Sound rules-based monetary policy and good economic performance go hand in hand. In 1776, Adam Smith wrote of the importance of rules for “a well-regulated paper-money” in *The Wealth of Nations*. In 1962, Milton Friedman made the chapter “The Control of Money,” with its rationale for monetary rules, a centerpiece of his *Capitalism and Freedom*. Economic research and practical experience in the United States and other countries over the past five decades continue to support this view.

**A BRIEF HISTORY OF RULES-BASED POLICY AND ITS ALTERNATIVES**

In the late 1960s and 1970s, the Federal Reserve moved decidedly away from rules-based policy. It became highly discretionary, moving money growth erratically up and down, sometimes flooring the accelerator and other times slamming on the brakes. Yes, the Fed had goals, but it had no consistent strategy to achieve the goals. The result was terrible. Unemployment and inflation both rose.

Then in the early 1980s policy became more systematic and more rules-based, and it stayed that way through the 1990s and into the start of this century. The result was excellent. Inflation
and unemployment both came down. Researchers like John Judd and Glenn Rudebusch at the San Francisco Federal Reserve Bank and Richard Clarida, Mark Gertler, and Jordi Gali showed that this improved performance was closely associated with the move to more rules-based policy. They found that the Fed’s instrument of policy—the federal funds rate—responded more systematically to developments in the economy. This close connection between policy and performance was just what monetary theory predicted.

Researchers found the same results in other countries. Stephen Cecchetti, Peter Hooper, Bruce Kasman, Kermit Schoenholtz, and Mark Watson showed that as policy became more rule-like in Germany, the United Kingdom, and Japan, economic performance improved. Few complained about international spillovers or beggar-thy-neighbor policies during this period. Sound rules-based monetary policies were not only good for the countries that adopted them, they were good for the international system, too. And again this result is just what monetary theory predicted.

But then a reversal came. The Fed decided to hold the interest rate unusually low during the period from 2003 to 2005, and in doing so it deviated from the rules-based policy that worked well during the 1980s and 1990s. With the inflation rate around 2 percent, the federal funds rate was only 1 percent in 2003, compared with 5.5 percent in 1997 when the inflation rate was also about 2 percent. The results were not good. This policy deviation brought on a search for yield and excesses in the housing market, and was thus a key factor in the financial crisis, especially when combined with a financial regulatory process which broke the rules for safety and soundness.

During the ensuing panic in 2008, the Fed did a good job. It provided liquidity through loans to financial firms and swaps to foreign central banks in a lender-of-last-resort manner. But after the panic the Fed returned to a highly discretionary policy. It initiated its unconventional monetary policy: the large-scale purchases of securities widely known as quantitative easing (QE).
Regardless of what you think of the impact of QE, it was not rule-like or predictable.\textsuperscript{3} It did not deliver the economic growth that the Fed forecast and it did not lead to a good recovery. The continuation of the near-zero interest rate was another deviation from rules-based policy.

This deviation from rules-based monetary policy spread to other countries.\textsuperscript{4} Central banks followed each other down through extra low interest rates in 2003–2005 and more recently through quantitative easing. QE in the United States was followed by QE in Japan and by QE in the eurozone. Researchers at the Bank for International Settlements called it a Global Great Deviation. Richard Clarida observed that “QE begets QE!” Complaints about spillover and beggar-thy-neighbor policy grew.\textsuperscript{5}

This short history demonstrates that shifts toward and away from steady, predictable monetary policy affect economic performance. Alex Nikolsko-Rzhevskyy, David Papell, and Ruxandra Prodan have confirmed these findings using modern econometric tests.\textsuperscript{6} In the same journal where their work was published, many other economists (including Michael Bordo, Richard Clarida, John Cochrane, Marvin Goodfriend, Jeffrey Lacker, Allan Meltzer, Lee Ohanian, and Charles Plosser) wrote about the advantages of such a rules-based policy strategy and agreed that during the past decade the Fed has either moved away from a rules-based strategy or has not been clear about what the strategy is.\textsuperscript{7}

For all these reasons, any successful blueprint for economic policy should include a sound rules-based monetary policy. Of course, it is possible technically for the Fed to get back to such a policy, but it is difficult in practice. Long departures from a rules-based strategy in the 1970s and in recent years illustrate the difficulty. De jure central bank independence alone as written into the Federal Reserve Act has not prevented departures. De jure central bank independence has been virtually unchanged in the past fifty years, yet policymakers have varied their adherence to rules-based policy.
MONETARY REFORM IN THE UNITED STATES

These variations point to the need for monetary reform legislation to require the Fed to adopt a rules-based monetary strategy or rule. I offered such a proposal several years ago,8 which would effectively restore and modernize reporting and accountability requirements for the instruments of monetary policy in the Federal Reserve Act.

A proposal along these lines has now been written into legislation. Section 2 of the Fed Oversight Reform and Modernization Act is entitled “Requirements for Policy Rules of the Federal Open Market Committee.” It would require the Fed to “describe the strategy or rule of the Federal Open Market Committee for the systematic quantitative adjustment” of its policy instruments. The act, which passed the House of Representatives on November 19, 2015, would simply require that the Fed choose a strategy and decide how to describe it. The Fed could change its strategy or deviate from it if circumstances called for a change, in which case the Fed would have to explain why.

Policy rules legislation with similar provisions was voted out of the Senate Committee on Banking, Housing, and Urban Affairs in 2015, so working out a compromise with the House legislation in conference should be feasible. If such a bill passed Congress and were signed into law, it would constitute the needed reform of the Federal Reserve Act.

In evaluating such legislation, it is important to emphasize the word “strategy” as explicitly stated in the legislation. Though economists frequently use the word “rule,” that term may convey the false idea that a rules-based monetary strategy must be purely mechanical. George Shultz explained the importance of having a strategy. He wrote that “it is important, based on my own experience, to have a rules-based monetary policy. . . . At least as I have observed from policy decisions over the years in various fields, if you have a strategy, you get somewhere. If you don’t have a strategy, you are just a tactician at large and it doesn’t add
up.” Fed Chair Janet Yellen similarly explained in a speech in the 1990s that “the existence of policy tradeoffs requires a strategy for managing them” and she showed how a rule for the policy instruments could serve as “a general strategy for conducting monetary policy.”

The United States Congress has responsibility for the oversight of monetary policy in this strategic sense. As Allan Meltzer recently testified,9 “We need change to improve the oversight that [Congress] . . . exercises over the Fed. . . . You need a rule which says, look, you said you were going to do this, and you have not done it. That requires an answer, and that I think is one of the most important reasons why we need some kind of a rule.”

There is precedent for this type of congressional oversight. Legislation that appeared in the Federal Reserve Act from 1977 to 2000 required reporting of the ranges of the monetary aggregates. The legislation did not specify exactly what the numerical settings of these ranges should be, but the greater focus on the money and credit ranges was helpful in the disinflation efforts of the 1980s. When the requirement for reporting ranges for the monetary aggregates was removed from the law in 2000, nothing was put in its place. A legislative void was thus created concerning reporting requirements and accountability. The proposed legislative reform would help fill that void.

There has been extensive discussion and debate in the Congress and in the media about the ideas underlying this type of legislation, and new economic research has begun to address the issue.10 Recently a number of economists—including Nobel Prize winners, former Fed officials, and monetary experts—signed a statement in support of the legislation. The statement is attached as an appendix to this essay.

There is currently opposition to the legislation from the Federal Reserve. Fed Chair Janet Yellen testified,11 “I don’t believe that the Fed should chain itself to any mechanical rule.” But the bill does not chain the Fed to any rule. The Fed would choose and
describe its own strategy, and it need not be mechanical. The Fed could change the strategy if the world changed. It could deviate from the strategy in a crisis if it explained why. It would still serve as lender of last resort or take appropriate actions in the event of a crisis. Moreover, a policy strategy or rule does not require that any instrument of policy be fixed, but rather that it flexibly adjust up or down to economic developments in a systematic and predictable way that can be explained.

Another stated concern with policy rules legislation is that the Fed would lose its independence. In my view, based on my own experience in government and my research, the opposite is more likely. A clear public strategy helps prevent policymakers from bending under pressure and sacrificing their institution’s independence.

Some commentators say that the reform would require the Fed to follow a particular rule listed in the bill, but this is not the case. The bill requires the Fed to describe how its strategy or rule might differ from a “reference rule,” which happens to be the Taylor rule. However, describing the difference between a policy rule and this reference rule is a natural and routine task for the Fed. In fact, many at the Fed (including Yellen) already make such comparisons.

Another critique is that the zero bound on the interest rate means that an interest rate rule is no longer useful. Wasn’t that the reason that the Fed deviated from rules-based policy in recent years? It was certainly not a reason in 2003–2005 and it is not a reason now, because the zero bound is not binding. It appears that there was a short period in 2009 when zero was clearly binding. But the zero bound is not a new thing in economics research. Policy rule design research took that into account long ago. One approach was to recognize that in such a situation one should simply keep money growth steady rather than embarking on a purely discretionary policy such as quantitative easing.

There is also the concern that there are many rules or strate-
gies to choose from. There are many different types of personal display devices, but that doesn't mean they are all useless. Some policy strategies are better than others, and it makes perfect sense for researchers and policymakers to be looking for new and better ones. Some people have suggested focusing on nominal GDP. I do not think adding housing prices or the stock market to a rule makes much sense, but with the policy rules legislation it is the job of the Fed to decide.

Some of the recent objections to predictable policy rules and the enabling legislation go to the heart of an old debate about rules versus discretion. Lawrence Summers raised this one: “I think about my doctor. Which would I prefer: for my doctor’s advice to be consistently predictable or for my doctor’s advice to be responsive to the medical condition with which I present? Me, I’d rather have a doctor who most of the time didn’t tell me to take some stuff, and every once in a while said I needed to ingest some stuff into my body in response to the particular problem that I had. That would be a doctor whose [advice], believe me, would be less predictable.”

This line of argument in favor of pure discretion appeals to an all-knowing expert, a doctor who does not perceive the need for, and does not use, a set of guidelines, but who once in a while in an unpredictable way says to ingest some stuff. But as in economics, there has been progress in medicine over the years. And much progress has been due to doctors using checklists. Experience shows that checklists are invaluable for preventing mistakes and for getting good diagnoses and appropriate treatments. Of course doctors need to exercise judgement in implementing checklists, but if they start winging it or skipping steps the patients usually suffer. Experience and empirical studies show that checklist-free medicine is fraught with dangers just as is a rules-free monetary policy.

Another line of argument is that you do not really need a rule or strategy for the instruments of policy. All you really need for
effective policymaking is a goal, such as an inflation target and an employment target. In medicine, it would be the goal of a healthy patient. The rest of policymaking is doing whatever you as an expert, or you as an expert with models, think needs to be done with the instruments. You do not need to articulate or describe a strategy, a decision rule, or a contingency plan for the instruments. If you want to hold the interest rate well below the rule-based strategy that worked well during the Great Moderation, as the Fed did in 2003–2005, then it’s OK as long as you can justify it at the moment in terms of the goal.

Ben Bernanke and others have called this approach “constrained discretion.”15 It is an appealing term, and it may be constraining discretion in some sense, but it is not inducing or encouraging a rule or a strategy. Simply having a specific numerical goal is not a rule for the instruments of policy; it is not a strategy. In my view, it ends up being all tactics. I think the evidence shows that relying solely on constrained discretion has not worked for monetary policy.

INTERNATIONAL MONETARY REFORM
As I discussed in the “brief history” earlier in this essay, the international monetary system has also drifted away in recent years from the kind of steady, rules-based system long advocated by monetary economists and practitioners from Milton Friedman to Paul Volcker. The deviations from rule-based monetary policy seem to spread from country to country. Because these deviations cause movements in exchange rates, they are also causing governments to impose capital controls, intervene in exchange markets, and use regulations to affect international exchange transactions. The international financial institutions are even endorsing such controls, a clear contrast with the 1990s when they were working to remove them.16

The resulting international economic performance has been poor. There are huge swings of capital flows into and out of
emerging markets, increased volatility of exchange rates, and disappointing economic growth in many emerging markets and developing countries.

In my view, the problem traces to deviations from rules-based monetary policies at the national level. Bouts of quantitative easing (QE) have been associated with large fluctuations in exchange rates akin to currency wars. As QE in the United States begets QE in Japan which in turn begets QE in Europe, exchange rates move sharply in each instance. Interest rate decisions at central banks also tend to spread around the world and also resemble currency wars. Central banks have tended to follow each other. Extra low interest rates in the United States were followed by extra low interest rates in many other countries, in an effort to fight off currency appreciations. Their action in turn has led to interest rates being lower than otherwise in the United States.

We need a new international strategy to deal with these problems. Any strategy should be based on the principle that a key foundation of a rules-based international monetary system is simply a rules-based monetary policy in each country. Thus one proposal would be for the United States to work with other countries to forge an agreement where each country commits to a rules-based monetary strategy. It would be a flexible exchange rate system in which each country—each central bank—describes and commits to a monetary policy rule or strategy for setting the policy instruments. The strategy could include a specific inflation target and some notion of the long-run interest rate, as well as a list of key variables to react to in certain ways. It would be the job of each central bank to formulate and describe its strategy. The strategies could be changed if the world changed or if there were an emergency. A procedure for describing the change and the reasons for it would be in the agreement.

For the new agreement to work well, it should include a commitment to remove capital controls eventually. This would be a difficult part of the reform: currently, there are sixty-four coun-
tries, including China, classified as “wall” or “gate” countries with varying degrees of capital controls. For this reason, a transition period would be needed.

There’s an important lesson from previous international monetary agreements that this proposal must also take account of. Consider the Plaza Accord of the 1980s, which included the United States, the United Kingdom, Japan, Germany, and France. Under the Plaza Accord, the Bank of Japan agreed to shift its monetary policy in a way that adversely affected its economy—too tight at first and too easy later—causing a severe boom and bust. In contrast, US monetary policy was not affected: the Fed simply clarified in a constructive way what it was already doing, and the US economy performed well. The lesson is that any agreement should not impose specific strategies on central banks, except to say that the strategies be reported. Such a process would pose no threat to the national or international independence of central banks.

Now is a good time for such an international reform. Paul Volcker and Jaime Caruana, the head of the Bank for International Settlements, and others have been calling for reform. Nevertheless, reform will be difficult because there is still disagreement about the diagnosis and the remedy as proposed here. Moreover, some countries are still in the midst of unconventional discretionary monetary policies, and even if they move toward a rules-based policy there is a question of follow-through and commitment.

In my view, such an international monetary reform will require strong US leadership. In this regard, there is an important link between the US reform proposal and the international reform proposal in this essay. US leadership would be bolstered if the Congress became a partner in the international agreement by passing legislation requiring that the Fed report and commit to a monetary policy strategy as in the Fed Oversight Reform and Modernization Act.
CONCLUSION

The national and international monetary reform proposals in this essay may not be the be-all and end-all, but they are supported by lessons learned from economic history and extensive research over the years. A reform by which the Federal Reserve commits to a rule-based strategy, and clearly explains temporary deviations from that strategy, would create a more transparent and predictable process with accountability. It would meet Milton Friedman’s goal of “legislating rules for the conduct of monetary policy that will have the effect of enabling the public to exercise control over monetary policy through its political authorities, while at the same time . . . prevent[ing] monetary policy from being subject to the day-by-day whim of political authorities.” And on the international side, each country could choose its own independent monetary strategy, avoid interfering with the principles of free and open markets, and contribute to the common good of global stability and growth.

Economists’ Statement on Policy Rules Legislation

We support the legislation entitled Requirements for Policy Rules of the Federal Open Market Committee, Section 2 of the Fed Oversight Reform and Modernization Act (H.R. 3189) which passed the House of Representatives on November 19, 2015. This important reform would lead to more predictable rules-based monetary policy. It is based on evidence and experience that monetary policy works best when it follows a clear, predictable rule or strategy. A rule reduces uncertainty by giving the public information about future policy actions.

The legislation requires that the Fed “describe the strategy or rule of the Federal Open Market Committee for the systematic quantitative adjustment” of its policy instruments. The Fed would choose the strategy and how to describe it. The legislation does not chain the Fed to any rule, and certainly not to a
mechanical rule. The Fed could change its strategy or deviate from it if circumstances called for a change, in which case the Fed would have to explain why. To improve communication about its strategy, the legislation requires that the Fed compare its rule or strategy with a reference rule, as is common practice.

The legislation enables the Congress to exercise better oversight over monetary policy. It would prevent the Congress from micromanaging the Fed or subjecting it to capricious short-run changes in political views or desires. If the Fed says that it plans to follow a strategy and it does not, then an answer is required. There is precedent for this type of oversight: from 1977 to 2000 the Federal Reserve Act required that the Fed set and report ranges of the monetary aggregates. The new legislation would fill a void created by repeal of that oversight in 2000.

The Fed would still serve as lender of last resort or take appropriate actions in the event of a crisis. Having a strategy or rule does not mean that instruments of policy are fixed, but rather that they adjust in a systematic and predictable way.

In no way would the legislation compromise the Fed’s independence. On the contrary, publically reporting a strategy helps prevent policy makers from bending under pressure and sacrificing independence. It strengthens independence by reducing or removing pressures from markets and governments to finance budget deficits or deviate from policies that enhance economic stability.

The decision by the Fed to adopt a numerical inflation goal is welcome, but such a goal is not a strategy for the instruments of policy. The new legislation would provide for that strategy, and thereby improve economic performance.

Lars Peter Hansen, Robert Lucas, Edward Prescott, George Shultz, Robert Heller, Jerry Jordan, Athanasios Orphanides, William Poole, Michael Bordo, Michael Boskin, Charles Calomiris, Varadarajan Chari, John Cochrane, John Cogan, Steven Davis, Marvin Goodfriend, Gregory Hess, Peter Ireland, Mickey Levy, Bennett McCallum, Allan Meltzer, Gerald O’Driscoll, Lee Ohanian, Scott Sumner, John Taylor