

## Historical Evidence on the Benefits of Rules-Based Economic Policies

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Today I would like to talk about monetary and fiscal policy, a topic chosen by many speakers at this joint luncheon over the past sixty years.

The first luncheon was held in 1948 in Cleveland.<sup>2</sup> Winthrop Aldrich spoke. He was President of Chase National Bank, then the largest bank in the United States. Aldrich called his talk “The Management of the Public Debt,” and he focused on fiscal and monetary policy. He had earlier blamed the Fed for helping to cause the Great Depression with easy money in the 1920s, and he was concerned in the late 1940s that the Fed would monetize the enormous World War II debt. So he spoke out against the Fed supporting the Treasury bond market: The Fed should “modify the policy of maintaining rigid support levels of government bonds,” he argued, and thereby “regain their freedom” to control inflation.

The second joint luncheon address was given by Paul Douglas, the University of Chicago economist who had just been elected U.S. Senator from Illinois, after enlisting at age 50 in the Marines and earning two purple hearts in the Pacific in World War II. Douglas also talked about macro policy, mainly about the federal budget; in fact the title of his talk was simply “The Federal Budget.” He knew the Keynesian arguments for deficit spending, but he was concerned about the large debt: “...the problem of balancing the budget and of adopting a sound fiscal policy is not merely economic. It is to an even greater degree a moral issue. We shall need a proper sense of values and a high degree of ethical self-restraint if we are to reach our goal.”

So sound monetary policy and sound fiscal policy were the clarion calls of the first two speakers at this joint luncheon series.

Today I want to carry on that tradition and talk about U.S. monetary and fiscal policy in the six decades since Aldrich and Douglas spoke. In particular I want to discuss the fundamental policy issue of rules versus discretion.

As I look back at monetary and fiscal policy in the United States over the past 60 years, I see three major trends in the balance between rules and discretion: first toward more

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<sup>2</sup> Robert Kavesh’s history marks the December 28, 1948 meeting as the first joint luncheon.

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 the past few years. Remarkably, in each of these swings, monetary policy and fiscal policy moved in the same direction.

In documenting these trends, I do not use a purely theoretical definition of rules versus discretion—such as might come out of game theory—in which policy is either at one extreme or the other, either pure rule or pure discretion. Rather I see a continuum between rules and discretion with the balance of policies shifting back and forth over this continuum. By more rules-based, I mean more predictable, less interventionist, and more systematic policies. By more discretionary policies, I mean less predictable, more interventionist policies, and with a focus on short-term fine-tuning. To simplify, imagine a measure, say X, of rules versus discretion: X is higher when policy is more rules-based, and X is lower when policy is more discretionary.

I am interested in how the balance between rules and discretion affects macroeconomic performance—unemployment, inflation, economic and financial stability, the frequency and depths of recessions, the length and strength of recoveries and periods of economic growth. Again to simplify, imagine a measure, say Y, of overall macroeconomic performance, with higher values of Y representing better performance. My purpose here is to examine the relationship between X and Y over the past 60 years in the United States.

### ***The Rise of Discretionary Policies***

First consider the rise of discretionary macroeconomic policies in the post World War II period, a story which is well known so I can be brief. Keynesian ideas about countercyclical fiscal policy grew in popularity in academia in the 1950s and 1960s and were soon applied to actual policy. The 1962 *Economic Report of the President* rationalized the use of discretion and the arguments appeared in the major textbooks. Keynesian discretionary policy continued in favor well into the 1970s. As late as 1977-78 the Carter administration successfully enacted discretionary stimulus packages, including grants to the states for infrastructure.

On the monetary side, the history of increased discretion is also well-known. The Fed certainly did not take heed of the message in Milton Friedman's 1968 AEA address "of setting itself a steady course and sticking to it." Instead, the late 1960s and the 1970s saw a series of boom-bust cycles in monetary policy with the inflation rate rising steadily higher at each cycle. The wage and price controls of the 1970s were perhaps the epitome of interventionist policy, and were, sadly in my view, defended by Fed Chairman Arthur Burns in his 1973 speech at the AFA-AEA joint luncheon where he argued that "wage rates and prices no longer respond as they once did to the play of market forces." Fed Governor Sherman Maisel's 1973 book shows how little emphasis there was on strategy or systematic thinking about policy. Years later, researchers—including Andrew Levin and I—showed that the Fed's responses to inflation were unstable over time in the 1970s and certainly not rule-like as they would become in the 1980s and 1990s.

### ***The Rise of Rules-Based Policies***

Next consider the shift toward rules-based macro policy in the 1980s and 1990s. For fiscal policy, signs of the shift are found in econometric analyses of countercyclical policies,

such as Ned Gramlich's 1979 study of the Carter stimulus packages, which showed that they were not effective. By the early 1990s cyclical movements in the budget deficit were dominated by the automatic stabilizers not by discretionary policy. For example, in 1992 the Bush Administration proposed a stimulus package, but it was very small, including such items as moving \$10 billion in government purchases from the future to the present, and none of the items in the package that required legislation actually passed the Congress. Similarly, the Clinton Administration proposed a stimulus which would have added \$16 billion to government purchases, but this too did not pass the Congress.

The lack of success with countercyclical fiscal policy led to a near consensus among economists. In 1997 Marty Eichenbaum wrote of the "widespread agreement that countercyclical discretionary fiscal policy is neither desirable nor politically feasible." In 2000 I wrote that it is "best to let fiscal policy have its main countercyclical impact through the automatic stabilizers."

The shift toward more rules-based monetary policy began with the shift of Fed policy to a focus on inflation under the leadership of Paul Volcker from 1979 to 1987. It was a dramatic change from the 1970s. In his 1983 address before the AFA-AEA luncheon Volcker said "We have...gone a long way toward changing the trends of the past decade and more." Alan Greenspan maintained the commitment to price stability in the 1980s and 1990s. Allan Meltzer describes these changes in detail in his history of the Fed.

Additional evidence of more rules-based policy is the Fed's more predictable and transparent decision-making process with a focus on expectations of future policy actions. The Fed started announcing its interest rate decisions immediately after making them. It also started explaining its intentions about the future. More evidence appears in the transcripts of the FOMC in the 1990s, which show a large number of references to policy rules. Former Fed Governor Larry Meyer emphasizes this systematic policy framework in his 2004 book which contrasts sharply with Sherman Maisel's 1973 book.

Finally, actual monetary policy corresponded much more closely to simple policy rules in the 1980s and 1990s compared with the 1960s and 1970s as Judd and Trehan of the San Francisco Fed first pointed out in 1995.

### ***The Return of Discretionary Policies***

Now consider the more recent history. In the past few years, there has been a dramatic shift back toward discretionary macroeconomic policies. Examples include the deviation from 1980s-1990s style monetary policy rules during 2003-2005; the \$152 billion discretionary fiscal stimulus of 2008 in which checks were sent to people on a one-time basis; the on-again/off-again interventions of financial firms by the Fed in 2008—on as the creditors of Bear Stearns were bailed out; off as the creditors of Lehman were not bailed out, on again as the creditors of AIG were bailed out, and then off again when the TARP was rolled out. Then there were the money market mutual fund and commercial paper facilities of 2008; the \$862 billion discretionary fiscal stimulus of 2009 which included temporary rebates and credits and grants to state and local governments; the cash for clunkers program of 2009; quantitative easing in 2009, now called

QE1, which included \$1.25 trillion purchases of mortgage backed securities and \$300 billion of longer term Treasury bonds; and QE2 in 2010 and 2011, which include the purchases of another \$600 billion on long term Treasury bonds.

First on this list is the interest rate policy of the Fed in 2003-2005. I consider this to be a deviation from rules-based policy because the interest rate was held well below the level implied by monetary rules, such as the Taylor rule, that had described policy well in the 1980s and 1990s. Without this deviation, interest rates would not have reached such a low level, and they would have returned much sooner to a neutral level. The deviation was large—on the order of magnitude seen in the unstable decade of the 1970s. One does not need to rely on the Taylor rule to conclude that rates were held too low for too long: The real interest rate was negative for a very long period, similar to what happened in the 1970s. The Fed’s statements that interest rates would be low for a “prolonged period” and that interest rates would rise at a “measured pace” are evidence that this was an intentional departure from a policy that was followed in the 1980s and 1990s. To be sure, others have different views. Ben Bernanke, for example, argues that the low interest rates in 2003-2005 were not a deviation from rules-based policies if you use a modified policy rule with the Fed’s *forecasts* of inflation rather than actual inflation. But the Fed’s forecasts of inflation were too low in this period, which suggests that such a modified policy rule is not a good one.

While this long list marks the shift back toward discretion as starting with monetary policy in 2003-2005, there are signs of an earlier shift in fiscal policy at the time of the tax rebates in 2001. Milton Friedman was quite critical of those rebates. When asked about them by reporter Art Pine in 2001, Friedman is quoted as saying “Keynesianism has risen from the dead” and called the move “a serious mistake.”

I should also emphasize that I could list many more examples of deviations from rules-based policy in recent years if I went beyond monetary and fiscal policy and considered regulatory policy. Most glaring was the failure to enforce rules about risks at certain large financial institutions, including commercial banks, the most highly regulated entities in the financial system, and to even encourage excessive risk taking by Fannie Mae and Freddie Mac. Adding these deviations to the list would only bolster the arguments I am about to make.

### ***The Impact on Economic Performance***

What effect did these changing trends in policy have on the economy? In other words, what happened to the economic performance measure (Y) when the rules-based measure of policy (X) rose and fell? A simple comparison of the policies and the performance reveals a close association.

The first trend toward discretionary policies was associated with a period of frequent recessions, high unemployment, and high inflation from the late 1960s to the early 1980s. Inflation, unemployment, and interest rates all reached into double digits. *When X went down, Y also went down.*

The second trend toward more rules-based policies was associated with a remarkably stable period, frequently called the Great Moderation, from the mid 1980s until the early to mid 2000s. Inflation and interest rates and their volatilities fell compared with the 1970s. The volatility of real GDP was cut in half. Economic expansions became longer and stronger while recessions became shorter and shallower. *When X went up, Y also went up.*

Finally, the return toward discretion in recent years has been associated with the financial crisis and recession whose depth has been on a par with the recessions at the end of the 1970s and much deeper than in the Great Moderation period. And the recovery has been much slower than that from the recession of the early 1980s; unemployment remains very high. *When X went down, Y also went down.*

So the past 60 years reveals a clear positive correlation between rules-based policy and good economic performance. In my view this correlation is best explained by a causation from policy to performance. But, one correlation—even an amazing six-decade long correlation—does not prove causation, so we need to investigate the reasons for the correlation further.

### ***Can the Positive Correlation be Explained by Performance Causing Policy?***

First consider the possibility that the correlation reflects a cause and effect in the opposite direction. In other words one might ask whether Y caused X, with poor economic performance bringing about more intervention, and good economic performance allowing for less intervention. However, for each swing in the rules-discretion balance—each rise and fall of X and Y—the timing is inconsistent with such an interpretation.

The popularity of discretionary Keynesian fiscal policy in the 1960s could not have been a response to the many recessions of the 1970s. Similarly, the inflationary monetary policy starting in the late 1960s could not have been caused by the inflation of the 1970s. And it obviously strains credibility to argue that the Fed's move to reduce inflation and restore economic stability was caused by the low inflation and a stable economy of the 1980s and 1990s.

Perhaps one could more plausibly argue that the shift back to discretion in recent years was due to the severe financial panic of 2008, requiring large discretionary monetary and fiscal packages. But much of that shift toward discretion began before the panic in the fall of 2008—the low interest rates of 2003-2005, the stimulus package of February 2008, the unprecedented use of the Fed's balance sheet in early 2008, not to mention the regulatory discretions taken during the housing finance boom. Moreover, if the emergency of the panic was the explanation then one would expect to see a return to rules-based policies now that the panic has been over for more than two years. But instead, another large discretionary action, QE2, has been undertaken, rationalized by a slowdown in the economic recovery and the view that the near zero interest rate monetary policy was not already easy enough to combat deflation.

### ***The Economic Basis for Rules Rather than Discretion***

Much economic theory supports the more straightforward explanation that rules-based policy caused the improved performance. Any dynamic model in which people are forward-

looking and take time to adjust their behavior implies that monetary and fiscal policy works best when formulated as a policy rule. There is the time inconsistency argument in favor of rules, which Kydland and Prescott demonstrated in their classic 1977 paper, and there is the Lucas critique which implies that rules are essential for conducting and evaluating policy. But there are many other reasons why rules-based policies work better. Policy rules provide predictability and reduce uncertainty. Policy rules help policymakers avoid short-term pressures from special interest groups and take actions consistent with long-run goals. Policy rules facilitate communication and increase accountability. The case for rules-based policies was reviewed in Ben McCallum's 1999 survey in the *Handbook of Macroeconomics*, and more recently in the survey by John Williams and me in the new *Handbook of Monetary Economics*.

Some argue that the recent crisis shows that these models have failed, and therefore one might discount this theoretical case for rules. But the evidence I report here does not support such an argument. Rather the evidence shows that the models were right and the policies were wrong, because policy makers did not follow the rules-based policies recommended by the models. I agree with Avinash Dixit who argued in a recent interview with Jeremy Clift of the IMF that "economic theory came out of this better than policy practice did..."

One particular complaint about the models is that they assume efficient markets and rational expectations without financial frictions. But virtually all models used for monetary policy contain frictions, usually sticky prices and slow adjustment. It is true that monetary and credit aggregates are frequently omitted from empirical models, but that is because measurement problems forced econometric modelers to focus on financial prices rather than financial aggregates. Some complain that the models only include a short-term interest rate, but those are the textbook models, not the ones built for policy work

### ***Evidence about Specific Policy Actions***

There is also plenty of evidence about specific policy actions which bolsters the evidence from the broad swings in the rule-discretion balance. Milton Friedman predicted in his 1968 AEA address that a monetary policy of higher inflation would not reduce unemployment and that such a discretionary monetary policy would lead to booms and busts; both were consistent with what happened in the 1970s and 1980s. Ned Gramlich, studying grants to states, and Alan Blinder, studying temporary tax changes, showed that discretionary fiscal packages in the late 1960s and 1970s had little effect. Steve Cecchetti, Jim Stock, and Mark Watson showed that the change to a more rules-based monetary policy in the 1980s and 1990s had at least some positive impact on economic performance.

I have spent a good part of the past three years studying the more recent discretionary actions.<sup>3</sup> My research shows that the low interest rates set by the Fed in 2003-2005 added to the housing boom and led to risk taking and eventually a sharp increase in delinquencies, foreclosures, and toxic assets at financial institutions. The research also shows that a more rules-based federal funds rate would have prevented much of the boom and bust.<sup>4</sup> I found that the tax rebates and one time payments in 2008 and 2009 did little in the aggregate to jump-start

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<sup>3</sup> My September 2010 testimony at the Senate Budget Committee provides a summary.

<sup>4</sup> The failure to follow rules-based regulations of banks exacerbated the problem.

consumption demand and thereby jump-start the economy, just as permanent income or life-cycle theory predicts. John Cogan and I found that the parts of the 2009 stimulus which aimed at boosting government purchases were ineffective. In my view QE1 had at most a small effect on mortgage rates once prepayment risk and default risk are controlled for.

Moreover, the highly discretionary on again/off again bailout policies of the Fed did not prevent the panic that began in September 2008; in my view they were a likely cause of the panic, or at least made the panic worse. The unpredictable nature of these interventions could have been avoided, in my view, if the Fed and the Treasury had stated more clearly the reasons behind the Bear Stearns intervention and their intentions for future policy. But no such description was provided. Confusion about policy rose when the TARP was rolled out and panic ensued as the S&P 500 fell by 30 percent. The original stated purpose of the TARP—to buy up toxic assets on banks' balance sheets—was never credibly viewed as operational and it caused uncertainty. It was only when the purpose of TARP was changed and clarified on October 13, 2008 to inject equity into the banks that the panic subsided.

To be sure, the Fed's interventions into the commercial paper market and the money market funds were helpful in rebuilding confidence. So not every discretionary intervention was harmful, but these would not have been necessary had the earlier interventions been avoided.

There are other negative implications of these discretionary programs. The fiscal packages have increased the debt and the monetary packages have increased the monetary overhang. The monetary interventions have reduced central bank independence, because many of them are not monetary policy as conventionally defined, but rather fiscal policy or credit allocation policy. Unwinding the programs creates uncertainty, and there is a risk of inflation if they are not unwound.

### ***Why the Swings in the Rules-Discretion Balance?***

While the evidence in support of rules-based policies is convincing, an important question remains: What causes these shifts? The periods during which discretionary policy dominates or rules-based policy dominates overlap political regimes in Washington: The first discretionary period overlaps the Kennedy, Johnson, Nixon, Ford and Carter administrations. The rules based period overlaps the Reagan, Bush 41, and Clinton administrations. The more recent period overlaps the Bush 43 and Obama administrations. So there is no obvious political explanation in the narrow partisan sense.

Perhaps the shift toward rules-based policy in the 1980s was the result of dissatisfaction with the economic performance of the 1970s. Perhaps the recent shift toward discretion was the result of complacency bred by the good economic times in the 1980s and 1990s. To put it more technically, perhaps Y Granger-causes X negatively. This is of course not inconsistent with X Granger-causing Y positively, which I have emphasized in this talk, and it suggests a way forward: Perhaps dissatisfaction with recent performance will cause a swing back toward rules-based policy in the near future.

## *Conclusion*

In this talk I have tried to provide a brief history of U.S. macro policy during the past 60 years. The history provides strong evidence that rules-based monetary and fiscal policies are enormously beneficial to the economy. The historical swings away from rules have been damaging whether during the Great Inflation of the 1970s or the recent Great Recession.

Like Aldrich and Douglas in the late 1940s, I speak today about these topics because I am concerned about the direction of policy. In my view, history calls out economists, regardless of specialty, to explain the costs of moving policy too far in the interventionist direction, too far away from rules. In this regard I can do no better than quote George Shultz in his 1973 address to this joint luncheon when he was U.S. Treasury Secretary.

Two years earlier, in 1971, Shultz advocated a policy which he called “Steady As You Go.” It had all the characteristics of the rules-based policies I discussed here. But his recommendations were not followed, and when he came to speak before this luncheon in 1973, we were in the midst of an interventionist binge similar in scope to what we have seen recently. So he called out: “economists have a particular responsibility to relate policy decisions to the maintenance of freedom, so that, when that combination of special interest groups, bureaucratic pressures and congressional appetites calls for still one more increment of government intervention, we can calculate the cost in these terms. In this manner, economists may have an impact on policy that extends beyond the most current crisis and reflects the best traditions of this discipline.”

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