that have firmly been established in a successful way of life.” Otherwise, tea partiers must be reactionary conservatives motivated by “extreme reactions to change” and are concerned with subversion and displacement of the “dominant” group leading to “paranoid social cognition and conspiratorial thinking.”

This “responsible conservative” litmus test raises several questions. First, why are there only two options? Their method sets up a

situation that precludes conservatives from desiring social change without being categorized as nefarious reactionaries. How would libertarians be categorized with this approach? Using their method, the only sanctioned position for conservatives is to ask liberal reformers to slow down, not change course. This also assumes that New Deal economic debates have been resolved, but this is simply not the case.

As part of their method to determine if the tea party is comprised of “responsible conservatives,” the authors measure if tea party websites are significantly different from articles on the *National Review Online*, their measuring stick for responsible conservatism. The authors then categorize and compare articles on the NRO and tea party websites according to issues they associate with “fusionist” responsible conservatism and others they associate with reactionary conservatism. It should come as little surprise that the content comparison between tea party group websites and the NRO did detect significant differences. For instance, the NRO was more than six times as likely to mention “responsible” issues such as foreign policy and national security, and three times more likely to mention social issues. Tea party websites, on the other hand, were six times more likely to mention what the authors deem as conspiratorial issues, labeled “Conspiracy/Socialism/Govt. Bad.” For instance, websites which urged supporters to oppose “Elected officials who support Socialist Government and forced redistribution of wealth,” or those claiming the president was moving the country closer to socialism would be categorized as conspiratorial. Based on the differences between tea party and NRO website content, the authors conclude that “the Tea Party supporters are different from mainstream conservatives” because “the Tea Party and its supporters are reactionaries.”

Parker and Barreto’s analysis raises several additional issues. They offer no clear category to measure the explicit overriding themes of the tea party movement, that is, opposition to redistribution (such as the stimulus, bailouts, spending, and taxes) and the “government rewarding bad behavior,” as tea party catalyst Rick Santelli put it. Instead, they categorize such concerns as “Conspiracy/Socialism/Govt. Bad.” But by lumping frustration with government (“Govt. Bad”) and redistribution into the same category as conspiracies, they combine substantively different types of concerns into one. For instance, by categorizing as “conspiratorial” the tea party belief that Obama is moving the country toward socialism, they assume this complaint is a proxy for an abstract fear of Obama.

Yet a CBS/*New York Times* poll found that tea partiers were the only political group in which a majority could—using their own words even—correctly define the word socialism, by a margin of 56 to 22 percent compared to non-tea partiers. If we include those who defined socialism more broadly as redistribution of wealth or as government taking away rights, this margin increases to 76 percent of tea partiers compared to 32 percent of non-tea partiers. For tea partiers, the word socialism connotes a very specific complaint, not just general trepidation.

National surveys indicate that the tea party is clearly the fiscally conservative wing of the Republican coalition. It is hardly surprising that a group of grassroots fiscal hawks would pay disproportionate attention to redistribution and thus differ from a website that appeals to the “fusionist” spectrum of the right-wing coalition. The authors nevertheless create this false choice between “responsible” NRO conservatives and reactionary conservatives anxious over their “social prestige.”

Next, the authors use a statistical method to simultaneously test several possible sources of tea party support and find evidence that the tea party is in part driven by fear of losing social prestige. But the test they constructed likely led them to overestimate the role that out-group hostility and social dominance have played in motivating tea party support.

Their test uses original survey data collected by the authors from respondents in 13 states, selecting disproportionately from competitive states: Ohio, Florida, Pennsylvania, South Carolina, North Carolina, Nevada, Michigan, Georgia, Colorado, Arizona, California, Missouri, and Wisconsin. The results found preferences for limited government, racism, social dominance, and fear of Obama are statistically influential in predicting tea party support. Undermining some alternative theories of tea party support, they did not find economic anxiety, authoritarianism, or ethnocentrism to be statistically influential.

To fully evaluate the authors’ findings, one must first understand the choices the authors made when initially constructing their statistical model. Some of those choices are problematic, and others the reader will want to evaluate further. First, it is unfortunate that their model excludes opposition to redistribution, the ostensible catalyst of the movement. While couched in the rhetoric of liberty and freedom, tea partiers’ specific complaints are about government spending, taxes, and what they view as unfair

government policies rewarding bad behavior and punishing producers—in other words, redistribution. By excluding a variable to measure these concerns from the model, a plausible explanation for tea party support is omitted.

Second, without adequate justification, the authors assume that if tea partiers believe President Obama is moving the country toward socialism, then they perceive him as a “powerful person from a ‘subordinate’ group” and consequently view him as “symbolic of their declining social prestige.” The authors presume that tea partiers define socialism as an abstract, scary bogeyman rather than a system in which government owns the means of production. Yet the fact that the tea party is the only political group able to accurately define socialism shows that to them socialism means something specific, not abstract. This is not to say that the authors are necessarily incorrect, but they did not adequately substantiate their assumption that concerns about socialism are actually anxiety over declining social prestige and the subversion a social “hierarchy.”

Third, the authors use a commonly accepted battery to measure latent racism. Although the questions can understandably be used to detect latent racial hostility, some debate exists as to whether these questions may also detect other beliefs. A full discussion is beyond the scope of this book review. Instead, here are some examples of the questions used, and interested readers can evaluate them: “Irish, Italians, Jews, and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.” “Over the past few years, blacks have gotten less than they deserve.”

Fourth, in order to determine if tea partiers have the “drive to dominate other ‘subordinate’ groups,” they problematically combine a battery of questions that have been found to predict racism and aggressive intergroup interactions with questions measuring egalitarianism that predict opposition to redistribution. The traditional measures of social dominance they use, such as whether a respondent believes “inferior groups should stay in their place,” make sense as proper measures of social dominance. Research has shown they predict intergroup competition and racism (Ho et al. 2011). However, very small numbers of Americans endorse such views, typically about 1 to 10, which make them difficult to use in statistical models. Perhaps this is why the authors combine these traditional measures of social dominance with a separate (and some view as a

related) construct measuring preferences for egalitarianism. For example, whether a respondent agrees or disagrees that “we should do what we can to equalize conditions for different groups” or “we should increase social equality.” This egalitarianism battery has been shown to predict “conservatism and opposition to redistributive social policies” (Ho et al. 2011).

There are two issues that arise from this method. In efforts to measure a preference for social dominance, it is problematic to combine one battery that has been shown to predict racism and zero-sum competition with another battery that predicts conservatism and opposition to redistributive social policies. By using this method, one could erroneously conclude that opposition to government redistribution is indicative of a preference for social dominance and racial hierarchy. In addition, the egalitarian questions used are unclear. For instance, it is unclear *who* the “we” is that tries to equalize conditions. Is it the government? It’s also unclear what kinds of conditions are being equalized. One could strongly favor equal treatment before the law but strongly disagree with the government equalizing economic conditions. Particularly for economic conservatives, the type of equality being discussed determines whether they will support or oppose a policy. Consequently, it is not obvious that questions about egalitarianism are measuring whether tea partiers believe President Obama has “stepped out of his place” by becoming president. The conclusions do not follow.

Even despite the issues with the social dominance measurement, Parker and Barreto found that only 7 percent of tea partiers score “high” on this measure. Most score in the middle or low range, which makes sense given the vagueness of the egalitarian questions. This further suggests that these are not the prevailing concerns across tea partiers.

Instead, far more prevalent in the tea party movement is their preference for limited government. The authors find that nearly 90 percent of tea partiers score *high* on preference for limited government, compared to 40 percent of non-tea partiers. More importantly, they find that a desire for limited government is a significant driver of the movement, even while controlling for other explanations. It is puzzling that despite the preference for limited government having a strong statistical significance and overwhelming prevalence in the movement, little attention is given to this finding. For instance, the words “limited government” are mentioned only

18 times in the book, while “social dominance” is mentioned 82 times, and “racism” or “racist” are mentioned 100 times.

While certainly the authors’ results on social dominance, racism, and anxiety about the president merit thorough discussion and investigation, their finding that tea partiers are sincerely concerned about the scope of government also warrants greater attention than it is given. Had the authors pursued it, they may have shed light on what tea partiers mean when they say they want limited government. Parker and Barreto likely would have found that language about limited government for these conservatives represents a deeper moral concern about government fairness and redistribution.

Finally, their comparison of the tea party to the Ku Klux Klan (KKK) of the 1920s is problematic, overlooks other analogous social movements, and conveys the message that the tea party is primarily concerned with phenotypes. The authors explain the tea party is the successor to the John Birch Society (JBS) and the 1920s KKK because “all three appeal to the same demographic and draw on similar rhetoric.” They do not adequately demonstrate, however, that the substantive rhetoric was the same or that similar demographics are sufficient for connecting these movements. For instance, they describe the Klan as being concerned about groups they perceived as “either racially or ethnically un-American” and that “the Klan defined the American way of life ethnoculturally.” The JBS “drew more on ideology to communicate its brand of nationalism than overt ethnic or racial intolerance.” From their explanations, it is unclear that the tea party, the KKK, and the JBS share substantively similar rhetoric.

Another question remains: Are there other social movements that are antecedents to the tea party movement? If so, why weren’t these connected? Unlike the KKK and JBS, the tea party emerged after a period of easy money, a bubble bursting, and a financial crisis that punished law-abiding and villain alike. In fact, the tea party emerged in an environment similar to the tax revolts of the 1930s, or the Jacksonian populists after the 1819 economic downturn (Beito 1989, Howe 2007). After the Crash of 1929, thousands of taxpayer groups and “economy leagues” formed in every state complaining that recipients of government funds were “tax eaters.” Echoing 2008, the Panic of 1819, according to Daniel Walker Howe, was “profoundly disturbing” because “personal fortunes could be unrelated to personal merit” and “the hardworking and honest suffered along with the undeserving” (Howe 2007: 144). Many blamed government

intervention, particularly government favoritism, for the nation's woes. Why weren't these other social movements examined as intellectual antecedents of the tea party movement? Had the authors focused more on tea partiers' complaints about government action and redistribution, perhaps those other social movements would have been given further consideration.

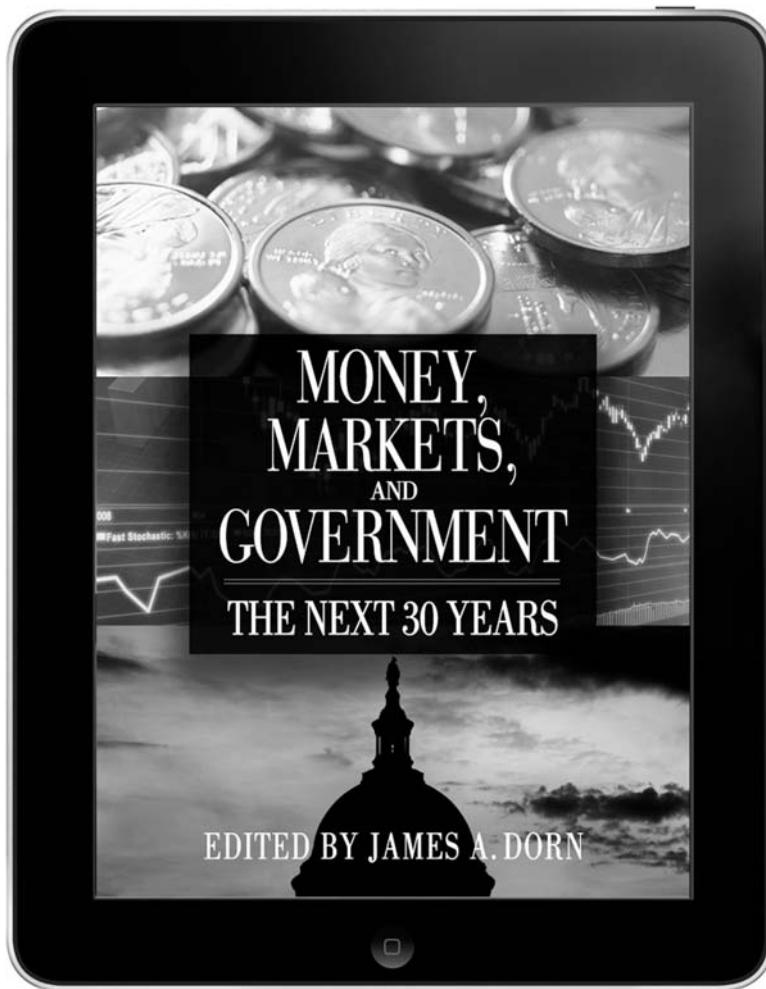
In conclusion, despite methodological problems in their analysis, it is reasonable to conclude that the tea party movement does include some who hold tendencies toward social dominance and out-group hostility. However, the authors do not adequately show that social dominance and fear of the displacement of white males is the prevailing moral passion motivating the movement. Consequently, more attention should have been given to explaining the meaning behind tea party complaints about government expansion, particularly their aversion to redistribution.

Emily Ekins
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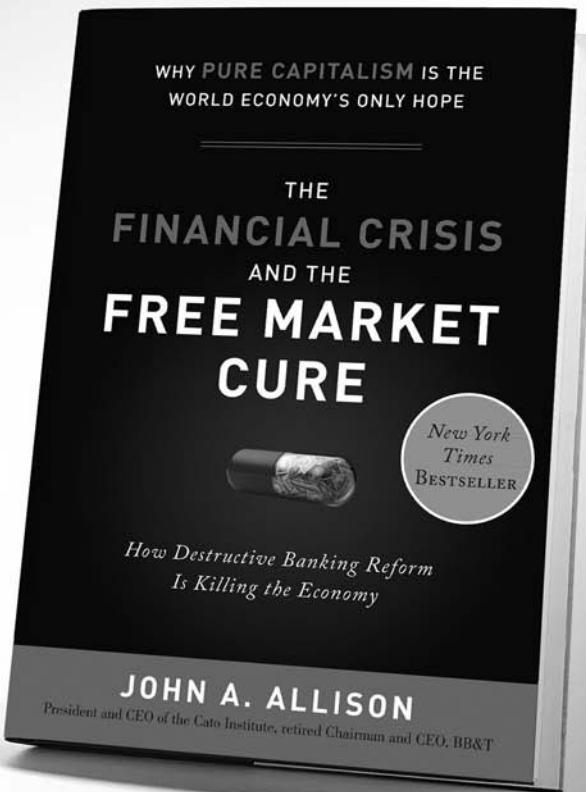
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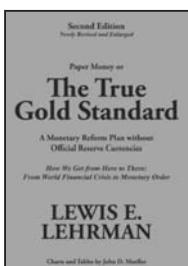
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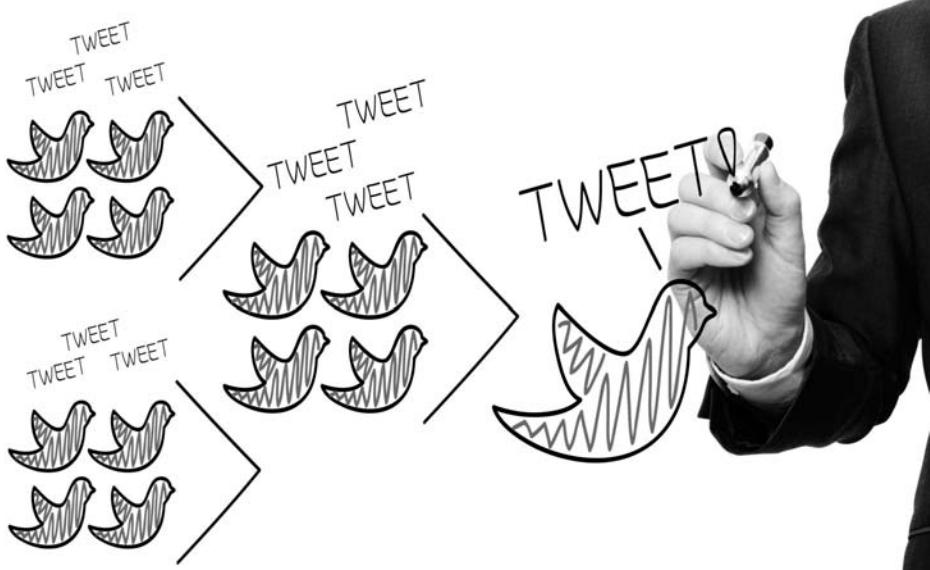
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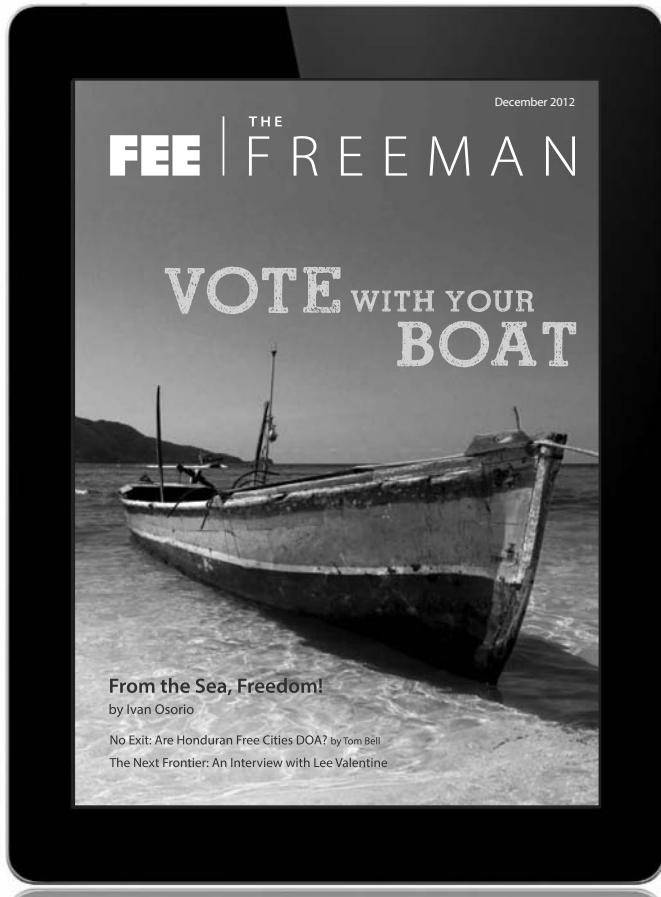
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—U.S. Monetary Commission of 1876

Report of the United States Monetary Commission,
Senate Report No. 703, 44th Cong., 2d sess., 1877.

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