Finnish Economic Papers – Volume 24 – Number 2 – Autumn 2011

THE RULES-DISCRETION CYCLE IN MONETARY AND FISCAL POLICY*

JOHN B. TAYLOR

Stanfor University
JohnBTaylor@Stanford.edu

This lecture starts with a review of historical trends in the balance between rules and discretion: first toward more discretionary policies in the 1960s and 1970s; second toward more rules-based policies in the 1980s and 1990s; and third back again toward discretion in recent years. In each of these swings, monetary policy and fiscal policy moved in the same direction. These swings are correlated with economic performance—unemployment, inflation, economic and financial stability, the frequency and depths of recessions, the length and strength of recoveries. The lecture then provides evidence that the correlation is causal with the moves toward more rules-based policies improving economic performance. (JEL: E60, N10)

1. Introduction

Over the past five decades, there has been a rarely-discussed, but quite noticeable cycle in economic policy in the United States. Policy has sometimes moved toward discretion, then veered toward rules, only to move back toward discretion again. So it is a cycle in the balance between rules and discretion. There are similar patterns in other countries, though I focus here mostly on the United States.

By discretionary policies I mean policies that are less predictable, more interventionist, more fine-tuning type policies. In contrast rules-based policies are more predictable, more systematic over time and don't involve a lot of intervention. As I show in this lecture, it's a distinction which emerges very clearly from the data. You can think of a variable *X* that measures whether policy is rules-based or not. Higher values of *X* represent more rules-based policies; lower values of *X* represent more discretionary policies. In this lecture I document the ups and downs in *X* over time.

But I also want to address what causes these ups and downs, and what is their impact on the economy—on unemployment, inflation, economic growth, the frequency of recessions, or the length of expansions. If *Y* is a measure of that performance, then how does *X* affect *Y*? Are high values of *X* for rules-based policies associated with high values of *Y* for better performance? Or is it the other way around? We should be able to tell by examining the swings back and forth over time.

* *This article is based on my Plenary Address at 33rd Annual Meeting of the Finnish Economic Association, Oulu, Finland on February 3, 2011. It builds on research reported in Taylor (2010 and 2011).*

2. The Swing Toward Discretion: 1960s–1970s

The first policy swing occurred in the sixties and the seventies; it is sometimes referred to as the "Keynesian revolution." In the United States it began in the 1960s in the Kennedy Administration and continued in the Johnson Administration. A remarkable document, the 1962 *Economic Report of the President,* made the case for Keynesian interventionism, explaining that it was needed to keep the economy stable. The persuasive arguments resulted in many of Keynesian interventions in practice, such as the investment tax credit, a tax surcharge, temporary tax rebates, and many other stimulus packages. It continued into the seventies when the federal government sent stimulus grants to the states so that they would build infrastructure to get the economy moving.

The same phenomenon occurred on the monetary side. Milton Friedman wrote in his famous Presidential address to the American Economic Association in 1968 that you should set some policy rules for money growth and try to keep the economy stable. He warned that discretionary fine-tuning would cause higher inflation or higher unemployment in a boom-bust cycle. But those warnings were not heeded, and the United States moved to a highly discretionary monetary policy which first tried to stimulate the economy by raising money growth and then cutting back. The 1970s were very turbulent as inflation and unemployment rose toward double digits.

You can empirically document these interventionist policies. Figure 1 examines monetary policy. There's an oval in Figure 1 labelled "1965 to 1979" which denotes the discretionary period. The short-term interest rate, the federal funds rate in the United States, is the solid line. The dashed line is the so-called Taylor Rule which describes a systematic response of this interest rate to changes in inflation and real GDP. This chart was originally created by the Federal Reserve Bank of San Francisco in 1995. The gap between the actual interest rate and this policy rule is a measure of how discretionary the policy was. According to this measure, interest rates were held too low throughout this period, but moved up and down several times, as the Fed tried to halt inflation, but then gave up too soon and gunned it again.

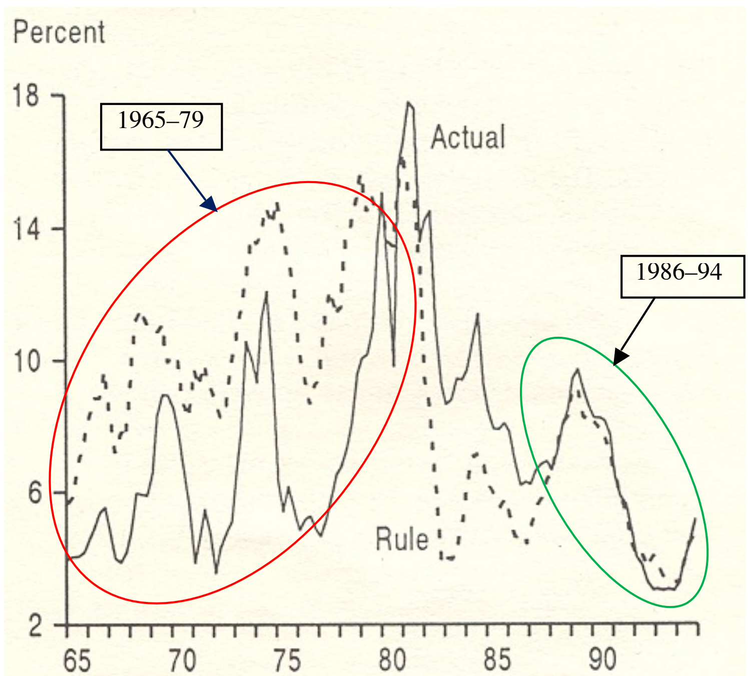

Figure 1. Discretion (1960s–1970s) and shift to rules-based policy (1980s–1990s)
Source: Judd and Trehan (1995).

3. The Swing Toward Rules: 1980s–1990s

In the eighties and nineties policy changed. First consider fiscal policy. The Keynesian-type temporary stimulus policies of the late 1970s were over by the early eighties and certainly by the mid-nineties. For example, in 1992 President George H.W. Bush proposed a very small fiscal stimulus. He only wanted to move forward $10 billion in government purchases by a few months, but it was rejected by the Congress. And in 1993 President Bill Clinton proposed a small stimulus; it was $16 billion dollars, but that was rejected by the Congress too.

By the late 1990s there was an economic consensus that Keynesian interventionist policy did not work (see Eichenbaum (1997). Fiscal policy movements were mostly due to the automatic stabilisers. When the economy went into recession, tax revenues would decline, and that would tend to be stimulative, but it was automatic, rule-like. It did not require the enactment of a piece of legislation.

The change in monetary policy was even more dramatic. A new chairman of the Fed, Paul Volcker, was appointed in 1979 and he quickly moved away from the inflationary monetary policies. He was followed by Alan Greenspan who continued that policy through most of the eighties and nineties. They focussed on the goal of price stability. That was their most important objective, and they argued that price stability would lead to more economic stability. It was a single-minded rule-like focus.

The Fed got more transparent too. It started announcing when it changed the interest rate and what policies would be in the future. The transcripts or the minutes of the Federal Open Market Committee (FOMC) reveal many references to policy rules that would guide policy. Financial market participants used policy rules to predict policy.

Figure 1 documents this change. You can see that the behaviour of monetary policy corresponded more closely to a rule from the mid-1980s onward. Figure 2 is another chart created at the Fed—in an article published by the Federal Reserve Bank of St. Louis. The dark solid line is the actual interest rate set by the Fed. The lighter line (dashed for part of the period) is what would be recommended by a policy rule. So, for much of the eighties and nineties, policy continued to be more rule-like.

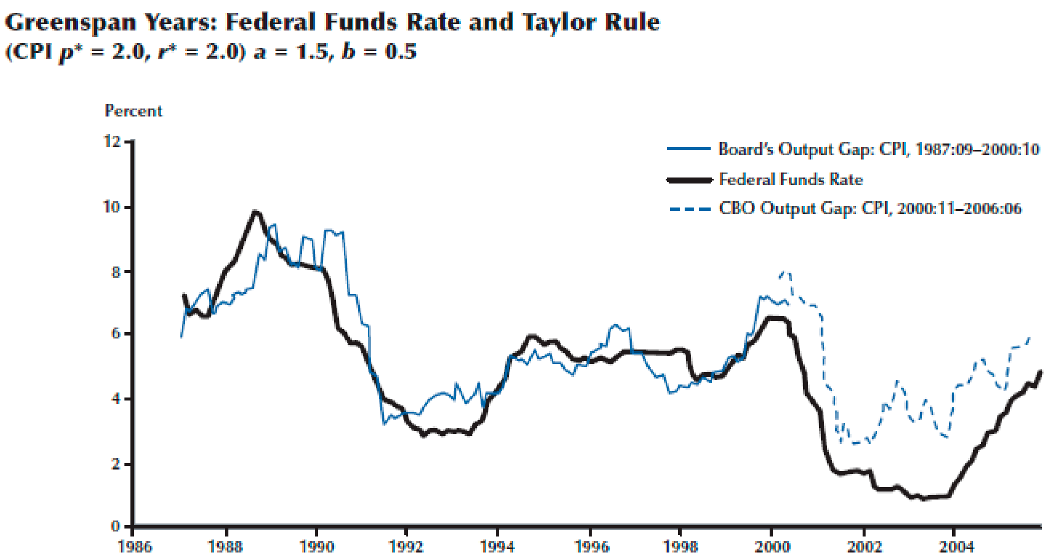

Figure 2. Chart from Fed Showing Shift Back Toward Discretion
Source: Poole (2007).

This shift toward more rule-like monetary policy is also evident in other countries. Figure 3 is from research by Steve Cecchetti, now at the BIS, and his colleagues. It shows the gaps between actual monetary policy and rule-like policy in several countries: Germany, Britain, Japan, as well as the United States. You can see very clearly that the 1970s were highly discretionary and you see a shift to more systematic types of policies.

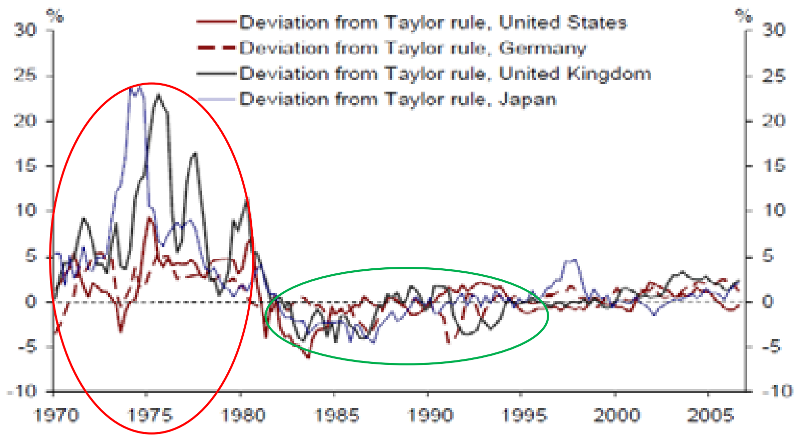

Figure 3. Chart showing large shift in several countries at the end of 1970s
Source: Cecchetti, Hooper, Kasman, Schoenholtz and Watson (2007).

4. The Swing Away from Rules in Recent Years

So that brings us to the third, more recent, period during which there were again significant departures from rule-like policies. In fact you can see it in Figure 2 where a deviation forms between the actual interest rate and the policy rule in the period around 2002–2005—a deviation from rule-like policy towards more discretionary policy. Figure 4 makes this clearer. This is a chart from *The Economist* magazine which focusses on the deviation.

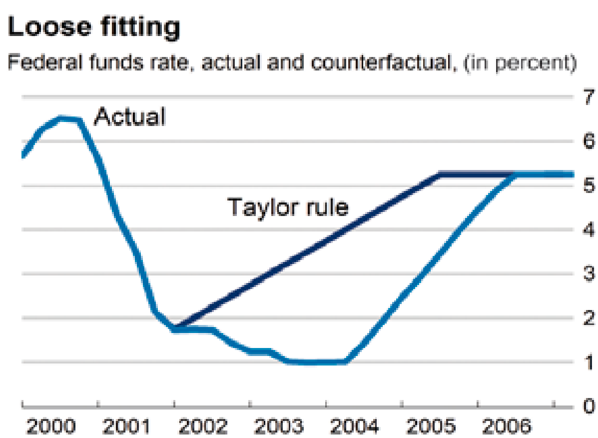

Figure 4. The swing toward discretion
Source: *The Economist*, October 18, 2007.

Figure 5 shows that interest rates appear to have been too low in Europe too. The blue line shows the deviation of the interest rate set by the European Central Bank from the same type of policy rule in Figure 4. The deviation is as much as two percentage points. The red line represents my estimate of how much of that deviation was related to the fact that the Fed had low rates (see Taylor (2009)). Central banks tend to move together, so that may be one reason why rates were extremely low in Europe.

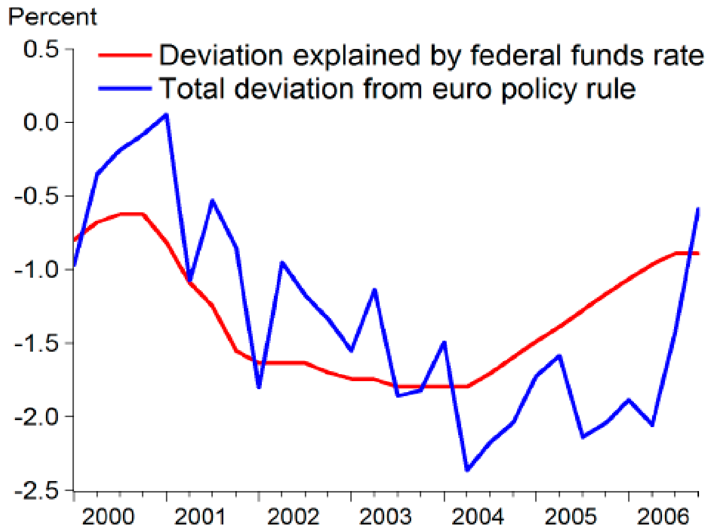

Figure 5. Interest rate development in Europe

These low interest rates in the euro zone had differential impacts in different countries within the zone. Figure 6 shows what was happening in different countries in Europe at this time. Within Europe, the horizontal axis shows you the move towards discretionary policy. The points toward the right on the chart represent big gaps between ideal monetary policy, based on policy rule considerations, and what actually took place. The vertical axis measures the growth or residential investment which represents the extent to where there was a housing boom. And you see that Ireland, Spain and Greece are in the upper right part of the picture. This chart was produced by the OECD in 2009. See Ahrend, Cournede, and Price (2008).

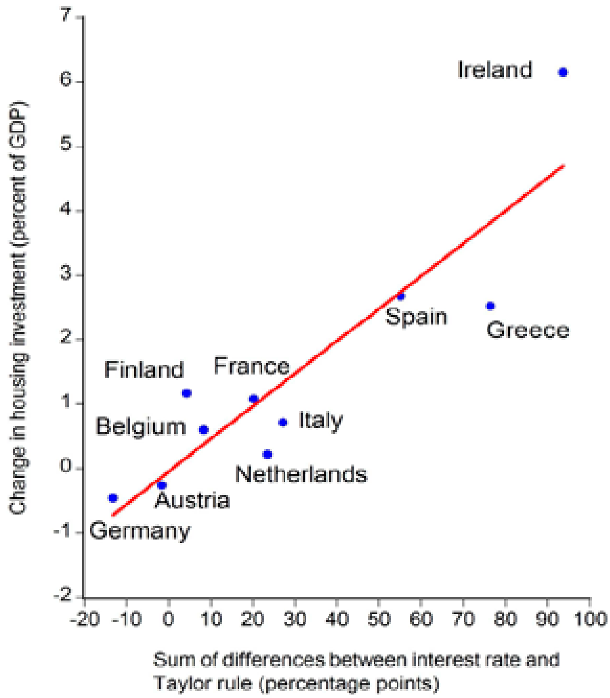

Figure 6. Impact of low interest rates (2001–06) in Euro zone

There were many other monetary interventions. The Fed used its balance sheet and created money in order to bail out the creditors of Bear Stearns. It then decided not to use its balance sheet to bail out the creditors of Lehman Brothers. It then went in and helped the creditors of AIG and then it stopped again. These are discretionary policies by any definition. I'm not judging their impact just yet. I'm just saying that they are not rules-based, but rather highly discretionary.

And then, after the panic in the autumn of 2008, there were many more interventions. In the United States there were the quantitative easings, QE1 and QE2. QE1 was mainly the purchase of 1.25 trillion dollars of mortgage-backed securities. QE2 is the purchase of another 600 billion of medium-term Treasury bonds. Those were financed by printing money, or by crediting banks with the reserves which added substantially to the Federal Reserve's balance sheet. So again this is discretionary intervention rather than rule-like behaviour.

Now consider fiscal policy. There were many stimulus packages, not just in the United States, but in other countries too, unlike the eighties and nineties. Figure 7 illustrates some of these policies for the United States. It shows disposable personal income; you can see some of these gigantic blips as discretionary stimulus payments are sent from federal government to individuals, hoping that they'll spend more to stimulate the economy. Those are the so-called Keynesian stimulus packages. There was a big one in 2008 and another one in 2009.

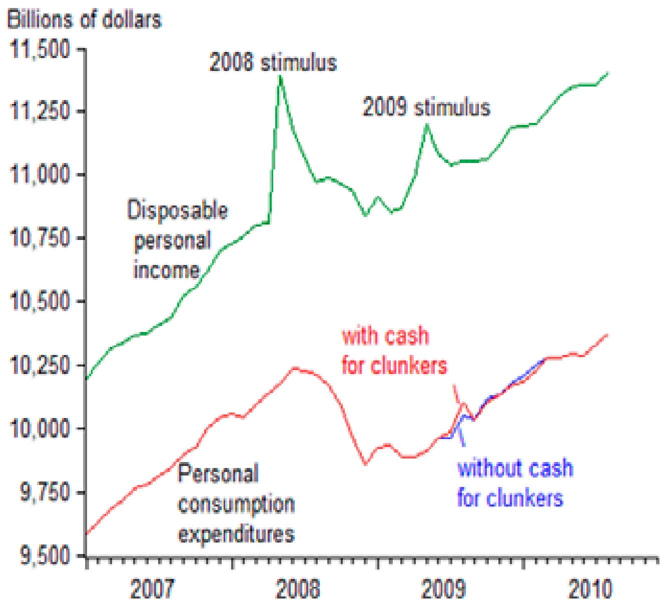

Figure 7. Return of discretionary fiscal packages

We've also had a rash of other interventions in the US economy, such as the "Cash for Clunkers" program where the Federal Government gave cash to car dealers if people came and exchanged their gas guzzling car for a new car. The hope was that this would stimulate consumption—but as shown in the picture of consumption, it didn't stimulate the economy by much and that was by moving purchases forward.

The 2009 stimulus package in the United States also aimed to stimulate spending at the state and local level. Grants were sent to the states from the federal government. The idea was that the states would spend those grants on infrastructure, but in fact, they didn't. Instead all they did was borrow less or saved the funds. Apparently the stimulus did not stimulate infrastructure spending at all.

5. What Are the Impacts?

So according to this historical review of policy, *X* has moved up and down over time. Now what about *Y*, what happened to economic performance? The answer should already be clear. The sixties and seventies were a terrible period. We had high inflation, high unemployment, high interest rates. We had a recession every three or four years. Thus, under those discretionary policies economic performance deteriorated.

The next episode, the eighties and nineties, was less discretionary, more rule-like, and the performance was completely different. The economists called this, "The Great Moderation Period". We had long expansions, low inflation and much lower unemployment.

And then finally, the recent discretionary period has been associated with unquestionably sub-par performance. It's now called "the Great Recession". And this poor performance is continuing with high unemployment in the United States.

Now correlation doesn't mean causation. Is there any evidence of causation from policy to performance? For example, can we rule out reverse causation? I believe we can. In the first time period of the 1960s and 1970s, you would have to argue that the poor economic performance led to the interventionist policy. But this makes no sense because the poor performance followed the interventionist policies. In the second period, when there was a swing towards rules-based policies, you'd have to argue that low inflation, long expansions and good economic performance led to the policies of Paul Volcker, etc. That doesn't make any sense either.

Now, in this recent period, maybe it is more plausible to say that this interventionist policy was brought on by the bad performance. But this idea doesn't fit the data. Remember that my first example of a move towards discretion—the 2003–05 monetary policy—occurred before the bad times started. And the move towards highly discretionary fiscal policy in the United States began in February 2008, before this panic period in the fall of 2008. Yes, some of the interventions occurred after the panic, and you could argue that they were brought on by the panic, but the basic shift towards discretionary policy preceded the poor performance.

Economic theory also supports the view that the changes in policies affected performance. A vast economic literature in the past thirty or forty years demonstrates the importance of rules for policy. In fact, any economic model where people look forward in the future and where they take time to adjust shows the benefits of having rules-based policy. Finn Kydland and Edward Prescott got a Nobel prize for showing the advantages of rules-based policies. And another Nobel prize was given to Robert Lucas for showing that you can't evaluate discretionary policies very well, implying that rules are better.

Moreover, policy rules have many other attractive features. They are more predictable. They help fend off special interests, which can get policy off track. They help communicate what policy is. So there are many reasons why economic performance would be better in those rules-based periods. See Taylor and Williams (2011).

And there is also direct empirical evidence from the interventions. In the United States, Alan Blinder (1981) showed that the temporary tax changes had very little impact. Ned Gramlich (1979) showed that the Keynesian stimulus packages in the late seventies didn't work. And then in the 1980s and 90s there were studies showing that the shifts to more rule-like monetary policy made the difference for stability.

I have spent a good deal of time in the past three years looking in detail at the most recent interventions, and I have found that most didn't work (see Taylor (2010)). Sending checks to people to stimulate consumption didn't stimulate consumption. Sending funds to the states did not stimulate infrastructure spending. Most of the interventions in the financial sector, the bailouts, did not help in my view. I think they made it worse, with an important exception: During the worst of the panic in September–October 2008, central banks got together and intervened to stabilize the money markets with swaps between themselves, which I think was constructive in stemming the panic. Not every specific discretionary intervention was harmful. But the overall shift in this direction was very harmful.

6. The Cause of the Cycle

What are the causes of these cycles in policy? One possibility is that they are caused by changes in economic theories. It is true that the economics profession made the case for discretion in the 1960s and discretion followed. It is also true that many in the economics profession made the case for rule in the late 1970s, and a move of policy away from discretion toward rules followed. But what about the recent move back to discretion? I am not aware of a shift in economic research that would have predicted this recent move towards discretion.

Another possibility is that the underlying shift to more rules-based policies is motivated by political theories that support a "rule of law" or a more limited power approach to government. The political philosophy of limited government and individual freedom calls for a rule of law approach to government policy, and that is consistent with rules-based monetary and fiscal policy. Rules-based monetary and fiscal policies are good on their own right, but they may need this broader political support.

There may also be an endogenous cycle in which poor economic performance generates better policies. Negative public reaction to the high inflation and high unemployment in the 1970s, may have led to better policies in the eighties and nineties. And then perhaps the better performance makes policy-makers too complacent. That good economic performance in the eighties and nineties might have led to complacency and a move back toward discretion.

Such an endogenous view of the cycle suggests we can "ride this wave," with the exit occurring naturally as the continuing dismal economic performance of the past few years drives people back towards rules-based policies. But even if true, it may take too long. I mentioned that in 1968 Milton Friedman made the case for not using these discretionary policies. It took twelve years of going the wrong way before policy heeded that advice. We had twelve years of terrible performance, and we don't want that to happen again.

7. Conclusion

In this lecture I have documented a highly-relevant history of cycling back and forth between discretion and rules in economic policy. I have also shown a strong correlation between these policy cycles and changes in economic performance. In my view the empirical evidence for the cycle and the correlation are irrefutable.

But I have also endeavored to show that the correlation is causal; policy is causing that performance. I think the case is strong here too, but I am sure this lecture is not the last word on that issue. There is room for debate and much interesting research to be done in the future.

References

Blinder, A. (1981). "Temporary Income Taxes and Consumer Spending," *Journal of Political Economy* 89, 26–53.

Cecchetti, S.G., P. Hooper, B.C. Kasman, K.L. Schoenholtz, and M.W. Watson (2007). "Understanding the Evolving Inflation Process. Presented at the U.S. Monetary Policy Forum 2007.

Eichenbaum, M. (1997). "Some Thoughts on Practical Stabilization Policy," *American Economic Review* 87, 236–39.

Friedman, M. (1968). "The Role of Monetary Policy**"** *The American Economic Review* 58, 1–17.

Gramlich, E.M. (1979). "Stimulating the Macro Economy through State and Local Governments," *American Economic Review* 69, 180–185.

Judd, J.P. and B. Trehan (1995). Has the Fed Gotten Tougher on Inflation?. The FRBSF Weekly Letter, March 31, 1995.

Kydland, F. and E. Prescott (1977). "Rules rather than Discretion: The Inconsistency of Optimal Plans." *Journal of Political Economy* 85, 473–491.

Lucas, R.E. Jr. (1976). "Econometric Policy Evaluation: A Critique." *Carnegie-Rochester Conference Series on Public Policy* 1, 19–46.

Poole, W. (2007): "Understanding the Fed." Federal Reserve Bank of St. Louis *Review* 89, 3–13.

Taylor, J.B. (2010). Assessing the Federal Policy Response to the Economic Crisis. Testimony before the Committee on the Budget, United States Senate, Sept 22.

Taylor, John B. (2011). Historical Evidence on the Benefits of Rules-Based Economic Policies. Address before the Joint Luncheon Session of the American Economic Association and the American Finance Association.

Taylor, J.B. and J.C. Williams (2011). "Simple and Robust Rules for Monetary Policy." In *Handbook of Monetary Economics*. Eds. B. Friedman and M. Woodford. USA: North-Holland.