

A Rehabilitation of Monetary Policy in the 1950's

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American monetary policy in the 1950's has typically not been judged favorably. Monetarists such as Milton Friedman (1960), Karl Brunner and Allan H. Meltzer (1964), and Charles W. Calomiris and David C. Wheelock (1998) criticize the Federal Reserve for stop-and-go policies and for a mistaken focus on free reserves. Keynesians such as Alan S. Blinder and Stephen M. Goldfeld (1976) argue that the Federal Reserve targeted output below the natural rate and therefore unnecessarily restrained output growth.

These unfavorable judgments seem strangely at odds with economic performance in this decade. Inflation, measured using the GDP deflator, averaged under 2.0 percent per year between 1952 and 1960, and it never went above 3.3 percent in a single year. Real GDP over the same period grew at an average rate of 2.9 percent per year, and the unemployment rate averaged 4.7 percent. While there were two recessions during this decade, that in 1954 was exceedingly mild, and that in 1958 was sharp but very brief. Although this unquestionably good economic performance is not proof that monetary policy was similarly good in the 1950's, it is certainly suggestive. At the very least, it implies that those who would criticize monetary policy in this decade are left with a mystery: Why was performance so good if monetary policy was poor or inept?

This paper suggests an alternative view of monetary policy in the 1950's, and hence a possible solution to the mystery of that decade's outstanding economic performance. We show that policy in the 1950's was actually quite sophisticated. Narrative evidence on the motivation of policymakers and their understanding of the economy shows that the Federal Reserve of the 1950's was remarkably similar to the

Federal Reserve of the 1990's. In particular, the Federal Reserve in the early postwar era showed the same overarching concern about inflation that is the hallmark of post-Paul Volcker monetary-policy orthodoxy. We also find that the Federal Reserve of the 1950's was not wedded to faulty indicators in its implementation of policy. Finally, empirical analysis of the behavior of the federal funds rate shows that policymakers in the 1950's responded much more aggressively to expected inflation than did policymakers in the 1960's and 1970's.

I. Narrative Evidence

Given that the time period is short, it is hard to test statistically whether the Federal Reserve of the 1950's was blessed with good sense or good luck. For this reason, it is most useful to analyze narrative evidence. The records of the Federal Reserve, specifically the *Minutes of the Federal Open Market Committee* (Board of Governors of the Federal Reserve System, various years) and the Congressional testimony of Federal Reserve Chairman William McChesney Martin, can reveal both the motivation behind policy actions and the prevailing framework used to understand the macroeconomy.

A. An Overarching Concern about Inflation

The most obvious and significant belief revealed by the *Minutes* is a fundamental abhorrence of inflation by virtually all members of the Federal Open Market Committee (FOMC). Indeed, in reading the *Minutes*, one periodically has to double-check the data. The discussion was often so fervent and the predictions so dire that it is hard to believe that inflation was actually very low.

The overarching concern about inflation is revealed most clearly in the statements the members made and the actions they endorsed during the times when inflation began to accelerate, if only modestly, in the mid and late 1950's. For example, in mid-1955 the economy

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was quite well recovered from the recession of 1953–1954, and there were fears that prices were about to rise. Many members of the FOMC spoke about the need to act decisively to prevent inflation. In August, Chairman Martin said in one of his rare prepared statements to the FOMC: “Inflation is a thief in the night and if we don’t act promptly and decisively we will always be behind” (*Minutes*, 2 August 1955, p. 13). In November, Governor J. L. Robertson 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*, 16 November 1955, p. 20; emphasis in the original). In response to these concerns, the discount rate was raised by a full percentage point between April and November, and other contractionary measures were taken.

The dislike of inflation and the desire to fight it were even more obvious in 1958. Almost as soon as the trough of the 1957–1958 recession was reached in the spring of 1958, the FOMC began to worry about inflation. The members felt that they had not reacted soon enough in 1955, and they were willing to risk another slowdown and Congressional anger to keep inflation from rising again. Chairman Martin said “he did not think that the System had faced in recent years anything like the present problem, whether it be called an inflationary psychosis or inflationary psychology. He did not know how to deal with the specifics of the problem except by moving in the right direction within the System” (*Minutes*, 19 August 1958, p. 59). In doing so, however, the System would have “to have courage to assume the risks that were involved” (p. 58). By September, interest rates had risen back to their 1957 peak level, and Vice Chairman Alfred Hayes expressed concern that further action “could lead to interest-rate levels so high as to be harmful to the economy and so high as to place the System in political jeopardy” (*Minutes*, 9 September 1958, p. 12). His concern, however, was not shared by most other members. Chairman Martin responded that “If the System should lose its independence in the process of fighting for sound money, that would indeed be a great feather in its cap and ultimately its success would be great” (p. 53). Governor James Vardaman also expressed the view that fighting inflation was of paramount importance. He said, “the country was going to

have inflation and ... there must be serious shock treatment” (p. 27).

The concern over inflation and the desire for tight policy continued for most of 1959. In February, H. G. Leedy summarized his view of the role of monetary policy: “The System, of course, wanted growth as well as stability, but if temporarily there had to be a choice between growth and arresting inflationary psychology he would favor the latter course” (*Minutes*, 10 February 1959, p. 22). In late May, Vice Chairman Hayes announced that “In the light of these threats to our economy, I am convinced that the time has come for a decisive signal of the Federal Reserve System’s determination to do its part to check inflationary trends” (*Minutes*, 26 May 1959, p. 17).¹

B. *Model of the Economy*

The narrative record also provides crucial evidence about why monetary policymakers in the 1950’s disliked inflation so. Their model of how the macroeconomy operated contained both a remarkably modern view of the causes of inflation and a firm belief that the output costs of inflation were large and imminent. As a result, they firmly believed that in fighting inflation they were encouraging both short-run stability and long-run growth.

A key feature of the model of many FOMC members was a sensible view of capacity or full employment. Most policymakers believed that inflation began to rise when there was still significant unemployment. For example, in July 1955, when unemployment was 4.0 percent, Vice Chairman Allan Sproul said that the economy was “nearer than we have been since early 1953 to full utilization of plant, equipment, and manpower; prices which have been stable, in the aggregate, for two years may be about to get a push on the up-side due to pressure from costs and from anticipation of price rises by businessmen, purchasing agents, and consumers” (*Minutes*, 12 July 1955, pp. 26–27). At the next

¹ Monetary policymakers in the 1950’s also expressed concern over unemployment and output growth on many occasions. Similarly, the FOMC expressed substantial concern about maintaining stability in the bond market and sought to avoid tightening around times of large Treasury refinancing operations. However, these concerns were clearly dominated by the concern over inflation.

meeting, Malcolm Bryan said that “the apparent present trends in the economy simply extend themselves to over-reach comfortable capacity and that, accordingly, an inflation is inevitable” (*Minutes*, 2 August 1955, p. 23). Watrous Irons subscribed to the same view a few months later, saying, “The economy was moving nearer capacity in many respects, and as this point approached less efficient means of production would be utilized and prices would tend to rise” (*Minutes*, 4 October 1955, p. 8). Again in 1959 when unemployment was 5.0 percent, Woodlief Thomas, the chief economist, said, “The economy is approaching the limits of resource utilization” (*Minutes*, 16 June 1959, p. 6).

The members of the FOMC and the Board staff were certainly aware that there was a short-run trade-off between inflation and output. However, they were united in believing adamantly that there was not a positive long-run trade-off. Indeed, by far the most common view was that if excessive demand resulted in inflation, output would actually fall in the long run. This view is similar to those of many current monetary policymakers, such as Alan Greenspan (see e.g., Greenspan, 1997).

This was clearly Chairman Martin’s view. Martin said in 1958: “If inflation should begin to develop again, it might be that the number of unemployed would be temporarily reduced to four million [from the current level of five million], or some figure in that range, but there would be a larger amount of unemployment for a long time to come. If inflation should really get a head of steam up, unemployment might rise to ten million or fifteen million” (*Minutes*, 19 August 1958, p. 57). Martin repeated this view in Congressional testimony in 1959, saying: “If total demands tend to run ahead of the output potential, the general price level will begin to rise and this, in turn, will have an adverse impact both on growth of demands and on means of financing increased and improved capacity. It will also have adverse effects on the efficiency with which resources are utilized” (Martin, 1959a p. 118).

Two features of this framework are noteworthy. The first is that the level of inflation at which Martin and others felt negative consequences were likely was very low. No one was contemplating inflation of more than 5 percent when making the dire predictions of long-run consequences. Second, the negative effects of

inflation were thought to occur quite quickly. Indeed, inflation could actually cause a recession. Martin expressed this view very clearly in Congressional testimony in 1959. He stated, “I happen to believe, Mr. Patman, that the 1957–58 recession was a direct result of letting inflation get substantially ahead of us” (Martin, 1959b p. 1285). Thomas, the chief economist, expressed a similar view. In September 1959, he said, “Increasing demands after mid-1955 resulted in relatively small increases in output but marked advances in prices . . . Distortions such as undue inventory accumulation, too hasty capital expansion in some areas, too rapid a rise in debt burden, and consumer resistance to price increases undermined the prevailing high activity and led to the recession of 1957–58” (*Minutes*, 22 September 1959, p. 8).

The belief in the absence of a long-run (positive) trade-off is certainly much more modern than the simplistic Keynesian model that held sway in the 1960’s and 1970’s. Indeed, many of the statements made by FOMC members in the 1950’s could be inserted into the narrative record for the 1980’s and 1990’s without notice. That the Federal Reserve had this model in the 1950’s suggests that the passionate statements about the dangers of inflation were not mere window dressing. Rather, they were part of a coherent view that placed predominant emphasis on keeping inflation in check.

C. Implementation of Policy

Brunner and Meltzer (1964), Calomiris and Wheelock (1998), and others argue that an important source of policy mistakes in the 1950’s and 1960’s was a focus on free reserves (total reserves less required reserves less borrowed reserves). And, there is no doubt that free reserves played an important role in policy in the 1950’s. For example, most FOMC meetings ended with some discussion of a target for free reserves.

However, we find no evidence that this focus on free reserves was predominant or led to persistent mistakes. The narrative record shows that the FOMC also paid close attention to interest rates, and goals for key interest rates were often used as a supplement to instructions about free reserves. A very common instruction was that the Account Manager should pay close attention to the “color, feel, and tone of the

market” (*Minutes*, 30 September 1958, p. 46). To a large degree, this instruction meant that he was to watch short-term interest rates. Often the role of interest rates was more explicit. For example, when Vice Chairman Sproul gave a detailed summary of what various terms such as “active ease” or “restraint” meant, the behavior of interest rates was central (*Minutes*, 11 January 1955, pp. 10–12). Indeed, the FOMC often chose the target for free reserves to try to attain a particular interest-rate outcome. In January 1955, for example, Martin asked the Account Manager what “operations ... might be followed for the System account to provide a minimum disturbance to the market during the immediate future [that is, to keep interest rates steady]” (*Minutes*, 25 January 1955, p. 9). The Account Manager responded by suggesting a range for free reserves, and the FOMC adopted a target within that range. And when the Committee expected a shift in the relationship between free reserves and interest rates, it typically changed the reserves target. In March 1955, for example, the FOMC expected that without open-market operations, there would be a large fall in free reserves with only slight upward pressure on rates. Since the Committee felt that some rise in rates was desirable, it decided to allow the large decline (*Minutes*, 29 March 1955, pp. 5–9).

An examination of the data on free reserves and interest rates confirms the key role of interest rates in policy-making. For most periods, free reserves and the federal funds rate move together closely, but in opposite directions. The main exception occurs in 1956, when both series rise considerably. Throughout the year the Federal Reserve expressed an intent to increase the degree of restraint. The “Record of Policy Actions” for the 27 March meeting states that the Committee felt that “the System would be derelict in its duty if it did not exercise additional restraint.” On 17 April, the Committee “agreed that there should be no relaxation of pressures”; at the 7 August meeting, it moved “to strengthen credit restraint”; and on 21 August, “The Committee felt that credit policy should be made somewhat more restrictive” (Board of Governors, 1956 pp. 26, 28, 36, 37). The rise in free reserves, therefore, was evidently an accommodative move taken to achieve a desired behavior of interest rates in the face of shifts in the normal behavior of reserves.

These considerations suggest that while targets for free reserves were important in the short-run implementation of policy, nominal interest rates were predominant over longer horizons. And since inflation varied little in the 1950’s, nominal interest rates provided a good indication of tightness in credit markets. Furthermore, many FOMC members showed a clear understanding of the distinction between real and nominal interest rates. For example, in 1959, Karl Bopp said, “One reason for the present level of interest rates is the anticipation of further inflation” (*Minutes*, 13 October 1959, p. 15).

The FOMC was also acutely aware of the lags associated with monetary policy. The members often worried that inflation, while currently low, was about to take off. For example, in September 1958, Leedy said that “the System should not postpone the matter of looking at the possibility of inflation ahead of it. There were signs of recovery on every hand, and if the System should wait until there was recovery beyond any shadow of a doubt it seemed to him that the System would have lost its opportunity to do the kind of a job that it was supposed to be doing” (*Minutes*, 9 September 1958, p. 32). Similarly, in September 1959, Governor Robertson “expressed the view that the System ought to adopt an affirmative position of restrictiveness in order to keep on top of the potential inflationary situation ahead. Otherwise, the System would get behind the game and might never catch up—repeating the mistakes of a few years ago” (*Minutes*, 1 September 1959, p. 21).

II. Statistical Evidence

To see if policymakers backed up their words with actions, one needs to supplement the narrative analysis with statistical evidence. To this end, we look at how the federal funds rate responded to developments in the macroeconomy in the 1950’s and compare those responses with the responses in other periods.² Because the 1950’s sample period is inherently limited and the variation in inflation in this decade is small, this empirical analysis must be

² John B. Taylor (1999) shows that the response of the federal funds rate to economic variables provides a sensible description of policy even in eras when the Federal Reserve was more directly targeting some other variable.

viewed as a suggestive check on the narrative analysis rather than as a conclusive test.

A. Specification

The particular specification that we consider is a forward-looking Taylor rule (see e.g., Richard Clarida et al., 2000). In its simplest, descriptive form, a Taylor rule shows how the Federal Reserve chooses the federal funds rate in response to inflation and departures of output from trend. A forward-looking Taylor rule takes into account the fact that the monetary authority typically responds to expectations of these variables. As discussed above, this forward-looking behavior was an important feature of policy-making in the 1950's.

The forward-looking Taylor rule that we consider is simply

$$(1) \quad i_t = \alpha + \beta E_t \pi_{t+1} + \gamma E_t (Y - \bar{Y})_{t+1}$$

where i is the federal funds rate, π is inflation, and $Y - \bar{Y}$ is the deviation of output from trend. Time is measured in quarters. To implement this specification, we regress the federal funds rate on the leads of actual inflation and the deviation of output from trend, instrumenting with information known at time t . For instruments, we use (in addition to the constant) the contemporaneous and two lagged values of inflation and the contemporaneous deviation of output from trend. We use multiple lags of inflation because the quarterly series tends to fluctuate substantially. The deviation of output from trend, in contrast, is quite smooth, so the contemporaneous value is an excellent predictor of next period's value.³

³ Data on the quarterly average of the federal funds rate for 1954:1 to 2000:4 are taken from Citibase. We extend this series back to 1950:1 using data from Edward J. Martens (1958). (The data in Martens [1958] are reported only in graphical form. After deducing the numbers from the graph, we checked and calibrated our deductions in a period of overlap between the series in Martens and that from Citibase.) We measure inflation as the quarter-to-quarter change in the log of the GDP deflator (at an annual rate). The deviation of output from trend is calculated as the difference between the log of real GDP and a log trend. The trend series is estimated using the Hodrick-Prescott filter applied to the period 1952:4–2000:4.

TABLE 1—ESTIMATED FORWARD-LOOKING MONETARY-POLICY RULE

Sample	Inflation ^a	Output ^b	Constant
1952:1–1958:4	1.178 (0.876)	−0.040 (0.295)	−0.562 (1.874)
1964:1–1979:3	0.891 (0.090)	0.269 (0.112)	1.410 (0.517)
1979:4–1987:3	1.263 (0.187)	−0.056 (0.287)	4.614 (0.992)
1987:4–2000:4	1.390 (0.305)	0.672 (0.315)	2.311 (0.760)

Note: Numbers in parentheses are standard errors.

^a One quarter ahead.

^b Deviation of output from trend, one quarter ahead.

We estimate the rule over four samples. The 1950's sample is 1952:1–1958:4. We start two years into the decade because the Federal Reserve was unable to pursue independent monetary policy until the Treasury–Federal Reserve Accord of 1951. We stop at the end of 1958 for reasons discussed below. The second sample corresponds roughly to the late 1960's and the 1970's; it runs from 1964:1 to 1979:3. The third and fourth samples are the Volcker and Greenspan eras: 1979:4–1987:3 and 1987:4–2000:4, respectively.

B. Results

The coefficient estimates are given in Table 1.⁴ The most important result is that the weight on expected inflation in the policy rule in the 1950's is quite similar to that in the Volcker and Greenspan eras, and noticeably larger than that for the 1960's and 1970's. In both the 1950's and the last two decades of the 20th century the point estimate is greater than 1, indicating that in response to a rise in inflation the Federal Reserve raised the nominal funds rate by enough to also raise the real funds rate. In the late 1960's and 1970's the coefficient is below 1, indicating that the Federal Reserve reduced the real funds rate when inflation rose.

The weight on expected inflation is estimated less precisely in the 1950's than in other decades. However, the point estimate and the narrative evidence presented in Section I tell a very similar story. The Federal Reserve of the 1950's was deeply concerned about inflation and acted aggressively to control it on several occasions. This can be seen in Figure 1, which shows the

⁴ We also run the regressions using the three-month Treasury bill rate as the indicator of policy stance and the deviation of quarterly industrial production from trend as the measure of the output gap. Neither of these changes affects the results appreciably.

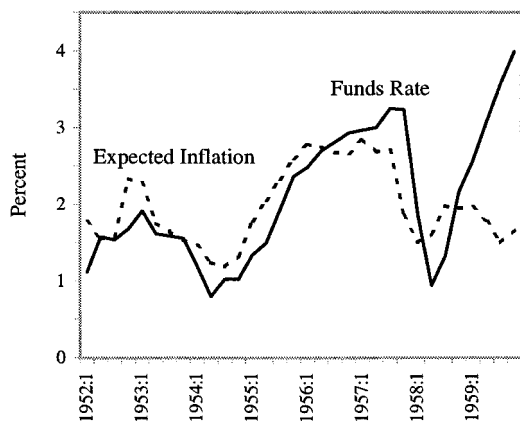


FIGURE 1. FEDERAL FUNDS RATE AND EXPECTED INFLATION

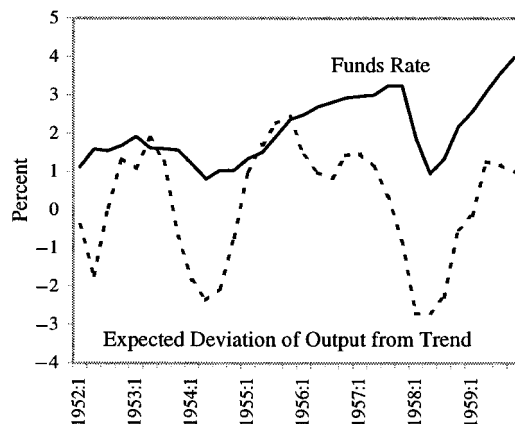


FIGURE 2. FEDERAL FUNDS RATE AND EXPECTED OUTPUT DEVIATION

federal funds rate and expected inflation (measured as the fitted values of the regression of the lead of inflation on the instruments) during the 1950's. This figure shows that there is a close and strong relationship between the two series for much of the decade.

Part of the imprecision of the estimation is the result of the Federal Reserve being particularly concerned about expected inflation in the late 1950's. Figure 1 shows that, while expected inflation derived from the first-stage regression rose slightly in 1958, its rise was small relative to the tightening by the Federal Reserve. As a result, this looks like a time when the Federal Reserve was not responding to expected inflation. (Furthermore, because expected inflation derived from the first-stage regression falls in 1959, if one continues the estimation through 1959 the estimated coefficient on inflation falls considerably and is measured even more imprecisely.) However, as described in Section I, the main reason for the tightening by the Federal Reserve at the end of the 1950's was its conviction that inflation was about to rise. In this context, it is useful to note that the Federal Reserve was not alone in fearing inflation at the end of the 1950's. The Livingston survey of expectations for the CPI six months ahead rose steadily from mid-1958 through the end of 1959.⁵ Thus, the Federal Reserve was acting out

of concern about inflation, even if that concern is not captured by our regression estimates.

The coefficient estimates reported in Table 1 show that the weight put on the expected output gap in the 1950's was small. The coefficient is essentially zero and very imprecisely estimated. Figure 2 graphs the expected output gap (measured as the fitted values from the regression of the output gap at $t + 1$ on the instruments) and the federal funds rate in the 1950's. The obvious positive correlation between the two series does not show up in the multiple regression because of correlation between expected inflation and the output gap.

III. Conclusion

Like central bankers of the 1990's, monetary policymakers of the 1950's had a deep-seated dislike of inflation and acted to control it. Their dislike of inflation was rooted in a model of the economy that emphasized the costs of inflation and the absence of a positive long-run trade-off between output and inflation.

These findings provide important insights into the performance of the economy in the 1950's. One key reason that inflation was low and steady was almost surely that the Federal Reserve was working to achieve those goals. And one likely reason that recessions were brief and mild is that inflation never got seriously out of hand. As a result, the Federal Reserve never had to undertake a disinflation of the magnitude of those of the 1970's and 1980's.

⁵ The Livingston survey data are from the Federal Reserve Bank of Philadelphia web site: (<http://www.phil.frb.org/econ/liv>).

Our findings may also provide insight into the policy mistakes in the late 1960's and 1970's. If monetary policymakers in the 1950's had figured out the essence of sensible policy, the mistakes of the 1960's and 1970's cannot just have been the result of continuing ineptitude or misunderstanding. Rather, something must have changed. One obvious candidate is the model of the economy. Thomas Mayer (1998) and Taylor (1999) suggest that a naive Keynesian model with an exploitable trade-off between output and inflation and, later, a natural-rate hypothesis with an unrealistically low estimate of the natural rate were the key sources of the inflation of the 1960's and the 1970's. Our finding that these models are so different from that in the low-inflation 1950's and post-Volcker 1980's and 1990's adds credence to this view.

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