

The Failure of Direct Monetary Constraints

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Abstract

Monetary authorities around the world have promised a safer money and that they would use this new authority to prevent future economic calamities. This claim has been met with abject failure throughout the history of central banks. Two questions emerge from: why do central bankers almost universally fail to accomplish their stated goals and what can be done about it? This paper identifies two main reasons for their failure: what has come to be known as the knowledge problem from Hayek (1945) and the very incentives of the central bankers to engage in expansionary monetary policy. Various policy proposals have emerged as a means of directly mitigating these failures. However, none have successfully managed to quell the problem of cheap and easy credit. A different solution is therefore necessary; this paper suggests doing so indirectly by eliminating their *exclusive* power over money. This solution no doubt has its own challenges (including legal challenges which must be overcome), but is nonetheless a viable solution. This paper provides is a clarification of the problem of central banks and encourages the defense of a process that may eventually yield a solution – specifically, the market process.

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“Like a married bachelor, a rule-bound central banker is a contradiction in terms, for both the background of central bankers and the incentives they confront, combined with the inescapable imperfections of even the most carefully crafted of monetary rules, will inevitably tempt them to tinker with the money stock”

— Selgin (2010)

1 Introduction

This paper explores the consequences of indirect, informal restraints on monetary authorities. A restraint in this context can be thought of as anything that limits the ability of a monetary authority to use its powers for ends that are privately beneficial but publicly destructive. Economists have long recognized that monetary policy, when placed in the wrong hands, can be wildly destructive. Rampant, unexpected inflation can devastate an economy.

I want to argue in this paper that formal attempts at preventing the deleterious effects of a central monetary authority are doomed to fail from the outset. As a result, problems with the current monetary arrangement should come as no surprise. In the standard approach, which mirrors the approaches that Nobel laureates such as Milton Friedman and Robert Mundell, but also James Buchanan to an extent, scholars point to the rules of the game as the source of the problem.¹ Implicitly, this suggests that if only the rules were correct, then the players’ behaviors within those rules would similarly be correct. The question then becomes crafting the correct rules and getting them implemented.

When it comes to designing policy, economists find themselves with a strong incentive to act as if they were saviors of society as opposed to students of society (Coyne and Boettke, 2006). This is because of the implicit belief that government exists not merely to enforce contracts and the rule of law, but to actively improve society through policy and legislative decree. The economist is uniquely situated to proffer advice on this dimension, as he understands the nature of economic order and how both formal and informal institutions influence economic decisions.

Assuming that such a policy exists and it is discovered, implementing it is likely to be problematic, owing to the fact that it would require bureaucrats to give up benefits that have been concentrated upon them and whose costs have been dispersed across so many private citizens. As Boettke and Smith (2011) argues, “Even if economists do find the technically optimal solution, past adherence of the Federal Reserve to what was considered at the time to be the optimal policy strongly suggests that what is considered technically optimal is oftentimes in conflict with what is politically optimal.” In essence, central banks have a strong tendency to pander to the wants and desires of politicians, especially when they are (re)appointed or (re)elected by the politicians.

A second problem, which heretofore has gone unmentioned in this context, is the problem of discovering such a policy. Much research exists on the problem of monopolies in general, and

¹For a rigorous treatment of how these Nobel laureates, and others, have affected the very essence of economics, see Boettke et al. (2012)

indeed this year’s Nobel Prize in Economics was awarded to Jean Tirole for his contributions to the solutions to monopoly power. In theory, it is a very straightforward task to eliminate monopoly power in the marketplace: simply identify the monopoly, determine what the perfectly competitive equilibrium would be, and legislate that that outcome be so. However, each step of this process is fraught with both knowledge and incentive problems.² As Hayek, Kirzner, and Buchanan describe, determining the equilibrium price and quantity is something that simply cannot be done *ex ante* (or *ex post*). Finally, Buchanan and Tullock (1962) points out that, even if politicians know what the correct policy ought to be, there is no guarantee that they will have an incentive to enact such a policy, which Boettke and Smith (2011) corroborates in the context of central banks. It is this second problem, and it’s implications for policy, that I wish to explore in this essay.

This essay pays heavy attention to the experiences of the United States. This is not because the US experience is in any way special; it is simply the one with which I am most familiar. At the same time, however, this essay seeks to convey general themes about central banking that apply with varying degrees of force across institutional settings. The rest of this essay will be structured as follows. Section II briefly describes the failures of the Federal Reserve and its effects. Section III explains why this is to be expected by providing a description of the knowledge and incentive problems faced by central bankers. Section IV provides a defense of the market process in the context of currency by discussing a robust political economy approach to money. Section V concludes with a discussion of implications for policies and suggestions for further research.

2 A History of Broken Promises

Like any government policy, the creation of the Federal Reserve system was done with the best of intentions. The arguments justifying its creation were straightforward – the Federal Reserve was to maintain economic stability, prevent deflation, and stimulate an economy during crises by combating unemployment. However, the proper judgment of monetary policy is not its performance on paper, but on its performance in the real world and in particular to its resilience to the whims of politicians, who would want to use the tools of monetary policy for their own ends. In this, Boettke and Smith (2013) and Smith and Boettke (2014) suggest that the Federal Reserve’s over one-hundred year history should be judged as a failure by documenting the history of the Federal Reserve as being a history of pandering to politicians.

This failure has severe deleterious effects for an economy. Selgin et al. (2010) finds that since the inception of the Federal Reserve, there have been more symptoms of monetary and macroeconomic instability than there were during the Federal Reserve’s predecessor. The Fed’s stated goals, per the Federal Reserve Act itself, are to “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.”

²Identifying a monopoly is entirely dependent on the definition of the economic good. This problem, however, is not as difficult with fiat currency as there is typically only one form of legal tender in a geographic region. There may be several currencies that are accepted at stores, but typically only one is granted legal tender status.

In one respect, the Fed has failed miserably: it has allowed the purchasing power of the dollar to fall dramatically. From 1790 to 1913, the value of a consumer basket costing \$100 rose to \$108 – an increase, to be sure, but only a modest one at best. An equivalent basket of goods in 2008, however, costs \$2,422 (Selgin et al., 2010). To put this another way, over the 123 years from 1790-1913, prices rose by 8%. During the 95 years of the Federal Reserve’s existence, prices rose by a staggering 2,200%.

On the issue of reining in business cycles, conventional wisdom would suggest that contractions have been both less frequent and shorter while expansions have been substantially longer since the establishment of the Federal Reserve System than they were prior. However, Selgin et al. (2010) reports that this is not necessarily true, citing Romer (1989) and Romer (2009) that suggests that, “although contractions were indeed somewhat more frequent before the Fed’s establishment... they were also almost three months shorter on average and no more severe.” The authors go on to say that recoveries were faster prior to the Federal Reserve, averaging a mere 7.7 months compared to the 10.6 months. This would suggest that not only has the Federal Reserve failed to remain independent from government influence, but it has also failed to either prevent inflation or tame business cycles.

3 Problems of the Existing Monetary Arrangement

These results should come as no surprise – prior to the establishment of the Federal Reserve System, the existence of money (imperfectly, to be sure) more closely resembled a market. With the establishment of the Federal Reserve, a central authority gained control over the supply of money and, as a result, ran into both knowledge and incentive problems.

3.1 Knowledge Problem

Hayek (1945, pg. 519-520) describes perhaps most cogently the essence of what has come to be known as the “knowledge problem” in economics. He notes, “The economic problem of society is... not merely a problem of how to allocate ‘given’ resources – if ‘given’ is taken to mean given to a single mind which deliberately solves the problem set by these ‘data.’ It is rather a problem of... the utilization of knowledge which is not given to anyone in its totality.”

On one level, money is no different from any other economic good. While it is one half of all exchanges and therefore deserves focused study in its role as a medium of exchange, it is still nonetheless a commodity. Answering the question “how much money should be produced?” is no different from answering the question of how many apples, oranges, doctors, or anything else should be produced. Hayek (1937, 1945) can be thought of as suggesting that no single person can ever know the answer to these questions, but a society, operating through the price mechanism’s guidance³ and the strict discipline of the profit and loss system, is led to discover the answers to

³Smith (1776)’s “invisible hand”

these questions, leading to neither a persistent under-provision nor a persistent over-provision of these goods.

The Federal Reserve System, and indeed all central banks, operate outside of both the price mechanism and the profit and loss system and thus do not gain the feedback necessary to understand when mistakes have been made and what corrections would be necessary to undertake. As a result, errors go unchecked because they are undetected.

3.2 Incentive Problems

A knowledge problem alone is insufficient to explain the Fed's performance (and indeed the performance of any central bank). If the problem were merely one of acquiring the correct information, we should expect to see a normal distribution of errors, with the central banks sometimes expanding the money supply too much and other times expanding it by too little. On a sufficiently long time span, however, the errors should cancel each other out. As Friedman (1982) reports, the Federal Reserve system has been almost exclusively a driver of inflation, which remains true through today. One hundred years seems sufficiently long to see some cancellation, and yet we do not. There must be something at play that makes it so that central banks tend to universally engage in too much monetary expansion as opposed to too little.

When it comes to their day-to-day operation, both states and central banks have strong incentives to promote expansionary monetary policies. In at least one fundamental sense, a state is like a firm - it must raise revenues and spend those revenues somehow. Like firms, if the spending exceeds the revenue raised, the state must decide whether it wants to borrow money against future revenues or reduce current expenditures. Individual people and even private groups of people manage to operate within a given budget at least most of the time, but states seem to be almost incapable of doing this seemingly simple task. Buchanan and Wagner (1977) offers one explanation as a response to the Keynesian avalanche - politicians will have a strong incentive to spend money as doing so will increase their odds of being reelected. What's more, they have virtually no incentive to reduce this expenditure at a later date. As a result, as Wagner (2012a) describes, democracies throughout history "tend to systematically promote budget deficits."

There are two direct ways to finance this deficit - borrowing money from other countries or a world bank, effectively borrowing money from current citizens of other countries, or borrowing money from future citizens of one's own country by engaging in deficit spending. With but slight alteration, these solutions mirror the solutions available for firms - the owner of the firm can borrow money from a bank, effectively borrowing money from non-employees or he can not take a paycheck and borrow money from himself. These forms of financing operations can be broadly described as "deficit" and "debt" financing.

Smith (1776) identified a third option that states have - the ability to debase their currency thereby inflating away their budgetary shortcomings. Faced with a budget shortcoming, states must raise revenues somehow. Perhaps the easiest way to accomplish this is to simply create more money. This is, after all, why counterfeiters engage in their activities - the things that they want require a

greater number of dollars than they currently possess and the most effective way to increase their holdings of dollars is to create fake dollars and try to pass them off as real dollars. We can think of the state printing money to meet its obligations in much the same way. The difference, of course, is that it is legal when the state does it but illegal when a private citizen does it for no reason other than the fact that the state is the state and the citizen is not. As Salter (2014a) identifies, debt-erosion through the use of the printing press is costly in terms of changing prices but also in terms of capital mis-allocations caused by the impaired price mechanism.

Central bankers, too, have a strong theoretical-case for promoting expansionary monetary policy. 1929 marked the beginning of what would eventually become known as the Great Depression in the United States. Over the next ten years, unemployment averaged almost 20%, output in the United States fell precipitously, and millions of people suffered real hardships. While several competing theories have emerged to explain this historical debacle, one of the most oft-cited explanations is a failure of the Federal Reserve to issue a sufficient amount of high-powered money, thus prolonging the Depression (Friedman and Schwartz, 1963; Bernanke, 1983). Further, Romer (1992) provides evidence that the recovery's beginning in 1933 was due to an annual increase of M1 by 10% between 1933 and 1937. Essentially, because the Federal Reserve failed to fulfill its role as the "lender of last resort," what would have been a mildly unpleasant bank run was turned into a systemic bank panic.

Taken together, these two proposals provide a clear path forward for any would-be central banker: do not fail to engage in sufficiently expansive monetary policy less you want to risk causing Great Depression 2.0. As a result, there seems to be an even stronger inflationary bias than there was before the Great Depression. Recently, we have seen this implicit belief take hold with the US Federal Reserve extending credit to insolvent banks in the wake of the 2007-2009 financial crisis. Where the Federal Reserve had previously refused to lend to banks upon the belief that those banks were insolvent because they had made bad loans and investments, the Federal Reserve instead invested heavily in these banks. This tendency has also crossed the Atlantic, as the European Central Bank bailed out Greek and Spanish banks in 2012.

Unfortunately, the costs of these actions do not simply go away – history shows that they eventually catch up with us. However, like the costs of increased government spending, the bill doesn't come until later, oftentimes not until the current Federal Reserve board has been replaced by an entirely new board. Further, central bankers have the ability to simply print more money and temporarily dig themselves out of the current hole, at least on paper. This means that these costs can be passed on to future generations, at which point the problem become compounded and it becomes even harder to assign blame accurately. For example, it's easy to point to the current debt that the United States government has accumulated, which currently stands at almost \$18 trillion. And while we can easily point to "Congress" as the source of the blame or maybe even "Republicans" or "Democrats," we cannot easily identify specific members of Congress or the Presidents' Administrations as guilty of causing this debt and thus, their actions go unpunished. As a result, expansionary monetary policy is privately beneficial to members of the state and central bankers

and near-costless to these individuals. What is necessary within the current arrangement, therefore, are rules prohibiting bad behavior. These rules, however, must be designed and implemented by people who are informed and guided by good theory.

3.3 Good Theory as a Panacea For Bad Policy?

One would think that good theory would prevail over bad theory. After all, a theory that more accurately describes the world should replace a theory that less accurately describes the world. For example, for generations people thought that the earth was the center of the solar system and concocted elaborate theories describing retrograde planetary motion. This theory was eventually replaced with a heliocentric model which was a vast improvement over the geocentric model. Might there be a similar story in economic theory and specifically, monetary theory?

Unfortunately, the answer is no. Wagner (2012b) and Boettke et al. (2014) both argue that economic theory, while no doubt taking place in a competitive marketplace for ideas, may be subject to distortions in the incentives and signals that guide economic scientists. Further, economic scientists in general are also susceptible to the demands of people hiring economists. As a result of this, it is possible that flawed economic theory can come to dominate a profession while useful theories may be left by the wayside.

When it comes to monetary policy specifically, we need only look at the organizations that are the primary consumers of monetary theory. White (2005) identifies this as the Federal Reserve and central banks in general. This makes sense - they are, after all, the primary users of monetary theory. This may cause problems, however, as they are also the primary sponsors of monetary research. As White (2005) says, from 2000-2005, 80% of articles appearing in the *Journal of Monetary Economics* had at least one co-author with a Federal Reserve affiliation listed on their CV. Perhaps even more troubling, the editorial boards of the top journals in monetary economics are overwhelmingly staffed by Federal Reserve-affiliated economists. This creates problems, as an article condemning the efforts of central bankers is likely to be met with heavy skepticism by the gate-keepers of research while an article that extols the efforts of central bankers is likely to be met with cheers. In a professional setting which rewards publications in high-ranking journals, the path ahead is obvious: write articles that praise the efforts of the gate-keepers.

This means that implementing sound monetary policy confronts a trifold problem. First, the epistemic constraints on the part of central bankers limits their ability to discover the proper course of action in response to changes in money demand and money supply. Second, expansionary monetary policy is privately beneficial for states and central bankers but socially costly. These costs, however, are 1) difficult to identify and 2) difficult to assign blame. Finally, the marketplace for ideas is currently guarded by individuals whose livelihoods depend on the existence of a flawed system, as monetary research takes place in an environment that may be insulated from competing ideas.

4 A Path Forward - Robust Political Economy and Money

What is necessary, therefore, is to remove the authority of politicians to engage in opportunistic behavior. Buchanan (2010) suggests the constitutionalization of money, placing its rules within the realm of the unquestionable. Doing so, he argues, would not only insulate the the value of money from wild market fluctuations but also from political action, as placing the value of money at the constitutional level explicitly denies politicians the opportunity to intervene in its value. Jonung (1984), however, provides historical evidence that even a constitutionally mandated value of currency (in this case, the Swedish krona was tied explicitly defined as being worth 1/2480 of a kilogram of gold) can be violated by political actors. While not explicit proof that a constitutionally defined value of currency is indefensible, the solution Buchanan (2010) proposes is not as robust as one would be initially inclined to think.

Thus, formal rules against engaging in opportunistic behavior, be they at the constitutional level or the regulatory level, have failed to achieve the desired results of monetary policy and have instead either brought about the very problems they promise to prevent or have brought about entirely new problems. While new technical solutions are continually found, these solutions almost universally assume that politicians are benevolent, omniscient despots. This represents a sort of “best-case” starting point, where the incentive and knowledge problems identified above are simply assumed away. To be sure, lip service is often paid to these ideas, but they are not fully captured in the technical solutions.

Problems emerge, however, when we apply solutions designed to work in this imagined best-case scenario to the real world, which can be thought of as a “second-best” world, where no person is actually benevolent nor omniscient. As Leeson and Subrick (2006) discusses, institutional arrangements that perform well under the (imaginary) ideal conditions often “exhibit widely different social welfare implications under less than ideal conditions... [and] a political economic arrangement that performs better than an alternative arrangement under ideal conditions may generate lower social welfare than this alternative when both systems are considered in light of motivational and cognitive imperfections.” In other words, what may seem like a superior system under ideal conditions may actually be an inferior system under more realistic, less than ideal conditions. Rather than start with these unrealistic assumptions about man, robust political economy instead starts with the assumptions that man is neither omniscient nor altruistic and seeks to craft rules that work under those conditions. In other words, instead of trying to design a system that directly solves the knowledge and incentive problems identified above, what we must instead find a solution that works despite these problems. While a direct rule may be difficult to imagine, we may be able to indirectly solve it by sidestepping it entirely by crafting rules that are self-enforcing – rules that are enforced not by some external enforcer, but because those in a position of power serve their self-interest by maintaining the rules.

One current approach is that of NGDP targeting (Sumner, 2012; Salter, 2014b), which essentially suggests that the central banks’ actions are tied to market factors. The key thrust of this approach (and similar approaches) is the use of market signals rather than aggregate signals as

a guide for monetary policy.⁴ Under this solution, the central bank offers to buy or sell NGDP futures contracts. In a situation where the money supply is too high, the value of the futures contract today will be low relative to its payoff in the future and thus, profit-seeking entrepreneurs will purchase these futures contracts, effectively decreasing the monetary base. If the money supply is currently too low, then money today would be worth more than money in the future, leading profit-seeking entrepreneurs to sell their futures contracts, thus increasing the monetary base. This approach carries with it a solution to both the knowledge problem and the incentive problem in that it does not rely on any central banker possessing any special knowledge that is epistemically denied nor does it require that they be altruists - they, too, need only be profit-seeking. Difficulty lies, however, in implementing rules of this sort, as 1) the central bankers may be unlikely to see research in this vein (White, 2005) and 2) even if they did discover this research and agree with it, they would have to sacrifice private benefits in order to confer social benefits upon everyone else. Thus, even if this arrangement is socially beneficial, it likely falls outside of the realm of political feasibility.

Alternatively, the problem could be solved with a return to free banking, as Selgin (1988), Selgin and White (1994), White (1989), and White (1995) suggest, which would entail a complete separation between money and the state. Like NGDP targeting, this institutional arrangement would also be considered self-enforcing. Here, rather than tie the central bankers' hands with a market-based measure, "monetary stability [would be] maintained by the actions of profit-maximizing banks," (Salter, 2014b). Competition is a better restraint on opportunistic behavior than any government policy could hope to be. As Selgin (1988) describes, a private bank would adjust the amount of bank notes in circulation based on the public's willingness to hold its notes/checkable deposits. This, in turn, would be evidenced by the amount of bank notes and checks that are redeemed each period. If the bank sees more bank notes returned than it expected, the profit maximizing strategy would be to decrease its money liabilities. Likewise, if fewer bank notes are returned than expected, the bank would maximize profits by increasing its money liabilities. As a result of these actions, MV would be stabilized, albeit unintentionally, which would have the side effect of maintaining monetary equilibrium. The strength of this system lies in its simplicity – it does not require any specific rule, even a constitutional rule, be created at all. Instead, it relies on the profit-seeking of private individuals.

In this sense, free-banking may be thought of as an informal constraint on central banks. It is informal in the sense that it does not have a specific rule, written or otherwise, regulating the behavior of any banker. Similarly, it is a constraint in that it prevents any issuer of currency from engaging in opportunistic behavior. The only rule necessary here is the recognition of private property. Indeed, as Horwitz (2011) discusses, "If the right general constitutional protections for private property, contracts, and the rule of law are in place, as well as the appropriate prohibitions on politicization, there is no need for a specific or distinct constitutionalization of money." Free banking, therefore, represents the best of both worlds – it has the long-term flexibility desired by

⁴Hence the moniker, Market Monetarism

central bankers to deal with unforeseen changes in money supply and money demand while also having the short-term rigidity to ensure a predictable provision of sound money. Unfortunately, difficulty lies here, too, as implementing such a policy is unlikely.

5 Conclusion

A common medium of exchange is one of the hallmarks of a thriving and productive society. This is not because having it allows people to purchase goods and services, but because of the immense reduction in the costs of transacting that money affords us. In its position as one half of virtually all exchanges, bad monetary policy has severely deleterious effects on not just a few industries, but all industries. As such, it is of crucial importance to have sound, monetary policy.

Unfortunately, direct constraints on monetary authorities are ill-equipped to provide sound money as the discovery is nigh-impossible and the implementation of such a rule is highly unlikely. This paper suggests that the indirect constraint of competition is a viable means of achieving the desired result of sound money. Through the profit and loss mechanism of the competitive market process, no rule must actually be explicitly created. This market system contains within it the long-term flexibility to deal with unforeseen changes in the economic environment as well as the short-term rigidity to ensure a predictable provision of sound money.

For all of its benefits, a return to free banking, which would require the state to voluntarily give up its monopoly power over the supply of money, is politically infeasible. This is no cause for giving up, however, as private competitors to state monopolies have historically emerged and led to an overall improvement in the quality of the service being provided. Here, we can think of the common example of the US postal system, which has both state-financed competitors and private competitors. Here, we have seen a tremendous improvement in the quality of service as a result of the emergence of private delivery corporations. The rise of competing currencies, even when the state requires a specific currency be used for tax purposes, could have a similar effect on the quality of “product” central bankers produce, namely, the supply of sound money. More research would be required before a qualified statement on this could be given. Regardless, having new currencies compete with old currencies, it would seem, would likely have the effect of increasing the quality of existing monetary policy by “creating” the informal constraint of market competition.

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