MACROECONOMIC POLICY IN THE 1960S:

THE CAUSES AND CONSEQUENCES OF A MISTAKEN REVOLUTION

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I suspect that like many visitors to this library, I find much to admire in the Johnson administration: its commitment to civil rights, the war on poverty, the expansion of the social safety net. The theme of my talk, however, will be that its conduct of macroeconomic policy was not one of them. Indeed, I will argue that far from being the high point of economic policymaking in the postwar era, the 1960s represented the beginning of a long dark period for macroeconomic policy. Both monetary and fiscal policy actions were seriously misguided in the 1960s, and led to undesirable economic outcomes.

In my view, macroeconomic policies of the 1960s were not the result of a change in the goals of policy or the effectiveness of economists. Policymakers at least since World War II had been committed to short-run stabilization, and economic models, if not actual economists, had been influential from the 1920s on. Rather, the revolution of the 1960s was a revolution in economic ideas. The model that policymakers used to understand the economy changed in dramatic ways. This led them to make radically different policy recommendations.

The resulting policy outcomes had two effects on the economy. One was to generate inflation and short-run instability. The second was to end the historical norm of long-run budget balance. The 1960s introduced Americans to the phenomenon of persistent peacetime deficits.

In my talk today, I want to discuss some of the evidence for this view that economic ideas played a crucial role in the macroeconomic policy actions of the 1960s and the subsequent economic outcomes. I want to show you that economic beliefs changed in the early 1960s and that these new beliefs led directly to new policies and to predictable consequences.

But, more importantly, I want to discuss what has happened to macroeconomic policy in

the decades since 1980. One of the most striking facts about macropolicy is that we have progressed amazingly in some areas, but have remained frighteningly stuck in the 1960s in others. The inflation and instability of the 1960s and 1970s led policymakers to develop (or, as I will suggest, rediscover) more sensible models of short-run macroeconomic behavior. This evolution of beliefs has led to dramatically better short-run stabilization policy. In my opinion, better policy, particularly on the part of the Federal Reserve, is directly responsible for the low inflation and the virtual disappearance of the business cycle in the last 25 years. In this area, the policy mistakes of the 1960s were a painful, but not permanent, detour on the road to excellent economic performance.

But, in another area, the policy decisions of the 1960s have had a more enduring consequence. At the same time that policymakers have done such a remarkable job at figuring out short-run stabilization policy, they have steadfastly remained on a path of fiscal irresponsibility. The persistent budget deficits that began in the 1960s have not only remained, but grown over time. I want to discuss how ideas about long-run fiscal policy have changed little over the last 40 years, and provide at least some speculation about why this has been the case.

Before I move on to the specifics, I want to say that much of what I will be discussing is based on joint research with my colleague (and husband), David Romer. If you are interested, I hope that you will look at both the published papers and some of our more recent unpublished work on fiscal policy for more detailed discussions of the evidence for our views on the evolution of macroeconomic policy in the United States.[1]

I. MACROECONOMIC POLICY BEFORE 1960

To understand how macroeconomic policy changed in the 1960s, it is crucial to discuss what came before. David and I have argued that both monetary and fiscal policy were remarkably "modern" in the 1950s.

First, the basic goals of macroeconomic policy in the early postwar era were virtually identical to what they are today. After living through the Great Depression and World War II, there is no question that policymakers felt that short-run stabilization and inflation control were their responsibility. The most obvious manifestation of this sense of responsibility was passage of the Employment Act of 1946, which made it the explicit role of the federal government to ensure "maximum employment, production, and purchasing power." Fiscal policymakers in the 1950s spoke frequently of their willingness to act "promptly and resolutely when either recessionary or inflationary influences in the general economy become evident" (*Economic Report*, 1956, p. 8).[2] And, the *Minutes* of the Federal Open Market Committee show that even in the 1950s, monetary policymakers were keenly aware of the Federal Reserve's "dual mandate" to preserve both price stability and real stability.

A. Policymakers' Beliefs

Not only were policymakers' goals for macropolicy in the 1950s similar to those of modern policymakers, the framework they used to understand the economy and make policy recommendations was also remarkably similar. Now, I don't want to push the comparison too far – the framework of the 1950s was certainly crude and less sophisticated than modern models. But, in certain key aspects it was quite modern. Table 1 summarizes the key economic beliefs of policymakers in various eras.

policymakers in various eras.

First, early postwar policymakers had a sort of intuitive natural rate framework. They certainly did not believe in a permanent trade-off between inflation and unemployment. Instead, they believed that expansionary policy could cause a temporary boom, but eventually inflation would rise and output would come back down. Indeed, William McChesney Martin, the Federal Reserve chair, believed strongly that attempting to push output above its comfortable level would actually reduce production in the long run because inflation was very costly. At one FOMC meeting he stated: "If inflation should begin to develop again, it might be that the number of unemployed would be temporarily reduced …, but there would be a larger amount of unemployment for a long time to come" (*Minutes*, August 19, 1958, p. 57).[3]

Perhaps even more important than the belief in a crude natural rate framework were policymakers' views of full employment. 1950s policymakers had what seem to modern researchers very realistic views of capacity. Policymakers tended to view 4½ to 5% as the level of unemployment at which inflation started to rise. For example, in 1959, the chief economist for the Board of Governors said that "[t]he economy is approaching the limits of resource utilization" when the current unemployment rate was 5% (*Minutes*, June 16, 1959, p. 6).

One way that 1950s policymakers' views about the economy were very different from those of many modern policymakers was in the importance they ascribed to a balanced budget. By the 1950s, policymakers understood that revenues depended on output and that slavish adherence to a balanced budget could accentuate cycles. But, they also believed that persistent deficits were inappropriate and that policy should aim for balance, "if not every individual year, then surely over a term of very few years" (1956 *Economic Report*, p. 73). For Harry Truman, this belief almost reached the level of gospel; his Budget Messages are full of references to the principles of "sound" public finance (see, for example, 1950 *Budget*, p. M5; 1951 *Budget*, p. M6; and 1952 *Budget*, p. M6).[4] Likewise, the 1948 *Economic Report* said:

> Tax policy for the long run should have two major elements: first, a level of revenue above expenditures in all except depression years which will permit systematic reduction of the public debt; and, second, a tax structure which will promote stabilized prosperity through adjustment of particular taxes to stimulate or to check consumer expenditure or business expenditure as circumstances require (p. 10).

Dwight Eisenhower shared Truman's fundamental commitment to long-run budget balance, and emphasized the importance of fiscal prudence for economic growth. For example, in his 1956 Budget Message, Eisenhower said:

> During the past 2 years, we have proved that a free, democratic system can make the adjustment from war to peace without serious economic disturbances. A major factor in this achievement has been the confidence of the people in the ability of the Government to bring its financial affairs under control and to conduct them in a responsible manner (1956 *Budget*, p. M15; see also 1961 *Budget*, p. M7).

B. Policies and Outcomes

The reason that I have talked in some detail about the economic beliefs that policymakers held in the 1950s is that I believe the policies they undertook and the economic outcomes derived largely from those beliefs. This was certainly the case with monetary policy. The narrative record of Federal Reserve deliberations consistently shows policymakers acting in accordance with their economic beliefs. To give just one example, in 1955, when inflation started to rise and the unemployment rate was below their view of normal, one FOMC member said: "I feel that there are inflationary pressures present which should be checked *now* by a firmer monetary policy – one firm enough to curtail spending and thus dampen price pressures" (*Minutes*, November 16, 1955, p. 20, emphasis in the original). This suggested action was consistent with the prevailing beliefs that there were no benefits to inflation and that the only way to reduce it was to contract aggregate demand firmly. The Federal Reserve did subsequently tighten, and the monetary contraction is widely thought to have led to both the recession of 1957-58 and a

slowing of inflation.

Another way to see the role of beliefs is to think about how monetary policy in the 1950s differed from modern policy prescriptions. I have described the beliefs of policymakers in the 1950s as quite similar to those of modern monetary policymakers. If that is true and ideas are important, one would expect policymakers to behave quite similarly in the two eras. And, to a large degree they do. John Taylor (1993) has shown that modern monetary policy can be well summarized by a simple rule: the Federal Reserve raises the real interest rate when inflation rises and when output rises relative to trend. One can estimate this rule over the post-1979 period and then see what it predicts modern policymakers would have done in other eras.[5]

Figure 1 shows the actual real federal funds rate and the predicted values of this Volcker-Greenspan-Bernanke monetary rule. In this and other figures, I start in 1953Q1 because of data limitations and to avoid the unusual circumstances of the Korean War. For the 1950s, the prescriptions of the modern monetary policy rule are often quite different from actual behavior. But, the deviations are not systematic. Policymakers were not consistently looser or tighter than a modern rule predicts. William McChesney Martin looks like Alan Greenspan with noise. This is just what one might expect given that the 1950s framework was quite similar to the post-1979 framework, but less sophisticated and less well calibrated.

The economic ideas of the 1950s were also manifested in fiscal policy. Figure 2 shows a graph of the actual real federal budget deficit as a percent of trend real GDP.[6] One thing that you can see is that policymakers did not aim for balance every year. The deficit certainly rose in the recessions of 1953 and 1958. Moreover, modern Congressional Budget Office estimates of the ratio of the high employment surplus to potential GDP, shown in Figure 3, show deliberate fiscal expansion in these episodes.[7] And, the narrative record, especially in the *Economic Reports*, confirms there were countercyclical actions, even in the 1950s.

But, what one also can't help but notice is that the actual surplus was on net positive in the 1950s. The budget was allowed to go into deficit in bad years, but it was forced to be in surplus in good ones. This is, of course, completely consistent with Truman and Eisenhower's belief that fiscal balance and retiring the public debt were ultimately good for the economy.

Another manifestation of the 1950s belief in fiscal prudence is the prevalence of "spending-driven" tax changes. In a new line of work, David Romer and I have looked at the motivation for every significant tax change in the United States since World War II (Romer and Romer, 2007a). These tax changes classified by motivation and scaled by the revenue effects are shown in Figure 4. One striking feature of the 1950s is that policymakers often raised taxes to pay for particular spending they wanted to do. The most extreme case of this was the fact that Truman fought the Korean War almost entirely out of current revenues by imposing huge wartime tax increases. But it was also the case that expansions in Social Security benefits and the building of the interstate highway system were financed with dedicated tax increases.

This tour through the macroeconomic policies before the 1960s wouldn't be complete without a discussion of macroeconomic outcomes. Figure 5 shows the behavior of inflation (measured as the log change in the quarterly GDP deflator from four quarters before).[8] Inflation was largely well contained in the 1950s. It rose to almost 4% in the middle of the decade, but policymakers reacted so forcefully, especially after the 1958 recession, that it had dropped to almost 1% by the start of the Kennedy administration.

Real economic performance was also quite good. Figure 6 shows the percentage deviation of real GDP from trend.[9] There were two recessions in the 1950s, and that in 1958 was quite deep. But, both were blissfully short, averaging just nine months from peak to trough. Overall, real GDP growth between 1953 and 1960 averaged a very healthy 2.9% per year.[10]

II. THE 1960S REVOLUTION

Herbert Stein (1969) has described the changes in fiscal policy in the 1960s as a revolution. And I certainly agree that there were dramatic changes in both fiscal and monetary policy. But the real revolution was in policymakers' view of how the economy worked. This change in beliefs was even more fundamental than Stein suggests, and led to policy changes not just in the 1960s, but also in the 1970s and, in some areas, right through to today.

A. Policymakers' Beliefs

The revolution in economic beliefs was strongest among fiscal policymakers. The Kennedy and Johnson Councils of Economic Advisers (CEA) replaced the proto-natural rate view of the 1950s with a belief in a permanent tradeoff between inflation and unemployment. Permanently lower unemployment could be purchased with acceptance of higher inflation. As a result, the "choice of the ideal level of utilization is a social judgment that requires a balancing of national goals of high employment and reasonable price stability" (*Economic Report*, 1969, p. 62).

The 1962 *Economic Report* suggested that "an unemployment rate of about 4 percent is a reasonable and prudent full employment target for stabilization policy" and was likely to be associated with relatively low inflation (p. 46). But, it suggested that lower levels of unemployment were both desirable and possible. The 1966 *Economic Report*, written at a time when unemployment had almost reached the 4% target, said: "There is strong evidence that the conditions originally set for lowering the target are in fact being met, and that the economy can operate efficiently at lower unemployment rates" (p. 75).

While these new views were more prevalent in the administration than at the Federal

Reserve, some members of the FOMC were clearly supportive. Perhaps more important, William McChesney Martin, who was Federal Reserve chair in both the 1950s and 1960s, did not challenge the new views. Whether he went along out of a loss of faith in his own views, or out of a conviction that Federal Reserve independence extended only so far, is unclear. What is clear is that the new views carried the day among both fiscal and monetary policymakers.

Another crucial change in economic beliefs in the early 1960s concerned the danger of persistent deficits. The 1950s emphasis on the benefits of fiscal discipline was replaced by a view that deficits, even over several years, could be salutary. Moreover, policymakers expressed confidence that deficits would largely take care of themselves by generating rapid growth and hence increased revenues. To give just a few examples, in his last Budget Message, John Kennedy said:

> Our present choice is not between a tax cut and a balanced budget. The choice, rather, is between chronic deficits arising out of a slow rate of economic growth, and temporary deficits stemming from a tax program designed to promote fuller use of our resources and more rapid economic growth. … Adoption of the tax program I am proposing will strengthen our Nation's economic vitality, and by so doing, will provide the basis for sharply increased budget revenues in future years (1964 *Budget*, pp. 10-11).

Similarly, the 1963 *Economic Report* stated: "if we enlarge the deficit temporarily as the by-product of our positive tax policy to expand our economy this will serve as a source of strength, not a sign of weakness. It will yield … a large public gain in expanded budget revenues" (pp. XIV-XV). Lyndon Johnson repeatedly expressed the same view that deficits would take care of themselves. For example, in his first Budget Message, he said that the tax cut would stimulate growth and "should hasten the achievement of a balanced budget in an economy of full prosperity" (1965 *Budget*, p. 13).

At some level, the new beliefs about fiscal discipline were a corollary of the view that a reasonable rate of unemployment was 4% or lower. Policymakers replaced the 1950s belief that

the actual budget should be balanced over a few years, with the idea that the full employment deficit should be roughly zero over the medium run. Given their belief in the desirability and attainability of very low unemployment, this idea gave 1960s policymakers license to run actual deficits for sustained periods.

However, the changing attitude toward fiscal discipline seemed to go even further than this. Whereas balancing the budget and retiring the public debt was an objective good for Truman and beneficial to growth for Eisenhower, it seems to have become almost superfluous for policymakers in the 1960s. Indeed, it is nearly impossible to find references in the *Economic Reports* or Budget Messages of the 1960s to a long-run goal of budget balance. The one exception is the 1963 *Economic Report* which stated: "The problem is to maintain a relationship between the deficits and surpluses of the various sectors that will permit this balance to be reached at a satisfactory level of economic activity – and without a prolonged succession of government deficits" (p. 74). But even here, it seems clear that maintaining full employment is the key concern, and the commitment to long-run balance feels vague and half-hearted.

The Johnson *Economic Reports* were even more explicit about the lack of interest in long-run balance. The 1966 *Economic Report* stated: "in focusing on balance of the economy, this policy strategy cannot give top priority to balance in the budget" (p. 180). In listing the main tasks of public policy, Johnson's section of the same report mentions stabilization, expanding opportunity, social welfare, even equilibrium in the balance of payments, but nothing about long-run budget balance (p. 5). The Johnson administration was at times deeply concerned about the deficit because of its short-run effects on output and inflation, but never for its long-run effects.

Though economic beliefs continued to evolve over the next decade, in certain key regards beliefs were fundamentally similar in the 1960s and 1970s. The most obvious continuity was a belief that normal unemployment was very low. By the late 1960s, policymakers had abandoned

belief in a permanent unemployment-inflation tradeoff for the natural rate hypothesis. However, given that they believed the natural rate was below 4%, the functional change in views was actually quite small.[11] Estimates of the natural rate rose noticeably in the mid-1970s, but then came down again with Carter administration.[12]

The failure of inflation to slow in response to unemployment above 4% forced policymakers to adopt additional ideas. Arthur Burns, Federal Reserve chair starting in 1970, added the notion that the economy had changed in key ways that made inflation relatively impervious to slack. The FOMC *Minutes* say Burns concluded: "monetary policy could do very little to arrest an inflation that rested so heavily on wage-cost pressures. In his judgment a much higher rate of unemployment produced by monetary policy would not moderate such pressures appreciably" (June 8, 1971, p. 51). This was a view that was also championed by the Carter Council of Economic Advisers and G. William Miller, Federal Reserve chair for eighteen months in the late 1970s.[13]

The loss of belief in the importance of fiscal discipline was one of the most striking areas of continuity. Richard Nixon rarely mentioned the actual deficit and certainly did not express support for long-run actual balance. His stated goal was to balance the full employment deficit, where full employment was explicitly defined to be 4% unemployment.[14] However, he did not express much commitment even to this goal. For example, the 1974 *Economic Report* said that while the plan was to have the full employment budget balanced for the coming year, "We will be prepared to support economic activity and employment by additional budgetary measures, if necessary" (p. 6). Also, Nixon seemed to share the Kennedy and Johnson belief that deficits would take care of themselves. In his Budget Message for 1972, he said: "The full employment budget idea is in the nature of a self-fulfilling prophecy: By operating as if we were at full employment, we will help to bring about that full employment" (1972 *Budget*, p. 7). Likewise,

in the Budget Message for 1973, he defended running a very large full employment deficit saying it would “increase jobs and bring the economy back toward capacity,” and that by increasing revenues it “brings us strongly forward toward our goal of a balanced budget in a time of full employment” (1973 *Budget*, p. 7).

Gerald Ford spoke often of the need for spending discipline and prudent fiscal policy, but he nevertheless seemed to put a relatively low priority on long-run budget balance. A section on “General Policy Principles” in the 1977 lame-duck *Economic Report* is striking in the fact that it does not mention eventual budget balance, either actual or high employment, as a consideration (pp. 25-31).[15] Ford also was a clear supporter of the notion that tax cuts, by generating revenues, would help take care of the deficit. The same *Economic Report* stated that the president’s proposal for a permanent tax cut would cause a large rise in the full employment deficit, but, “As private sector spending continues to expand, it is expected that the Federal deficit will gradually diminish” (p. 31).

Jimmy Carter, like other policymakers in the 1960s and 70s, did not have a fundamental commitment to long-run budget balance. The Carter CEA seemed to believe that the key role of the budget was to keep output at potential, and the level of the actual or full-employment deficit at potential was otherwise largely irrelevant. The 1978 *Economic Report* stated:

> The level of the high-employment surplus or deficit consistent with maintaining high-employment output depends on the balance between non-Federal saving and investment that would occur at that level of economic activity. An imbalance must be accommodated by the Federal surplus or deficit …. There is no given level of the high-employment surplus that is suitable in all situations. In particular, just as a balanced actual budget is often not a desirable objective of fiscal policy, a balanced high-employment budget will only on occasion be appropriate (pp. 55-56).

Carter expressed a similar view in his Budget Message for 1980. He gave as one of his four principles in shaping a budget the gloriously vague notion that: “the budget must be kept within

the bounds of what is appropriate in today's economic circumstances" (1980 *Budget*, p. 8). Furthermore, the Carter administration shared the 1960s view that persistent deficits could be highly salutary. For example, the 1978 *Economic Report* stated:

> This year I have proposed budgets that call for a deficit of $62 billion in 1978, and one only slightly smaller in 1979. Had I decided not to recommend a tax cut …, the deficit in 1979 could have been $15 to $20 billion smaller. But I believe that tax reduction is essential to continued progress in an economy still characterized by substantial unemployment and idle plant capacity (pp. 12-13).

Policymakers in this period also believed that deficits to some degree would tend to take care of themselves (1978 *Economic Report*, pp. 12-13).

B. Policies and Outcomes

The new economic views of the 1960s and 1970s were the key determinant of macroeconomic policy actions in these decades. Much of the evidence for the linkage is narrative: policymakers said they were taking certain actions because of their economic model. For example, in the case of the 1964 tax cut, both Kennedy and Johnson said the economy was at an unfavorable place on the Phillips curve and they were taking action to close the gap between the actual and socially desirable rates of unemployment (see, for example, 1964 *Economic Report*, p. 7, and 1965 *Economic Report*, pp. 64-65). Likewise, in the early 1970s Burns refused to tighten monetary policy because he was convinced even a large recession would not cure inflation. Instead, he pressured Nixon into using wage and price controls as the policy response.[16]

Another way to demonstrate the crucial role of economic ideas is to show that policy actions were consistent with prevailing economic beliefs. This was certainly the case with monetary policy. Consider again the difference between the actual path of the real federal funds rate and the predictions of a post-1979 monetary rule shown in Figure 1. In the 1950s, there

were no systematic differences, which I suggested was consistent with the fact that the prevailing economic framework, at least for monetary policy, was quite similar in the two eras.

In the 1960s and 1970s, the differences were enormous. Actual monetary policy was consistently much more expansionary than a post-1979 rule suggests is appropriate. Indeed, the real funds rate in the period 1961Q1-1979Q3 averaged more than four percentage points lower than that predicted by the Volcker-Greenspan-Bernanke monetary rule.[17] This behavior is very consistent with the economic beliefs of the 1960s and 70s. If one believes that the normal unemployment rate is very low, even unemployment rates of 5 or 6% look troublesome and suggest expansionary policy.

The fluctuations in monetary policy in the 1960s and 70s are also consistent with prevailing economic beliefs. In both 1968 and 1974, monetary policy tightened substantially: the real federal funds rate rose about two percentage points in each episode. These tightenings correspond to times when the Federal Reserve decided inflation was too high and they were willing to cause a recession to bring it down (Romer and Romer, 1989). What is striking about both episodes is that tightening was indeed carried far enough to generate a recession, but not far enough to actually cure inflation. This behavior is very consistent with policymakers' economic understanding. In both cases, they stopped because their model suggested they had created a large output gap and so inflation should come down.

Fiscal policy actions in the 1960s and 70s were also consistent with the new economic beliefs. Figures 2 shows that the actual budget was in deficit in every quarter from 1965Q1 to 1979Q3, except for 11 quarters in the periods of strongest growth in the mid and late 1960s. Figure 3 shows that modern estimates of the high employment surplus are negative for every quarter in this period, except the first two. Given that policymakers felt that unemployment was higher than the normal or natural rate almost every year, this expansionary bias follows naturally.

Another manifestation of the 1960s beliefs that deficits don't matter and that fiscal expansion is good is the prevalence of stimulatory tax cuts. Looking again at tax changes classified by motivation shown in Figure 4, one sees a number of tax cuts in both the 1960s and 1970s motivated by concern about long-run growth and the short-run prospects for the economy. The 1964 tax cut was just one of many like it in these two decades.

The consequences of the economic beliefs and the resulting policy actions in the 1960s and 1970s are well known. Inflation, which was close to 1% at the start of the Kennedy administration in 1961, rose steadily over the decade, ending at over 5%. It then rose even more dramatically in the 1970s. While the effect of the oil price shocks in 1974 and 1978 are quite obvious, modern scholars, such as DeLong (1997) and Barsky and Kilian (2001), have been convincing that monetary expansion and loose policy more generally were the key source of the inflation in these decades. The expansionary bias in both monetary and fiscal policy led to rates of inflation unheard of in peacetime.

The behavior of real output in these two decades was clearly quite mixed. Output grew strongly after 1965, in large part because of expansionary fiscal policy and accommodative monetary policy. Productivity growth slowed starting around 1973, but even so, there were many years in the late 1970s of GDP growth over 5%. The spurts were again almost surely the result of expansionary policy, especially on the part of the Federal Reserve. But, there were also times of steep decline in this period. The recession of 1969-70, clearly seen in the plot of the deviation of GDP from trend in Figure 6, was the result of an abortive attempt to rein in inflation. The 1974-75 recession was the result of the oil price shock and a dramatic tightening of monetary policy. Thus, it seems clear that policy must bear considerable responsibility not only for the inflation of the 1960s and 1970s, but also for the substantial real volatility.

III. POST-1970S STABILIZATION POLICY

The story I have told about what went wrong in the 1960s and 1970s is in many ways quite standard. The view that a revolution in economic ideas led to a revolution in policy and outcomes is one with many proponents – J. Bradford DeLong (1997), Thomas Mayer (1998), and Edward Nelson (2005), to name three of my favorites. We each have our own way of conceptualizing the ideas and differences in which ideas we think were most important, but all agree that ideas were key.

In many ways, the more interesting part of the story is what came next. In the area of short-run stabilization, there was a counterrevolution that, in a fundamental sense, brought policymakers back to the core beliefs of the 1950s. In the area of long-run fiscal policy, in contrast, many of the ideas of the 1960s linger right through to today.

A. Policymakers' Beliefs

Like policymakers in the 1970s, the Volcker Federal Reserve and the Reagan administration believed in a natural rate framework. But a key change was in their estimates of the natural rate. Whereas Carter and G. William Miller believed that the normal unemployment rate was close to 5%, the Volcker Federal Reserve and Reagan CEA did not expect inflation to slow until unemployment was substantially higher. For example, the 1983 *Economic Report* stated: "While it is not easy to pinpoint the inflation threshold unemployment rate precisely, it probably lies between 6 and 7 percent" (p. 37).

A second key change in views between the 1970s and the 1980s was a renewed conviction that inflation would respond to slack. Whereas Burns, Carter, and Miller all expressed fear that conventional aggregate demand contraction would do little to slow inflation,

both monetary policymakers and the Reagan administration had little doubt that monetary contraction would work. For example, in October 1982, when the unemployment rate was approximately 10%, the FOMC believed that “further moderation in labor cost and price pressures and also in inflationary expectations was a reasonable anticipation” (Record of Policy Actions, October 5, 1982, p. 124). A corollary of this renewed faith in aggregate demand policy was a disavowal of alternative inflation control policies. For example, the 1982 *Economic Report* declared: “Neither guideposts nor price controls … have succeeded in stopping inflation” (p. 49).

A third change in views involves the costs of inflation. Policymakers in the 1960s and 1970s had clearly disliked inflation, but they did not view it as destructive. Indeed, in the early 1960s, it was just the cost of lowering unemployment permanently. By the 1980s, policymakers viewed inflation as genuinely damaging to both short-run confidence and long-run growth. For example, the Record of Policy Actions for the FOMC meeting of February 4-5, 1980 stated: “Committee members continued to express great concern about the inflationary environment and its role in generating distortions and instability” (p. 101). In this way as well, economic views in the 1980s and beyond are remarkably similar to those in the 1950s.

Now, economic views have clearly continued to evolve since 1980. Most notably, policymakers’ estimates of the natural rate were substantially reduced in the late 1990s when changes in the economy appear to have genuinely lowered the sustainable rate of unemployment. But, in its essentials, the model used by policymakers for short-run analysis has been remarkably stable over the last 27 years – emphasizing an accurate estimate of the natural rate and a crucial role for aggregate demand management in keeping output close to trend and inflation well contained.

B. Policies and Outcomes

This counterrevolution in economic beliefs after 1980 was again reflected in policy choices, at least for monetary policy. An interesting development in macropolicy after 1980 is that short-run stabilization has become almost entirely the purview of monetary policymakers. Fiscal policy since 1980 has been aimed largely at long-run issues, not short-run aggregate demand management. One way to see this is to look again at our cataloging of the motivations for tax changes shown in Figure 4. Since 1980, there have been only two tax actions even partly for countercyclical purposes. These were the 2001 and 2002 Bush tax cuts. To a large extent this delegation of short-run stabilization to monetary policy reflects a consensus both inside and outside of government that the Federal Reserve is better able to respond flexibly and responsibly to inflation and real deviations of output from trend.

As in other decades, the clearest evidence that beliefs have driven policy comes from the narrative record. For example, one cannot read the deliberations of the Federal Reserve in late 1979 and early 1980 and not be struck by the degree to which the new ideas were behind the radical change in policy. The Record of Policy Actions for the meeting on February 4-5, 1980 stated that members believed that unemployment, which was already 6.3%, was likely to increase substantially. Nevertheless, they "agreed that monetary growth should slow further in 1980 … in line with the continuing objective of curbing inflation" (p. 102).

But, one can also see the linkage in post-1979 estimates of the monetary rule I have mentioned earlier. Recall the rule is the relationship between the ex post real federal funds rate (r) and inflation (π) and the deviation of output from trend (y). To deal with a clear tendency for the Federal Reserve to smooth interest rates, it also includes the lagged real funds rate. The point estimates in the Volcker-Greenspan-Bernanke period are:

$$\underset{}{r_t} = \underset{(0.21)}{-0.09} + \underset{(0.04)}{0.84\, r_{t-1}} + \underset{(0.06)}{0.20\, \pi_t} + \underset{(0.08)}{0.24\, y_t}.$$

That the coefficient estimates on both inflation and the deviation of output from trend are positive and significant is instructive. It suggests that the Federal Reserve raises the real funds rate when inflation rises or output rises relative to trend. This is certainly consistent with the modern beliefs that inflation is costly and that contracting the economy is a useful way of controlling inflation. The positive coefficient on the deviation of output from trend also is consistent with the Federal Reserve's continuing goal of moderating real fluctuations.

That the gap between the actual and predicted real funds rates shown in Figure 1 is quite small in the post-1979 period is also revealing. It suggests that the Taylor rule is indeed a good description of the behavior of modern monetary policymakers. The absence of sustained deviations between the two series is consistent with the fact that policymakers' economic framework has been remarkably steady over this time period.

Macroeconomic outcomes since 1979 have been very much what one would predict given the policy record. The Volcker recession of 1981-82 was horrific, and the direct consequence of the largest monetary contraction since the Great Depression. But, it reduced inflation from nearly 10% to close to 3%. Since 1985, inflation has been below 4% every single year and has averaged just 2.5%.

Real short-run macroeconomic performance has been similarly splendid. Since the Volcker recession, the U.S. economy has suffered only two recessions in 25 years: those in 1990 and 2001. And, in terms of the deviation of GDP from trend, both were quite mild. The overall record of output volatility shown in Figure 6 is also striking. As someone who started her career saying there had not been a stabilization of the postwar economy, I now have to admit there most certainly has been – it just started in 1985, not 1947.

Indeed, this noticeable damping of cyclical fluctuations since the mid-1980s has spawned a large literature attempting to explain the "Great Moderation."[18] Though there is a camp that emphasizes the role of good luck, I feel the contribution of good policy cannot be overstated. By keeping inflation well contained, the Federal Reserve has largely avoided the need to engineer recessions to bring inflation down.

Overall, the story of stabilization policy of the last quarter century is one of amazing success. We have seen the triumph of sensible ideas and have reaped the rewards in terms of macroeconomic performance. The costly wrong turn in ideas and macropolicy of the 1960s and 1970s has been righted and the future of stabilization looks bright.

IV. POST-1970S FISCAL POLICY

What stops this story from being a good morality play is that good hasn't triumphed entirely. At the same time that we have seen a glorious counterrevolution in the ideas and conduct of short-run stabilization policy, we have seen a remarkable lack of progress in long-run fiscal policy. In this area, the legacy of 1960s beliefs is still very much with us and may threaten the long-run stability of the American economy.

Before discussing the evidence for this view, I should mention a small book by Buchanan and Wagner from 1977 that was in some ways quite prescient. Writing in what we can now see was still the infancy of the fiscal revolution, they too stressed the important role of the new ideas of the 1960s in generating persistent deficits. Little would they have guessed that the continuity of ideas they identified would continue thirty more years.

A. Policymakers' Beliefs

The revolutionary idea of the 1960s concerning long-run fiscal policy was that it was not important to balance the budget even over a period of several years. Rather, persistent budget deficits could actually be desirable because they would lower unemployment and move the economy toward a more desirable path for real output. Budget deficits would largely take care of themselves by generating faster growth and hence more revenue.

There has been some evolution of ideas about persistent deficits over the last forty years, but also tremendous continuity. Ronald Reagan, in making his case for the 1981 tax cut, also emphasized the notion that deficits would generate growth, and by doing so would cure themselves. The main difference is that while Kennedy and Johnson felt that deficits would raise output by permanently raising demand and lowering unemployment, Reagan emphasized the impact of incentives on labor supply and entrepreneurial motivation. For example, Reagan's Budget Message for 1983 stated:

> But our incentive-minded tax policy and our security-based defense programs are right and necessary for long-run peace and prosperity, and must not be tampered with in a vain attempt to cure deficits in the short-run. The answer to deficits is economic growth and indefatigable efforts to control spending (1983 *Budget*, pp. M11-M12).

Reagan also added another idea to the mix – the starve the beast hypothesis. In a speech in 1981, he said:

> Over the past decades we've talked of curtailing government spending so that we can then lower the tax burden. Sometimes we've even taken a run at doing that. But there were always those who told us that taxes couldn't be cut until spending was reduced. Well, you know, we can lecture our children about extravagance until we run out of voice and breath. Or we can cure their extravagance by simply reducing their allowance (Address to the Nation on the Economy, February 5, 1981, p. 2).[19]

Deficits caused by tax cuts would take care of themselves, at least in part, by forcing policymakers to cut spending.

While Reagan was a staunch supporter of these notions about how deficits would cure themselves, he did feel that long-run budget balance was an important goal. In contrast to policymakers in the 1960s and 70s, Reagan (and his CEA chair Martin Feldstein) spoke passionately about the harms of persistent high deficits. For example, Reagan's Budget Message for 1985 stated: "the threat of indefinitely prolonged high budget deficits threatens the continuation of sustained noninflationary growth and prosperity. It raises the specter of sharply higher interest rates, choked-off investment, renewed recession, and rising unemployment" (1985 *Budget*, p. M6). Likewise, the 1983 *Economic Report* stated: "The Federal budget deficit has become a major problem for the American economy" and "[t]he magnitude of the potential crowding out of private investment is immense" (pp. 26, 27). As a result, policymakers' long-run fiscal beliefs in the Reagan era are a perplexing mixture of two potentially contradictory ideas.

Economic policymakers under George H. W. Bush, like those under Ford, placed considerable emphasis on slowing the growth of government spending, but relatively little on achieving long-run budget balance. Bush's first Budget Message listed "five broad themes" of the budget – none of which even touched on deficit reduction (1991 *Budget*, p. 3). The *Economic Reports* often emphasized the problems in using the deficit as a measure of fiscal policy. For example, the 1992 *Economic Report* stated: "Large current deficits do not in themselves mean that the Nation is currently generating new large burdens on future generations" (p. 273). After an initial emphasis on significant deficit reduction through strong measures to restrain spending (for example, 1990 *Economic Report*, pp. 35-36), by 1991 the projected reductions in the cyclically adjusted deficit were trivial (1991 *Economic Report*, p. 69). The 1993 *Economic Report* did not even mention the deficit in its discussion of proposed fiscal reforms (p. 31).[20] And, to the extent that the administration viewed deficits as a problem, it believed that to a large

degree they would take care of themselves. For example, the 1990 *Economic Report* stated that the administration would eliminate the deficit over time "by slowing the growth of Federal spending while economic growth raises revenue until the budget is balanced" (p. 4).

The long-run fiscal views of the Clinton administration are somewhat different from those of other post-1970s policymakers. Most notably, policymakers in the Clinton era believed strongly that deficit reduction was important for growth. The 1994 *Economic Report* discussed at great length the importance of investment of all types. In this context, it declared: "For too long, Federal budget deficits have been gobbling up an inordinate share of the Nation's saving, thereby keeping real interest rates too high … and leaving the Nation with a Hobson's choice between lower domestic investment and higher foreign borrowing" (p. 31). Similarly, the 1995 *Economic Report* stated: "deficit reduction is not an end in itself but a means to the end of greater national investment and higher living standards" (p. 28). The Clinton administration also seemed to believe that such deficit reduction took concrete actions and that deficits would not typically cure themselves. For example, the 1994 *Economic Report* declared: "Deficit reduction is difficult and painful" (p. 31). In this way, too, policymakers in this era differed in views from those before and after.

At the same time, even the Clinton administration did not seem to have had a view that budget balance over the long run was a significant goal. With the exception of the last (lame-duck) *Economic Report*, the narrative sources from the Clinton era contain no statement of a clear standard by which to judge long-run fiscal policy. Indeed, a telling example of the lack of importance assigned to long-run balance is the deficit projection given in the 1995 *Economic Report*. After projecting that the deficit would decline through 2000 (to about 2% of GDP), the *Report* concluded that "[b]eyond 2000 the deficit is anticipated to remain roughly constant" (p. 68). It then added the fact that "[o]ver the longer run, changing demographics will put upward

pressure on the deficit" (p. 69). Clearly, there is little evidence that they viewed genuine balance as a crucial long-run goal.

When George W. Bush took office in 2001, the federal government was projected to run substantial surpluses for an extended period. Policymakers cited these surpluses as a reason for cutting taxes. For example, the president's Budget Message for 2002 stated: "After funding important priorities and retiring all Government debt possible, my budget uses the remaining portion of the surplus to provide fair and reasonable tax relief to every American who pays income taxes" (2002 *Budget*, p. 3). Thus, policymakers initially appeared to put some weight on budget balance as a guide for fiscal policy.

When deficits returned soon after the beginning of Bush's presidency, however, so did the 1960s view that budget balance was not important even over an extended period. The 2004 *Budget*, for example, expressed little concern over persistent deficits: "Limiting and reducing the federal debt remains a priority for this Administration. But it is not the sole or even the top priority. … [W]e now face a period of budget deficits. By all historical standards, these deficits are modest and manageable" (p. 25). Similarly, the 2003 *Economic Report* declared that what should limit tax cuts was not deficits, but only the possibility of more extreme fiscal difficulties: "As long as the change in fiscal policy does not bring about large, systemic imbalances in the economy – such as a high debt-to-GDP ratio, or rapidly rising interest costs as a share of Federal outlays – policymakers should not be paralyzed by the fear that any benefits from tax reductions are likely to be undone" (p. 58).

Finally, policymakers in the Bush era again argued that deficits would largely go away on their own. For example, the 2002 *Economic Report* said: "In general, faster economic growth causes budget surpluses, not the other way around. Moreover, policies that promote job creation and entrepreneurial activity ultimately increase the size of the economy and hence provide the

resources for future spending obligations" (p. 44). Similarly, in a press conference on August 24, 2001, Bush invoked the notion that tax cuts would cause government spending to decline, and so restrain the deficit that way.

B. Policies and Outcomes

These views have definitely been reflected in policy. Most notably, the graph of the actual deficit to trend GDP given in Figure 2 shows that the U.S. budget has been in deficit in 35 of the last 40 years. Policymakers have not tried to achieve budget balance because they do not think it is important and because they think the deficits will take care of themselves.

But even these figures give an overly optimistic picture of U.S. fiscal health over the past few decades. It is well understood that in terms of the present value of future social insurance obligations and future revenues, the current and prospective deficits are several times larger than the actual deficit.[21] Even in the fleeting glory days of the late 1990s, the present value deficit was almost as far from balance as it is today.

The trouble is, the key views still underlying long-run fiscal policy are almost surely false. In case the sheer persistence of deficits is not enough to convince you that deficits do not cure themselves, some recent research that David Romer and I have done has looked specifically at the starve the beast view mentioned by Reagan and Bush (Romer and Romer, 2007c). We find that this particular story of how deficits might take care of themselves fails dramatically. We focus on the behavior of federal expenditures after the long-run tax cuts that the hypothesis says should reduce spending. Figure 7 shows the estimated cumulative response of spending to a tax cut of 1% of GDP. Over the full postwar era, spending has actually risen, not fallen, after tax cuts. Some of these estimated effects are even statistically significant. So, far from dealing with the deficits caused by a tax cut, the behavior of spending has exacerbated them.

Likewise, we have new research that casts doubt on the supply-side response of the economy to tax cuts (Romer and Romer, 2007b). While we find that output responds strongly to tax changes – tax cuts do cause GDP to rise substantially – those effects appear to be largely temporary demand-side effects. Perhaps the strongest evidence on this point is that inflation also increases following tax cuts. This suggests that output is rising relative to capacity, rather than that capacity is rising.

And, on the idea that persistent deficits don't matter, I think there is widespread consensus that that too is not true. There may be differences in our estimates of the size of the eventual effects, but most economists agree that deficits over decades unquestionably reduce national saving and have consequences for long-run standards of living.

That their key ideas are not true, raises the question of why policymakers haven't learned and ideas haven't changed. Here, the contrast with short-run stabilization policy is instructive. The economic ideas of the 1960s and 1970s that led to expansionary policy also led to inflation and real instability. People hated the macroeconomic outcomes and policymakers saw the consequences of their actions both on the economy and on Election Day. Policymakers were forced to learn because the consequences of their ideas and actions were relatively immediate and obvious.

The deficit may be different. In a world where monetary policy compensates for any short-run effects of expansionary fiscal policy, the consequences of persistent deficits may only be felt over a very long horizon. Persistent deficits may crowd out useful investment so growth is slower. Such crowding out may have enormous effects on standards of living over a century, but are unlikely to be noticeable over a decade or two. This is especially true if temporary developments, such as an insatiable demand for U.S. bonds by the Chinese government, prevent interest rates from rising for a while. But even in this case, the deficits will likely have an

eventual impact on U.S. living standards as a growing share of our national income has to go to servicing foreign-held debt.

It is also possible that the effects of persistent deficits are highly nonlinear. Perhaps over a wide range, deficits and the cumulative public debt really do have little impact on the economy. But, at some point, the debt burden reaches a level that threatens the confidence of investors. Such a meltdown and a sudden stop of lending would unquestionably have enormous real consequences.

The fact that the effects of deficits may be very slow to reveal themselves or highly nonlinear may have allowed policymakers to put off learning in a way that they could not with short-run stabilization policy. The absence of obvious consequences and voter pressure may have made clinging to old ideas both possible and appealing.

Whatever the reason for the persistence of beliefs about long-run fiscal policy, the crucial fact is that beliefs have persisted. And, those beliefs are one of the legacies of the 1960s. The view that budget balance is not important even over a fairly long horizon, pioneered by the Kennedy and Johnson administrations, set in motion the long-run budget ideas and actions we see today. There was indeed a fiscal revolution in America in the 1960s, and we are still trying to recover from it more than forty years later.

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Table 1
Policymakers' Economic Beliefs in Different Eras

1950s

- Proto-natural rate framework
- Normal unemployment rate is 4½ to 5%
- It is important to achieve long-run fiscal balance; persistent deficits are unacceptable and costly

1960s

- Permanent trade-off between inflation and unemployment
- Acceptable unemployment rate is 4% or below
- It is not important to achieve long-run fiscal balance; persistent deficits can be salutary and will tend to take care of themselves

1970s

- Natural rate framework
- Very low estimates of the natural rate (4%)
- Inflation doesn't respond to slack
- It is not important to achieve long-run fiscal balance; persistent deficits can be salutary and will tend to take care of themselves

1980s and Beyond

- Natural rate framework
- Sensible estimates of the natural rate
- Aggregate demand policy can lower inflation
- Inflation is costly
- It is not important to achieve long-run fiscal balance; deficit reduction is desirable but less important than other concerns, and deficits may take care of themselves

Figure 1
Actual Real Federal Funds Rate and
Predicted Rate from a Post-1979 Monetary Rule

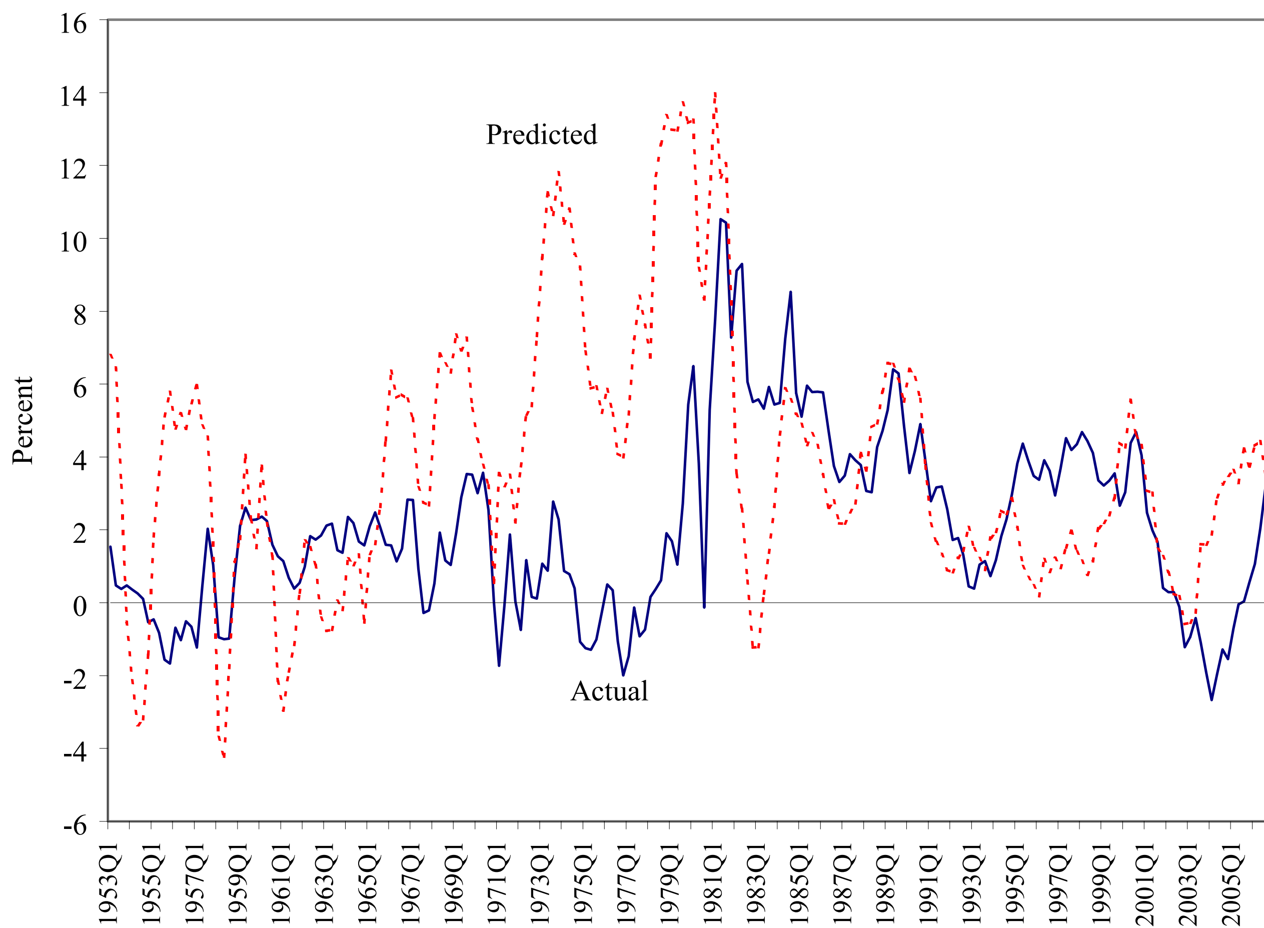


Figure 2
Ratio of Actual Real Budget Surplus to Trend Real GDP

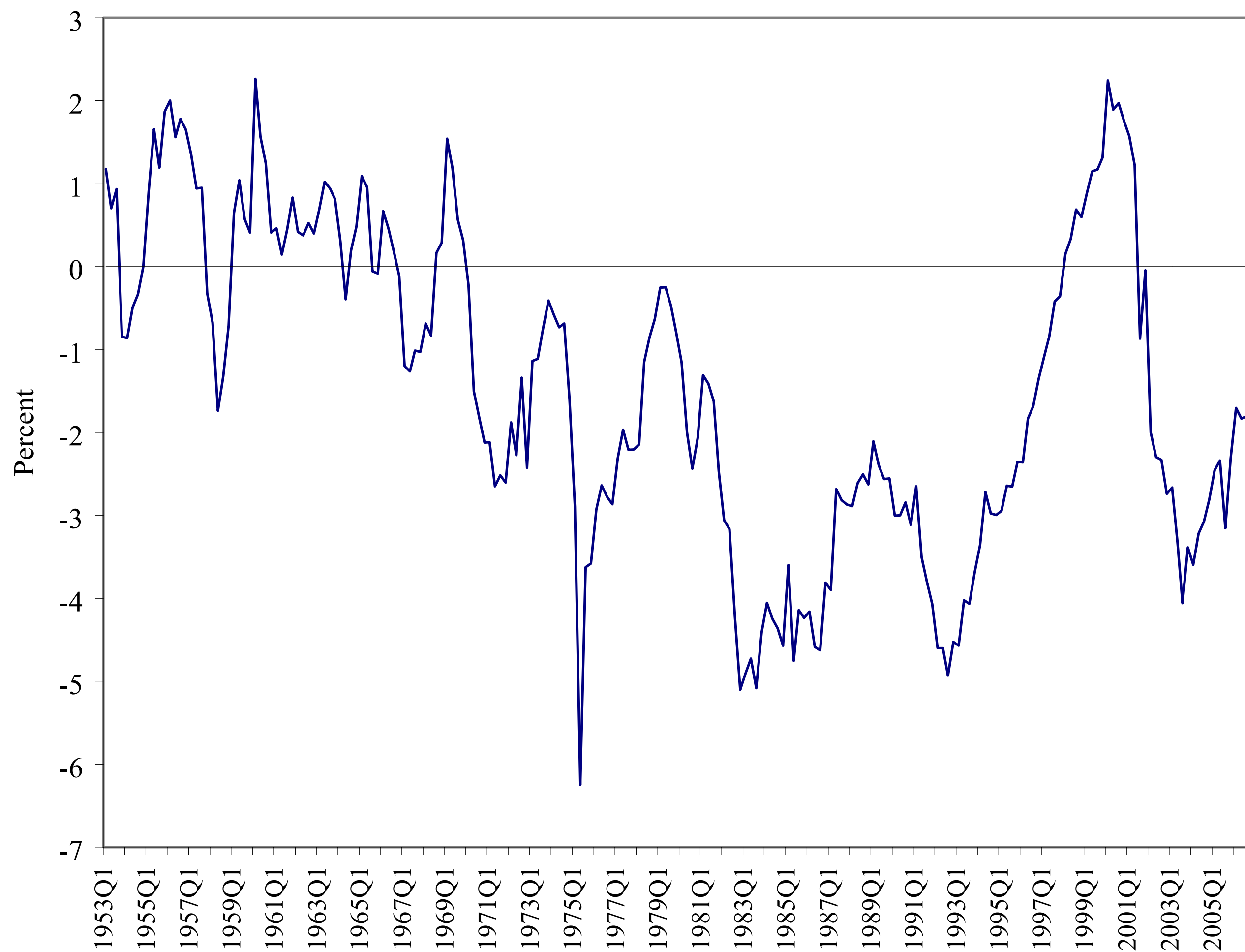


Figure 3
Ratio of High Employment Surplus to Potential GDP

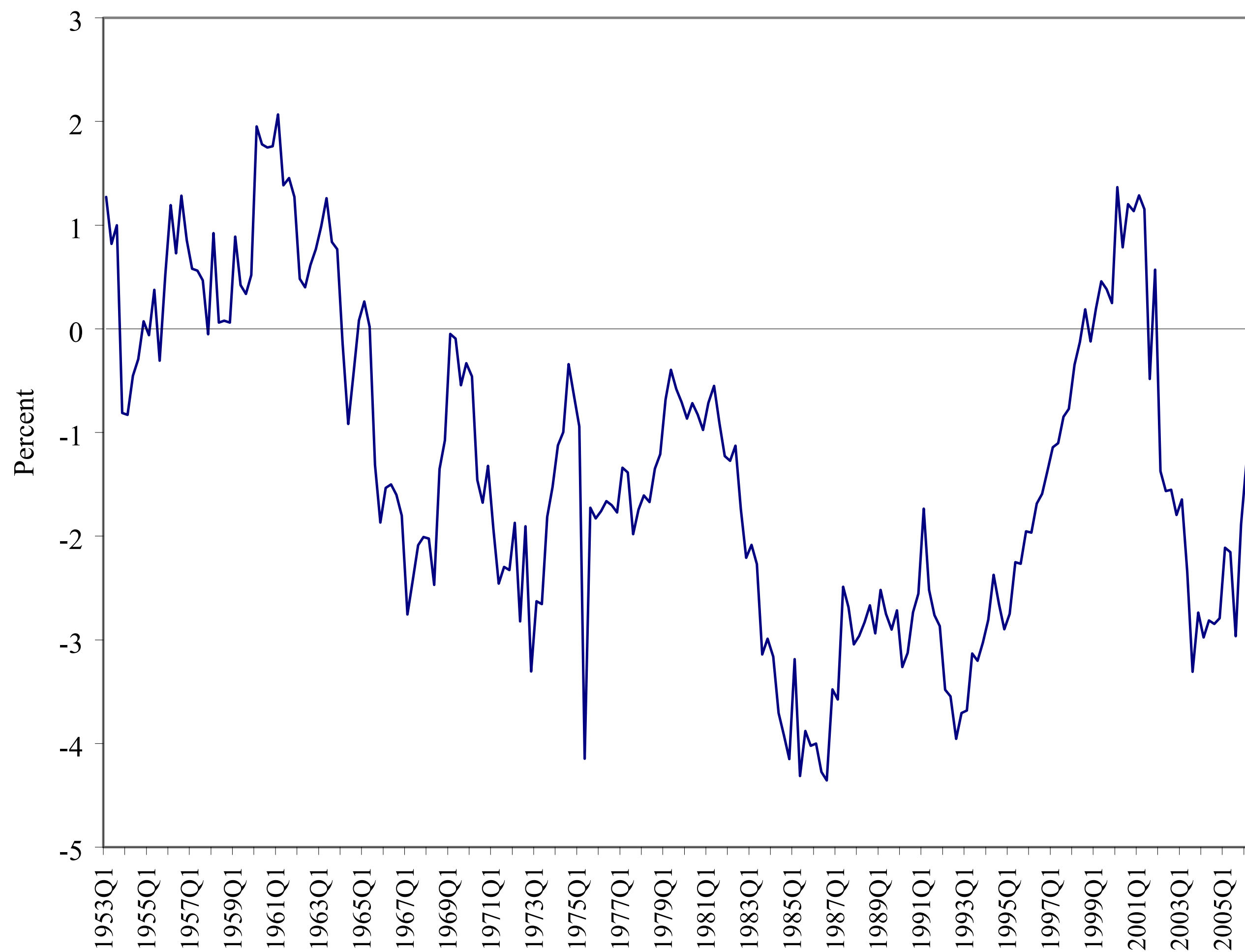


Figure 4
Legislated Tax Changes Classified by Motivation

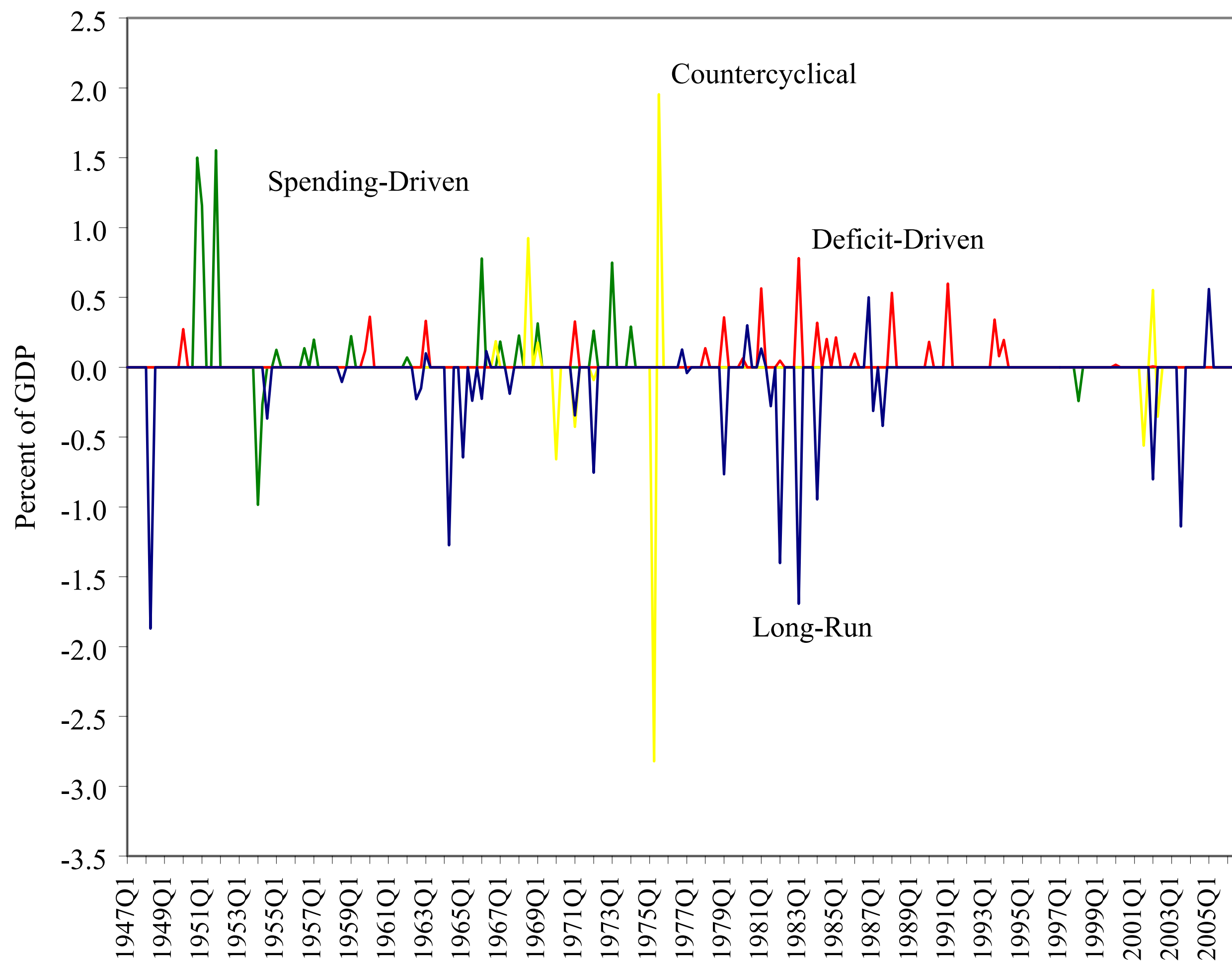


Figure 5
Inflation Rate

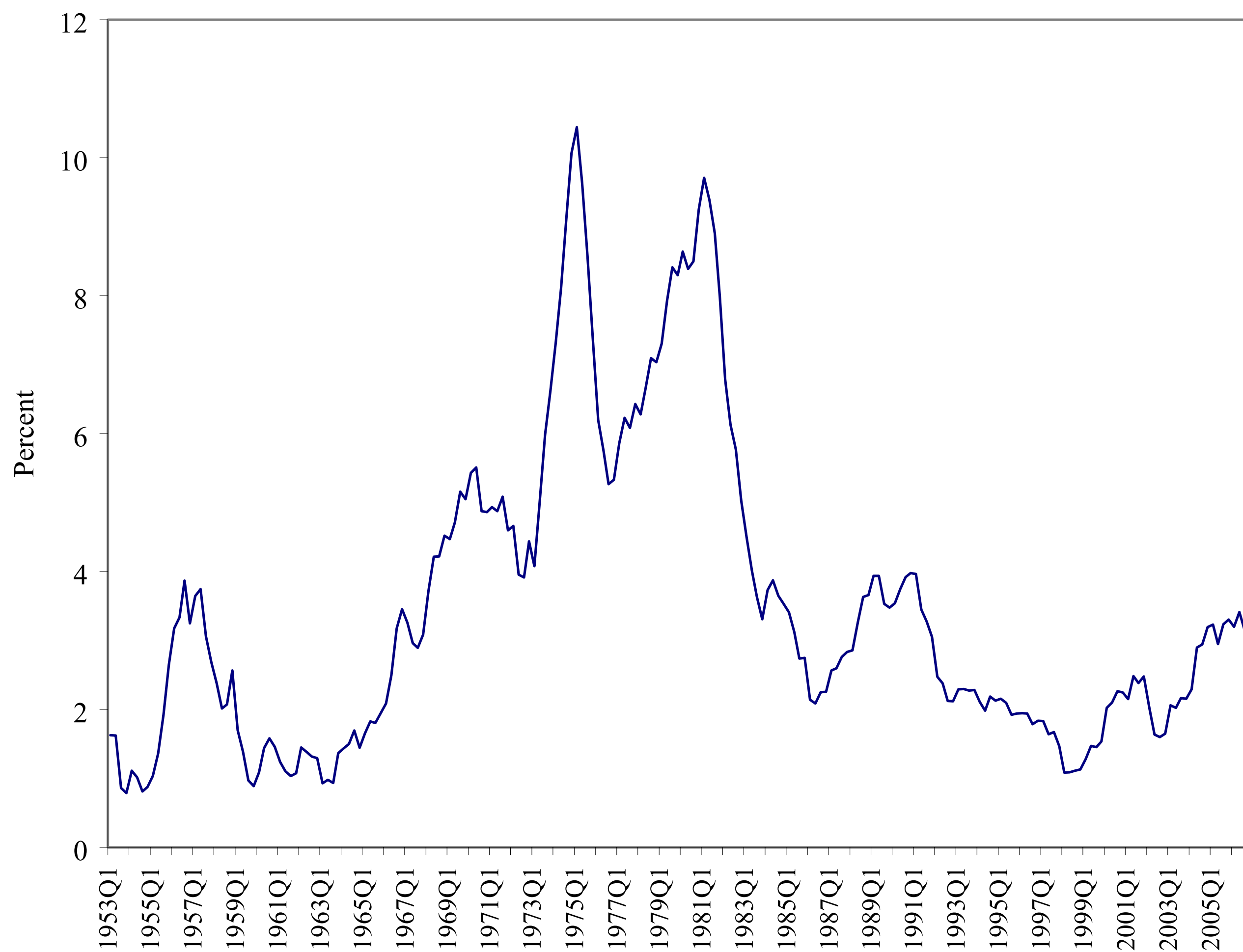


Figure 6
Deviation of Real GDP from Trend

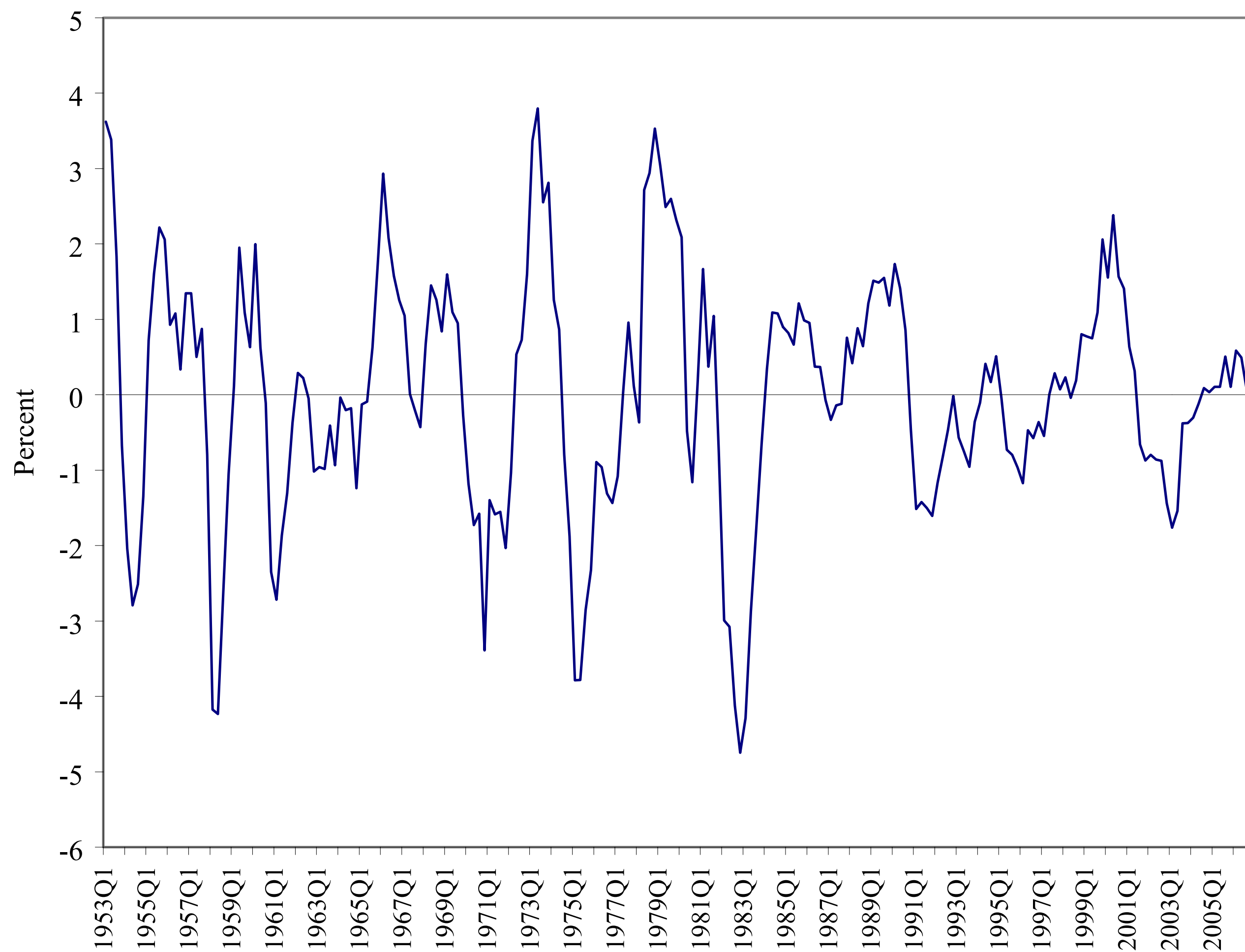
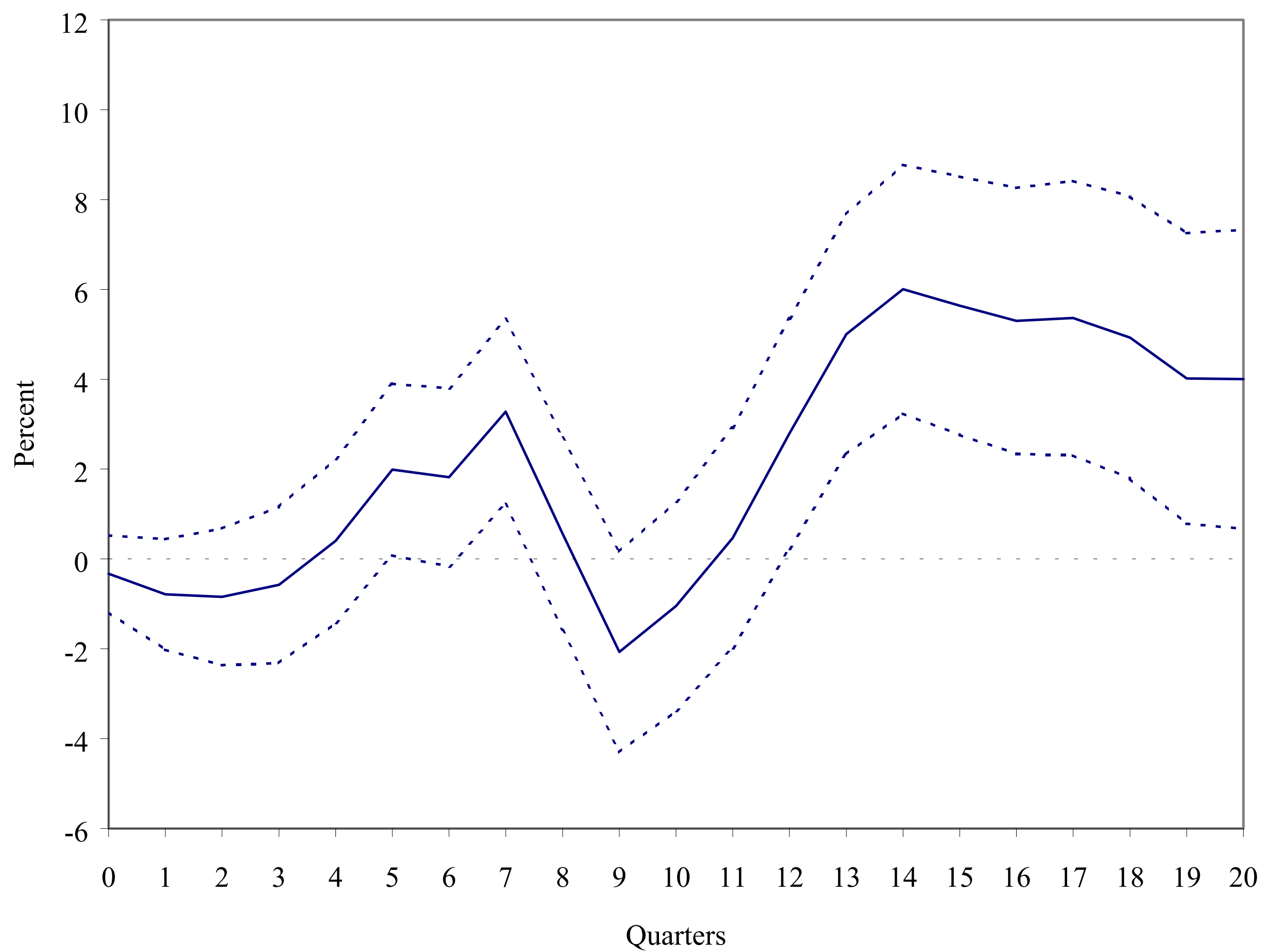


Figure 7
Impact of a Tax Cut of 1% of GDP on Total Federal Expenditures



NOTES

[1] The relevant papers are Romer and Romer (2002a,b, 2004, 2007a,b,c)

[2] The *Economic Report of the President* is abbreviated as *Economic Report* in citations.

[3] The *Minutes of Federal Open Market Committee* is abbreviated as *Minutes* in citations.

[4] The *Budget of the United States Government* is abbreviated as *Budget* in citations.

[5] The actual rule that I estimate is:

$$r_t = b_0 + b_1 r_{t-1} + b_2 \pi_t + b_3 y_t,$$

where r is the ex post real federal funds rate, π is the rate of inflation, and y is the percentage deviation of real GDP from trend. The ex post real funds rate is calculated by first averaging the GDP deflator for a given quarter and the subsequent quarter, and then subtracting the log difference of this averaged price series from the quarterly funds rate. The averaging of the deflator series is done to make the timing of the change in prices more closely correspond to that of the funds rate. Inflation is measured as the log difference of the GDP deflator from four quarters before. Trend log GDP is calculated using a Hodrick-Prescott filter (λ = 1600) over the period 1947Q1 to 2006Q4. The data for the monthly federal funds rate are from the Board of Governors of the Federal Reserve System (www.bog.gov, series H15/H15/RIFSPFF_N.M, downloaded August 22, 2007). The Federal Reserve data start in July 1954. We extend the series back to January 1953 using data from Martens (1958; see Romer and Romer, 2002a, p. 125, for more details). Data on real GDP and the GDP deflator are from the National Income and Product Accounts (www.bea.gov, Tables 1.1.6 and 1.1.9, respectively, downloaded August 22, 2007). The rule is estimated over the period 1979:4-2006:4. The point estimates are discussed in Section III.

[6] The data on the federal surplus are from the National Income and Product Accounts (www.bea.gov, Table 3.2, downloaded August 22, 2007). The series name is net federal government saving. I divide net federal government saving by the GDP deflator to convert it to real terms. Trend real GDP is calculated in the same way as described in note 5.

[7] The CBO data on both the high employment surplus and potential GDP are unpublished quarterly values designed to be consistent with the NIPA estimates. See Romer and Romer (2007b) for a description of this series and our methodology for extending the series before 1960.

[8] The data are from the National Income and Product Accounts (www.bea.gov, Table 1.1.9, downloaded August 22, 2007).

[9] The data on real GDP are from the National Income and Product Accounts (www.bea.gov, Table 1.1.6, downloaded August 22, 2007). As in the estimation of the monetary rule, trend real GDP is calculated by fitting a Hodrick-Prescott filter (λ=1600) to the logarithm of real GDP for the period 1947Q1 to 2006Q4.

[10] The growth rate is calculated as the difference in the logarithm of real GDP from its value four quarters before.

[11] The 1970 *Economic Report* estimated the natural rate at 3.8% (p. 79).

[12] The 1977 *Economic Report* suggested the natural rate was close to 5½% (p. 51). Comments by Carter in the 1978 *Economic Report* suggest that his estimate was substantially lower (p. 5).

[13] See 1978 *Economic Report*, pp. 17 and 145; 1979 *Economic Report*, p. 78; and Record of Policy Actions, August 15, 1978, p. 210. The Record of Policy Actions is a section of the *Annual Report of the Board of Governors of the Federal Reserve System* that provides a short summary of the motivation for policy actions taken at each meeting.

[14] See, for example, 1975 *Budget*, p. 4.

[15] Likewise, the Budget Message for 1978, which also talks about the need for fiscal restraint, puts even more emphasis on the need for tax reduction (1978 *Budget*, p. M4).

[16] See, for example, Burns's testimony to Congress in the *Federal Reserve Bulletin* for July 1971, p. 596.

[17] The deviation is even larger if one considers only the period 1965Q1-1979Q3: the average deviation of the funds rate from the predicted level is close to 6 percentage points in this sample. The reason for this difference is that despite the evolution of ideas, monetary policy was somewhat constrained in the early 1960s by concern about the balance of payments and pressure on the exchange rate.

[18] See, for example, McConnell and Perez-Quiros (2000) and Stock and Watson (2002).

[19] The texts of presidential speeches are from the database of presidential documents constructed by John Woolley and Gerhard Peters, *The American Presidency Project* (www.presidency.ucsb.edu).

[20] The one notable exception to this lack of emphasis on long-run budget balance was the Bush administration's first *Economic Report*. The 1990 *Economic Report* stressed both the general importance of reducing the deficit and the specific fact that the administration had "proposed *a new rule for fiscal policy* that would extend the Gramm-Rudman-Hollings law by requiring the Federal Government to maintain a balanced non-Social Security budget after 1993" (p. 23, emphasis in the original). However, since this idea does not appear either in contemporaneous major administration statements, such as the 1991 Budget Message or the 1990 State of the Union Address, or in other *Economic Reports*, it appears to be largely an aberration.

[21] See, for example, Auerbach (1997).