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Why Congress Should Institute Rules-Based Monetary Policy

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Abstract

Many take for granted that the Federal Reserve has contributed positively to economic stabilization, but the U.S. has experienced severe economic turmoil in at least four different decades since the Fed was founded. Recessions have not become less frequent or shorter in duration, output has not become less volatile, and some of the worst U.S. economic crises have occurred on the Fed's watch. Furthermore, the Fed's actions during the 2008 financial crisis are only the latest example of its long history of propping up failing firms. Throughout its history, the Fed has operated within a purely discretionary policy framework. As long as the U.S. operates under its existing government-run monetary arrangement, Congress can improve economic outcomes by requiring the Fed to implement rules-based monetary policy.

Many economists take for granted that the Federal Reserve has contributed positively to economic stabilization in the U.S., but its track record warrants a critical appraisal. Since the creation of the Federal Reserve in 1913 the U.S. has experienced the Great Depression in the 1930s, severe inflation and unemployment during the 1970s, a major banking crisis in the 1980s, and a severe financial crisis and recession in 2008. Recessions have not become less frequent or shorter in duration, and output has not become less volatile since the Fed was created. Even the supposed taming of inflation during the Fed's tenure comes with several caveats, least of all that it is unique to a narrow time period.

Furthermore, while the Federal Reserve is supposed to be an independent arbiter of monetary policy, its unorthodox actions during the 2008 crisis are only the latest example of how the Fed props

Key Points

- The Fed's track record warrants a critical appraisal. Since the Fed was created in 1913, the U.S. has experienced the Great Depression in the 1930s, severe inflation and unemployment during the 1970s, a major banking crisis in the 1980s, and a severe financial crisis and recession in 2008.
- During the Fed's tenure, recessions have not become less frequent or shorter in duration, and output has not become less volatile. Even the supposed taming of inflation comes with several caveats, least of all that it is unique to a narrow time period.
- The Federal Reserve has always employed discretionary monetary policy without any rigid operational framework. Rules-based monetary policy would give the central bank a strict set of guidelines that dictate its future actions.
- As long as the U.S. continues under its current government-run monetary arrangement, Congress can improve economic outcomes by requiring the Fed to implement rules-based monetary policy.

This paper, in its entirety, can be found at **http://report.heritage.org/bg2991**

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up failing firms. Throughout its history, the Fed has operated within a purely discretionary policy framework, so its poor performance is not surprising. Given the continuance of America's government-run monetary arrangement, Congress can improve economic outcomes by requiring the Fed to implement rules-based monetary policy.

Overview of Monetary Policy

Monetary policy is a central bank's attempt to alter the amount (supply) of money in an economy to promote economic growth and stability. The Federal Reserve, the official central bank of the United States, is responsible for U.S. monetary policy. The general goal of monetary policy is to prevent large swings in economic activity. In theory, the central bank can achieve this goal by manipulating the money supply to offset changes in consumers' demand for holding money. In practice, correctly offsetting these changes is difficult and the Fed has (at best) made things worse just as frequently as it has improved the economy.[1]

One reason the Fed has had such difficulty stabilizing the economy is that central banks have only *indirect* control over the money supply. Broadly defined, the money supply includes items such as currency, commercial bank reserves, demand deposits, savings accounts, and money market funds.[2] Regarding all the various money-supply components, the Fed uniquely has direct control only over what is referred to as the monetary base (defined as the sum of all U.S. currency in circulation plus commercial banks' reserves). When the Fed buys (sells) securities, it adds to (detracts from) the total amount of banks' reserves, thus directly impacting the base.

When the Fed wants to increase the money supply, it buys Treasury securities from the public so that it increases the amount of reserves in the banking system. These additional reserves allow private banks to lend additional money. If banks create new money via loans, they increase the money supply and economic activity will increase.[3] On the other hand, when the Fed wants to decrease the money supply, it *sells* Treasuries to the public so that it drains reserves from the banking system. Thus, the Fed exercises direct control over the monetary base in an effort to indirectly influence the economy's money supply and, ultimately, economic output.

Why Monetary Policy Matters

Traditional Keynesian and New Classical economists argue that the quantity (and quality) of money in an economy is of secondary importance. Orthodox Keynesians believe monetary policy has little impact on the economy and they focus, instead, on the relationship between fiscal policy and the economy's level of spending. The New Classical school believes that monetary policy ultimately impacts *only* the economy's price level, not the level of real economic variables (such as employment or the amount of goods and services produced).[4] The alter-

1. Norbert J. Michel, "Federal Reserve Performance: Have Business Cycles Really Been Tamed?" Heritage Foundation *Backgrounder* No. 2965, October 24, 2014, http://www.heritage.org/research/reports/2014/10/federal-reserve-performance-have-business-cycles-really-been-tamed, and Norbert J. Michel, "Federal Reserve Performance: What Is the Fed's Track Record on Inflation?" Heritage Foundation *Backgrounder* No. 2968, October 27, 2014, http://www.heritage.org/research/reports/2014/10/federal-reserve-performance-what-is-the-feds-track-record-on-inflation. For a broader overview, see George Selgin, William Lastrapes, and Lawrence White, "Has the Fed Been a Failure?" *Journal of Macroeconomics*, Vol. 34 (2012), pp. 569–596.
2. For formal classifications of the aggregate money supply, see Board of Governors of the Federal Reserve System, "What Is the Money Supply? Is It Important?" September 26, 2013, http://www.federalreserve.gov/faqs/money_12845.htm (accessed December 18, 2014).
3. The maximum quantity of money that the banking system can create depends on the percentage of reserves that commercial banks are required to hold at their district Federal Reserve bank, an amount that is currently set at 10 percent. Historically, the Fed has influenced the monetary base almost exclusively by buying and selling short-term Treasury bills in the public (open) markets, even though it broke from this tradition during the 2008 financial crisis. See Norbert J. Michel, "The Fed at 100: A Primer on Monetary Policy," Heritage Foundation *Backgrounder* No. 2876, January 29, 2014, http://www.heritage.org/research/reports/2014/01/the-fed-at-100-a-primer-on-monetary-policy, and Norbert J. Michel and Stephen Moore, "Quantitative Easing, The Fed's Balance Sheet, and Central Bank Insolvency," Heritage Foundation *Backgrounder* No. 2938, August 14, 2014, http://www.heritage.org/research/reports/2014/08/quantitative-easing-the-feds-balance-sheet-and-central-bank-insolvency (accessed December 18, 2014).
4. In general, *most* macroeconomic theories now present ways in which short-run monetary changes can have real negative effects on income, employment, and investment. For more on the early Keynesian and New Classical positions on these monetary changes, see George Selgin's introduction to Leland Yeager, *The Fluttering Veil: Essays on Monetary Disequilibrium* (Indianapolis: Liberty Fund, 1997).

native view is that monetary changes are an important source of real economic fluctuations.

In this view, monetary disequilibrium—a "discrepancy between actual and desired holdings of money at the prevailing price level"—leads to disruptions in real economic variables such as output and employment.[5] Monetary policy, therefore, should prevent the supply of money from getting too far out of balance with the demand for money. If the supply of money should exceed the demand to hold it, people will spend their excess money balances on goods and services.[6]

If people spend more money on, for example, home furnishings and appliances, these particular business owners will see an increase in sales. One danger is that these business owners could mistake the increase in sales for a *nonmonetary* (real) surge in the underlying demand for their products. If, in fact, the sales increase is due solely to a monetary imbalance (that is, too much money in circulation in the economy), resources will be misallocated as managers hire more workers and raise more capital to increase production. When these businesses become unprofitable as the demand for the increased production fails to materialize, unemployment can rise.

Furthermore, monetary equilibrium can return only after the price of money falls. In other words, the amount of goods and services money can buy—its purchasing power—has to fall as the prices of nonmonetary goods rise.[7] In this example, the imbalance in the money market will reverse only after people spend enough of their excess money balances to bring about higher-priced home furnishings and appliances. If this phenomenon occurs on a widespread scale, the entire economy could realize both higher unemployment and inflation.[8]

On the other hand, when the demand to hold money exceeds its supply, the money market will return to balance only after people spend *less* on goods and services. Thus, absent an offsetting increase in the supply of money, business owners will realize a decrease in sales that could be mistaken for a decline in the underlying demand for their products. This sort of imbalance in the money market will reverse itself only after people cut back on spending enough to rebuild their money balances, which means that prices will have to fall. In other words, the price of money—its purchasing power—will have to rise.

Ostensibly, monetary policy can be used to restore monetary equilibrium via offsetting changes in the money supply. In theory, the money supply can be increased to meet an increase in the demand to hold money, and vice versa. In either scenario, prices of goods will more accurately—but never perfectly—reflect the underlying conditions of their respective markets. Thus, the price system will function more smoothly as it transmits "cleaner" signals that direct resources to their highest-valued uses. The best monetary policy, therefore, is the one that best maintains monetary equilibrium. A key question is whether monetary policy would better achieve this goal via strict policy rules or a discretionary framework.

Rules vs. Discretion

Rules-based monetary policy gives a central bank a strict set of guidelines that dictate its future actions. For example, a rule-based policy could require a central bank to undertake expansionary or contractionary policies to maintain a particular price level.[9] Currently, the Federal Reserve employs

5. Leland Yeager, "The Significance of Monetary Disequilibrium," *Cato Journal*, Vol. 6, No. 2 (Fall 1986), p. 370, http://object.cato.org/sites/cato.org/files/serials/files/cato-journal/1986/11/cj6n2-3.pdf (accessed January 2, 2015).
6. Money demand amounts to the desire to hold on to money rather than use it to buy goods and services. Strictly speaking, money demand refers to holding cash balances idle rather than spending them. Even financial assets are included among these items that could be purchased, thus "saving money" by investing in a mutual fund or savings account does not constitute money demand.
7. Because of money's unique role as the economy's medium of exchange, the prices of all other goods are expressed in terms of money, and the price of money is expressed in terms of the goods and services that consumers purchase. Put differently, the price of money is its purchasing power—the amount of goods and services one unit of money can buy.
8. For a summary of the earliest evidence that monetary disturbances can lead to real economic disturbances, see Michael Bordo and Anna Schwartz, "Clark Warburton: Pioneer Monetarist," in Anna Schwartz, ed., *Money in Historical Perspective* (Chicago: University of Chicago Press, 1987), http://www.nber.org/chapters/c7504.pdf (accessed January 10, 2015).
9. Expansionary (contractionary) monetary policies are those designed to expand (contract) credit, thus leading to more (less) economic activity. See Michel, "The Fed at 100: A Primer on Monetary Policy."

discretionary monetary policy without any rigid operational framework. The Fed does operate under the so-called dual mandate, statutory language that directs it to promote both price stability and low unemployment, but has no binding requirements to hit any specific economic goals.

The Fed is completely free to judge both the direction of the economy and the appropriate monetary policy response. In general, if the Fed believes unemployment is too high or that there is a danger of deflation (a falling price level), it pursues expansionary policy by purchasing securities. If, on the other hand, the Fed believes unemployment is too low or that there is a danger of inflation, it follows a contractionary policy by selling securities. In any case, the Fed is not bound to implement expansionary or contractionary policies at any particular time using any particular benchmark.[10]

Defenders of this type of discretion-based policy claim that the enormous complexity of the ever-changing economy requires broad discretion, but the nature of the economy actually makes the case for rules-based policy. No one person—or small group of central bankers—can ever be expected to understand and react properly, much less to always act consistently, with respect to changing conditions throughout the economy. Rules-based monetary policy would actually reduce uncertainty because it would anchor people's expectations with respect to what the Fed will do on an ongoing basis.

Rules-based monetary policy can also overcome a major credibility problem that the Federal Reserve faces. The Fed cannot—under a discretionary framework—credibly commit to any future course of action that will result in an optimal economic outcome.[11] Even if the Fed were to select the best policy given its current situation, the result would be higher inflation without any corresponding gain in employment. While this prediction seems counterintuitive, it is based on the fact that people in a dynamic economy act based on their perception of current and past policy decisions, as well as on their expectations of future policy actions.

A clear policy rule commitment would bind the Fed to a future course of action based on clearly defined economic outcomes, thus drastically reducing uncertainty with respect to future policy changes. Properly structured, rules-based monetary policy would also help to prevent short-term considerations—such as temporary cyclical fluctuations—from interfering with the Fed's long-term goals. Even a rule that specifies a range of policy options "can help the public coordinate its expectations based on credible commitment, limit the knowledge burden facing monetary policymakers, and help insulate the central bank from undue influence."[12] For all of these reasons, rules-based monetary policy can move the economy closer to monetary equilibrium than a discretionary framework could.

Monetary Policy Rules

Several central banks currently use some type of rule to (loosely) guide their policy actions. The Fed, for instance, has an official inflation target of 2 percent although its policy actions are not strictly bound by this target.[13] That is, the Fed does not follow a policy rule because it is perfectly free to deviate from this target however and whenever it chooses. While no central bank currently implements monetary policy according to a strict rule, economists

10. The Fed also has the discretion to deal with large, unexpected swings in the economy via "emergency" measures, even though its operations are supposed to prevent such swings from occurring in the first place. This emergency authority is not part of monetary policy and it should be revoked, along with limiting the Fed to a rules-based monetary framework. See Norbert J. Michel, "The Fed's Failure as a Lender of Last Resort: What to Do About It," Heritage Foundation *Backgrounder* No. 2943, August 20, 2014, http://www.heritage.org/research/reports/2014/08/the-feds-failure-as-a-lender-of-last-resort-what-to-do-about-it?ac=1.

11. This issue is known as the time inconsistency problem. See Finn Kydland and Edward Prescott, "Rules Rather than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy*, Vol. 85, No. 3 (1977). Kydland and Prescott won the economics Nobel Prize for their work on this topic.

12. Alexander Salter, "An Introduction to Monetary Policy Rules," Mercatus Center *Working Paper*, December 4, 2014, p. 14, http://mercatus.org/publication/introduction-monetary-policy-rules (accessed January 20, 2014). Salter provides a broad overview of rules-based policies; see also Richard Clarida, Jordi Gali, and Mark Gertler, "The Science of Monetary Policy: A New Keynesian Perspective," *Journal of Economic Literature*, Vol. 37 (1999), pp. 1661–1707, http://www.nyu.edu/econ/user/gertlerm/science.pdf (accessed December 26, 2014).

13. The Federal Reserve did not have a formal inflation target until 2012. See Jonathan Spicer, "In Historic Shift, Fed Sets Inflation Target," Reuters, January 25, 2012, http://www.reuters.com/article/2012/01/25/us-usa-fed-inflation-target-idUSTRE80O25C20120125 (accessed May 22, 2014).

have developed several that could be used.[14] A brief overview is as follows.

- **Inflation rate targeting rule.** Inflation rate targeting rules require the central bank to keep inflation—the rate of change in the price level—within a certain range. For example, the Fed may be required to keep the U.S. inflation rate between 1.5 percent and 2.5 percent. Under this rule, if the rate of inflation rises to 3 percent, the Fed would conduct contractionary monetary policies to bring the rate back into the required range. If, on the other hand, the inflation rate falls to less than 1.5 percent, the Fed would implement expansionary policies to raise the rate of inflation back into the target range.

- **Price-level targeting rule.** Price-level targeting rules require the central bank to target the price level itself rather than the rate of change in the price level (inflation). For instance, the Fed could be required to keep the price level, as measured by the consumer price index (CPI), between 220 and 230. If the CPI falls below 220, the Fed would undertake expansionary monetary policy, whereas a CPI of more than 230 would require contractionary policy. Under such a rule, the Fed would always try to keep the CPI in a certain range regardless of the inflation rate.[15]

- **Taylor rule.** Named after Stanford economist John Taylor, the Taylor rule specifies a short-term interest rate (currently the federal funds rate) target for the central bank. The rule specifies a target by taking into account both the rate of inflation and the growth rate of real (inflation-adjusted) economic output. The Taylor rule essentially says that if inflation or output are below (above) their desired growth rates, the central bank should conduct expansionary (contractionary) policy by purchasing (selling) securities until a lower (higher) interest rate target is reached.[16]

- **McCallum's feedback rule.** Named after Carnegie–Mellon economist Bennett McCallum, this rule specifies a target growth rate for the monetary base. The rule accounts for the growth in real output, changes in how fast money "turns over" in the economy, and also for the growth in nominal gross domestic product (NGDP).[17] In practice, this rule would work similarly to the Taylor rule except that the central bank would target a growth rate for the base instead of for the federal funds rate.

- **NGDP targeting.** Nominal GDP targeting rules can take several forms, all of which are designed to stabilize the overall economy. For instance, the central bank could set a target range for either the level or the growth rate of NGDP in an effort to stabilize the economy's total nominal spending (aggregate demand). Scott Sumner, one noted advocate of an NGDP target, has proposed that the Fed target the NGDP growth rate and then commit to compensating for any misses.[18] The general idea is that the Fed should be as expansionary or contractionary as necessary to ensure that the economy's aggregate nominal spending stays on target.

14. Central banks have consistently argued that wide discretion is necessary to conduct monetary policy, but bureaucracies are unlikely to support rules that drastically reduce their role.
15. In the post–World War II era, central banks in most developed countries have tried to stabilize the price level by focusing on inflation rather than the price level itself. While the average rates of inflation in most of these countries havedeclined, particularly since the 1980s, the price level itself has been widely divergent across countries. See Robert Dittmar, William Gavin, and Finn Kydland, "Price-Level Uncertainty and Inflation Targeting," Federal Reserve Bank of St. Louis *Review* (July/August 1999), https://research.stlouisfed.org/publications/review/99/07/9907rd.pdf (accessed December 29, 2014.)
16. John Taylor, "Discretion Versus Policy Rules in Practice," Carnegie–Rochester Conference Series on Public Policy, 39, 1993, pp. 195–214, http://web.stanford.edu/~johntayl/Papers/Discretion.PDF (accessed December 30, 2014).
17. The term velocity is used to describe how fast money turns over in the economy, and it is related to the demand for money. For McCallum's rule, see Bennett McCallum, "The Case for Rules in the Conduct of Monetary Policy: A Concrete Example," Federal Reserve Bank of Richmond *Economic Review* (September/October 1987), https://www.richmondfed.org/publications/research/economic_review/1987/pdf/er730502.pdf (accessed January 2, 2015).
18. Scott Sumner, "The Case for Nominal GDP Targeting," Mercatus Center, October 23, 2012, http://mercatus.org/sites/default/files/NGDP_Sumner_v-10%20copy.pdf (accessed May 22, 2014).

For example, the Fed may set a target annual growth rate of 4 percent for NGDP. If actual NGDP growth turns out to be only 3 percent, the Fed would then engage in expansionary policy to try to increase NGDP growth to 5 percent. If successful, the average growth rate would hit the 4 percent target. Sumner has also proposed a version of NGDP targeting that would limit the Fed's role to setting the target. Under this approach, investors would buy and sell NGDP futures contracts until the money supply adjusted enough to get expected NGDP back to the Fed's target.[19] Thus, private markets would ultimately determine the money supply and interest rates after the Fed sets the target.

Other "Rules-Based" Policies

A commodity money standard, such as a gold standard, effectively serves as a type of monetary rule even though it is fundamentally different from those previously described.[20] In such a system, the price level would be determined by the stock of a physical commodity rather than being managed by a central bank. An additional option is a competitive currency regime, sometimes referred to as free banking. Under this framework, private banks issue their own currencies to offset changes in the demand to hold money. Such a system can be viewed as a fully privatized NGDP targeting framework because it tends to stabilize total nominal spending.[21] Policy by any of the rules discussed in this *Backgrounder* would be an improvement over the Fed's existing discretionary framework, but a commodity standard or a free-banking regime would likely require structural changes not required by the other rules.[22]

What Congress Should Do

Since the founding of the Federal Reserve, the U.S. has experienced severe economic turmoil in at least four different decades. Furthermore, recessions have not become less frequent or shorter in duration, and output has not become less volatile during the Fed's tenure. While the Fed is supposed to be an independent arbiter of monetary policy, its actions during the 2008 crisis are only the latest example of the Fed's long history of propping up failing firms. As long as the U.S. operates under its existing government-run monetary arrangement, Congress can improve economic outcomes by eliminating the Fed's broad discretionary powers. In particular, Congress should do the following:

- **Require the Fed to select a rules-based policy.** Congress can greatly improve transparency and predictability by requiring the Fed to adopt a rules-based monetary policy. For example, the approach offered in the Federal Reserve Accountability and Transparency Act of 2014, introduced by Representative Bill Huizenga (R–MI) and Representative Scott Garrett (R–NJ), would require the Fed to choose its own monetary policy rule. It would also give the Fed the flexibility to stop following its policy rule, provided that it explains its decision to Congress. This sort of legislation should enjoy bipartisan support because it would greatly reduce uncertainty with respect to the Fed's future policy actions without overly restricting the Fed.

- **Create a formal monetary commission.** Freeing the U.S. dollar from the control of discretionary central bankers and moving the U.S. toward a truly competitive monetary system is a justifiable long-term goal. Congress can move the U.S. closer to this ideal by forcing the Fed to choose its own rules-based policy, but major structural reforms to the Fed will most likely require a formal congressional commission. The Centennial Monetary Commission Act of 2013 (H.R. 1176 and S. 1895), proposed by Representative Kevin Brady (R–TX) and Senator John Cornyn (R–TX), is an excellent example of such a commission. This type of legislation would establish a commission to examine U.S. monetary policy, evaluate alternative monetary policy rules, and recommend a future course for monetary policy. Such a com-

19. Scott Sumner, "Re-Targeting the Fed," *National Affairs*, No. 9 (Fall 2011), http://www.nationalaffairs.com/publications/detail/re-targeting-the-fed (accessed February 18, 2014).
20. Leland Yeager, "Stable Money and Free-Market Currencies," in Yeager, *The Fluttering Veil*, pp. 337–362.
21. See George Selgin, *The Theory of Free Banking: Money Supply under Competitive Note Issue* (Indianapolis: Liberty Fund, 1997).
22. See Jerry Jordan, "The Role of Gold in a Market-Based Monetary System," Cato Institute Monetary Conference, November 6, 2014, and George Selgin, "Law, Legislation and the Gold Standard," Cato Institute Monetary Conference, November 6, 2014.

mission would provide Members of Congress with the information they need to fulfill their constitutional responsibilities regarding monetary policy.

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