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WHAT DID WE LEARN FROM THE MONETARY EXPERIENCE OF THE UNITED STATES IN THE GREAT DEPRESSION?*

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The depression that began in 1929 provides a series of challenges for the student of US monetary history. Why did monetary policy fail to stop the decline in output? Why did monetary policy fail to prevent a decline in the money supply or in bank earning assets? Why did the Federal Reserve System permit banks to fail at an unprecedented rate or permit the public's conversion of demand deposits into currency to increase the number of bank failures? What blunder, tragic error, or chance sequence of events produced or permitted a decline of 25 per cent in the money supply, currency, and demand deposits, and a 50 per cent decline in industrial production between August 1929 and March 1933?

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This series of questions can be augmented by asking about each of the main events that is a part of the history of that period. But the main question to be asked about the monetary policy of the period is not why each of the separate events took place but why they occurred together during so brief a time span. An acceptable answer to the latter question provides a basis for deciding whether the consequences of US monetary experience of 1929–33 might have been avoided or are likely to be repeated.

Two main explanations have been offered for the failure of monetary policy in the early thirties, one by Wicker and one by Friedman and Schwartz. In the following sections we summarize both of these explanations and offer our own alternative view. Our argument is supported by evidence from two sources: (1) a comparison of the monetary policies in the recessions of 1923–24 and 1926–27 with the monetary policy in the first half of the depression of 1929–33, and (2) the records of the Open Market Committee and the Board of Governors for the period 1929–33. In the final section, we suggest that the framework that led the Federal Reserve astray in the early thirties continues to guide monetary policy.

Current explanations of the failure of monetary policy

As Wicker has observed, "The praise meted out to the Federal Reserve System for the alleged success of US monetary policy between 1922 and 1927 is surpassed only by the blame showered on it for its so-called failures between 1928 and 1933." Wicker disagrees with the view that there was a marked difference in the policy pursued after 1928 and argues that a consistent policy was followed throughout the period. He attributes the results achieved before and after 1928 primarily to differences in gold flows and international monetary relations.

A main point of Wicker's argument is that most of the members of the Open Market Committee did not believe that monetary policy should be used to stimulate domestic economic activity. Policy had this effect in the two recessions before 1928, he believes, because domestic considerations happened to coincide with international considerations during the recessions of 1923–24

3We are greatly indebted to the Board of Governors of the Federal Reserve System for making available to us the records of the Open Market Investment Committee and of the Federal Reserve Board and for permitting us to excerpt and quote from their records without any restriction other than that the material be used for purposes of scholarship. We are indebted also to Mr. Merritt Sherman, secretary of the Board of Governors, and to his staff for their assistance, courtesy, and co-operation.
4The records were read and excerpted by Mr. William E. Gibson to whom we gave only the most general instructions—to distil from the many pages of the minutes the main ideas and arguments that dominated the discussions and to pay attention to the kinds of evidence available to the Board and to the Committee and the ways in which evidence was used. Needless to say, we are grateful to Mr. Gibson and wish to acknowledge the scholarly and thoroughly capable way in which he carried out his assignment.
5A more complete discussion of the minutes will appear in our forthcoming book.
6"Federal Reserve Monetary Policy," 325.
and 1926–27. International considerations were largely absent or of lesser importance, following the peak in 1929, so the Federal Reserve failed to undertake purchases. Wicker explains the Federal Reserve's expansive policy during the two recessions in the middle twenties as an attempt to stop gold inflows. On Wicker’s interpretation, the Federal Reserve believed that the gold inflow during the two recessions resulted from the difference in interest rates between New York and European centres. By reducing rates in New York, the Federal Reserve reduced, stopped, or reversed the capital movement and helped to maintain a distribution of the gold stock that they believed to be consistent with convertibility. Since the gold flows were much smaller in the months following the 1929 peak, he suggests that the Federal Reserve found less reason for open market purchases or other expansive action. Wicker's argument casts doubt on the view that the Federal Reserve accepted stimulation of domestic output and employment as a goal of monetary policy. However, when he argues that the Federal Reserve acted in a “consistent” way throughout the period, he fails to provide a clear statement of the principles to which they consistently adhered or a measure by which to judge the direction of their action or its consistency. As Charts 1 and 2 show, judgments about the policy that the Federal Reserve pursued during the three periods depend on the measure that is chosen. If the Federal Reserve's purchases of bills and securities is used to measure the policy position, as in Chart 1, policy was most expansive in the early stages of the 1929 recession and least expansive (or most contractive) in the early stages of the 1923 recession, contrary to Wicker's arguments. If the direction of policy is judged by changes in the extended monetary base—the monetary liabilities of the government—the conclusion is reversed, as shown in Chart 2. Of course, neither of these measures suggests that the policy was consistent in the various periods. Nor does the apparent “consistency” of the policy increase if we adjust for changes in member bank borrowing.

Evidence that is more damaging to Wicker’s case comes from the examination of gold flows. The cumulative inflows of gold were largest in each of the twenty months following the peak in 1923 and smallest or substantially smaller during a similar period after the peak in 1929. Yet, bill and security purchases were much smaller in the 1923 recession, as Chart 1 shows, and most of the purchases were made after the trough of the recession, when the economy was expanding, while most of the gold inflow came before the trough of the recession. Wicker's argument appears to rest on differences in the timing of the effect of different operations or on the willingness of the Federal Reserve to reverse some operations but not others. The gold inflows and the security purchases are both expansive and should have the same effect on interest rates, money and the price level. Wicker suggests, however, that the Federal Reserve did not believe that the security purchases and the gold inflow would have the same effect on the price level. In addition, he suggests that the Federal Reserve preferred reductions in interest rates brought about by security purchases because of a desire to maintain convertibility. Further, he seems to suggest that the Federal Reserve planned to sell the securities before the inflation occurred. As we note, below, his argument is not fully developed or carefully stated.

The extended monetary base equals total reserves plus currency issued by the Federal Reserve and the Treasury adjusted for changes in reserve requirements resulting from policy decisions and redistribution of deposits between classes of banks and types of deposit.
CHART 1. Cumulative change in Federal Reserve portfolio of bills and securities following NBER peaks May 1923, October 1926, and August 1929

cession. Further, we find that the cumulative gold inflow was close to its maximum well before the Federal Reserve began to purchase securities and acquire bills. These data are hard to reconcile with Wicker's interpretation of the reasons for Federal Reserve action.

A second explanation of the change in Federal Reserve policy after 1928 has been offered by Chandler,7 by Friedman and Schwartz, and by others.8 In the Friedman and Schwartz version, the death of Benjamin Strong in 1928 deprived the Federal Reserve of a dominant personality, a persuasive leader, and a knowledgeable expert. George Harrison, who succeeded to Strong's official position as head of the New York Federal Reserve Bank, did not inherit his unofficial role as the dominant member of the policy-making group. Although Harrison tried repeatedly to get others in the System to agree on a program of open market purchases, he lacked the ability to lead and was unable to persuade the majority to accept his views, as Strong would have done had he lived. As a result of Strong's death, power passed to the committee and beyond it to the directors of the twelve regional Federal Reserve banks.9 Friedman and Schwartz describe the governors and directors of the regional

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7L. Chandler, Benjamin Strong, Central Banker (Washington DC, 1953).
8The references are cited in Wicker, "Federal Reserve Monetary Policy."
Federal Reserve banks as men of limited vision, lacking a sophisticated understanding of monetary matters and a sense of national responsibility. The Federal Reserve Board lacked the tradition of leadership, hence it could not—or in any case did not—fill the vacuum created by Strong's death. Friedman and Schwartz conclude:

"It was a defect of the financial system that it was susceptible to crises resolvable only with such leadership [of outstanding individuals]. The existence of such a financial system is, of course, the ultimate explanation for the financial collapse, rather than the shift of power from New York to the other Federal Reserve Banks and the weakness of the Reserve Board, since it permitted those circumstances to have such far-reaching consequences. Nonetheless, given the financial system that existed, the shift of power and the weakness of the Board greatly reduced the likelihood that the immediate decisive action would be taken, which was required to nip the liquidity crisis in the bud."

We believe that the Friedman and Schwartz explanation overlooks the main reasons for the failure of monetary policy following the peak in 1929. In the following section, we attempt an alternative explanation that, we believe, makes the apparent success of policy from 1922 to 1928 as well as its failure in the depression of 1929 the result of a single, consistent framework that was unaffected by the death of Governor Strong.

An alternative explanation of Federal Reserve inaction

One of the most striking features of Chart 1 above is the contrast between the volume of securities purchased by the Federal Reserve immediately after the turning point in 1929 and the volume purchased after the other turning points. The Federal Reserve increased its portfolio in each of the four months following the cyclical peak in 1929, then stopped purchasing for almost a year. The purchases began several months before the stock market crash in October; hence they cannot be explained solely as a response to that event. Although some of the purchases were made to offset the effect of the stock market crash on the money market, Chart 1 shows that the portfolio continued to increase for several months after the initial panic had subsided. In the earlier cycles shown in the chart, the Federal Reserve either sold securities or kept its portfolio unchanged through most of the downswing. Just before the trough of the recession, the Federal Reserve began to purchase and, in 1923–24, continued to purchase long after the lower turning point had been passed.

The Riefler-Burgess doctrine suggests an explanation of the differences between the policies in the three periods. As we have noted elsewhere, the main ingredients of the Federal Reserve's approach to policy were blended into a relatively specific framework during the twenties. One purpose of this framework, which we call the Riefler-Burgess doctrine, was to explain the way in which open market operations affected bank reserves and market interest rates. A second purpose was to explain the role played by member bank borrowing and the relation of member bank borrowing to open market operations. According to the Riefler-Burgess doctrine, if member banks borrowed for profit they could offset the effect of open market operations on member bank reserve positions. The reason was that countercyclical open market operations raised interest rates and reduced reserves when the demand for bank loans was high and supplied reserves when interest rates and the demand for loans were low. If banks borrowed for profit, they would restore or increase their reserve positions by borrowing from the Federal Reserve when the Federal Reserve sold in the open market and repay borrowing when the Federal Reserve purchased in the open market. Of what use were open market operations if banks borrowed for profit and offset the effect of open market operations?

Analysis of data on borrowing and interest rates by the staff of the Federal Reserve suggested an alternative interpretation. Under the alternative interpretation banks did not borrow for profit. Banks borrowed only in case of "need" and with great "reluctance." To assure that they would be able to believe this conclusion in the future, the Federal Reserve imposed restrictions on the use of the discount window and began a campaign to convince the bankers that bankers were reluctant to borrow from the Reserve banks and anxious to repay as quickly as possible.

On the Riefler-Burgess interpretation, open market sales were the force that caused banks to borrow. Because bankers were reluctant to borrow and did so only in the case of "need," interest rates rose when bankers increased their

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debt to the Federal Reserve and, as a result, loans to the public were reduced. Open market purchases by the Federal Reserve provided reserves that were used to repay borrowing from the Federal Reserve, so market interest rates declined, and the public was induced to borrow more from banks. Thus, open market operations and member bank borrowing were explained within the same framework and the Federal Reserve's control of bank loans and market interest rates became effective by forcing member banks into or out of debt to the central bank.

Our earlier analysis of Federal Reserve policy-making relied heavily on two quite different sources of evidence strongly suggesting the persistence of this framework. One source was the published statements of members of the Open Market Committee or the staff of the Federal Reserve and the responses to a questionnaire that we sent to each member of the Board of Governors and each president of a Reserve bank. This evidence was persuasive, but it was far from conclusive. Indeed, at the time we gave several examples of public statements or testimony before Congress that do not seem to us consistent with the Riefler-Burgess doctrine or its offspring, the free reserve doctrine. The second source of evidence for the Riefler-Burgess and free reserve doctrines was far more persuasive than the first. It consisted of a comparison of what the Federal Reserve said it planned to do and weekly changes in the moving average of free reserves during the 1950s and early 1960s. There was a remarkably close association between decisions to change policy as recorded in the Federal Reserve's annual reports and changes in the weekly moving average of free reserves during the post-war years. If our earlier analysis is correct, differences in the size of open market operations in the three cycles starting in the twenties should, to a very large extent, be explained by differences in the volume of member bank borrowing and repayments.

Chart 3 suggests that cumulative sum of changes in the Federal Reserve's portfolio plus changes in borrowing are much more similar in the three cycles than the principal components, one of which (the portfolio of securities) is shown in Chart 1. However, a negative value in Chart 3 means that Federal Reserve purchases of bills and securities did not fully offset the decline in member bank borrowing, so the combined effect was to reduce member bank reserves during each of the three recessions. Our earlier argument provides no clearcut reason why the Federal Reserve should have a dominantly pro-cyclical policy, although we argued that in fact US monetary policy is frequently pro-cyclical rather than counter-cyclical.

The data in Chart 3 suggest that monetary policy followed a similar pattern in the three cycles. These data suggest, therefore, that no special explanation of monetary policy during the first twenty months of the 1929 depression, such

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12 Ibid.
13 Free reserves are member bank excess reserves minus member bank borrowing. The accumulation of excess reserves in the thirties eventually led the Federal Reserve to change their assumption that excess reserves are constant (or approximately constant). The emphasis that Riefler and Burgess placed on borrowing in an earlier period shifted to an emphasis on free reserves.
as the death of Benjamin Strong, is required. Moreover, our interpretation, based on the Riefler-Burgess doctrine, assigns no special importance to gold flows as a source of reserves or to the use of open market operations as a means of offsetting gold flows. And our examination of monetary policy during the latter part of the 1929–33 downswing offers no reason to reverse our conclusion about the importance of the Riefler-Burgess framework in understanding the monetary policy operations that took place. While there is some evidence that the death of Benjamin Strong contributed to a shift in the balance of power within the Federal Reserve and some evidence that spokesmen for the Federal Reserve, at times, appeared eager to maintain and extend the convertibility of currencies into gold, we find that a special explanation of monetary policy after 1929 is unnecessary and that an explanation based on the special attention paid to international considerations is incorrect. The Riefler-Burgess framework appears to explain the size of open market operations in each of the recessions just as it explains the volume of open market operations in other periods.

A new question arises, however. The data in Chart 3 show that open market operations and bill purchases failed to offset the decline in member bank borrowings. The sum shown in the chart had a deflationary and contractive effect throughout each of the downswings. Why did the Federal Reserve fail to purchase securities or acquire bills in amounts equal to the decline in member bank borrowing during each of the recessions?

The answer is not hard to find. We need only extend our argument slightly. The development and the acceptance by the Federal Reserve of the Riefler-Burgess framework was not the result of a systematic search for a theory to

![Chart 3: Cumulative sum of changes in Federal Reserve portfolio plus changes in borrowing after NBER peaks](image-url)
guide monetary policy. The framework was developed to explain how open market operations could affect interest rates and the volumes of bank earning assets even if member banks were able to compensate for open market operations by discounting. Under the classical theory of central banking as developed in Bagehot and elsewhere, central bank policy affected market interest rates by changing the discount rate and inducing banks or dealers to borrow from or repay the central bank. The Riefler-Burgess framework was developed to show that the core of the classical mechanism remained intact in the US monetary system and that open market operations remained effective. Open market operations forced banks to borrow, or allowed them to repay debt; in this way, they determined the volume of borrowing and repayment. Under the Riefler-Burgess doctrine, the mechanism by which the central bank affected market interest rates was changed; the ability of the central bank to affect market interest rates remained intact.

Market interest rates were taken to be the key indicator of monetary policy. If market rates—and particularly short-term rates—fell, policy was regarded as expansive, even "easy"; when market interest rates rose, policy was regarded as "tight" or anti-inflationary.

Chart 4 shows that market interest rates declined much more in the early months of the 1929 depression than they did in either of the two previous

![Chart 4. Cumulative changes in short-term interest rates (3 to 6 month Treasury notes) after NBER peaks](chart4.png)
recessions. Starting from a higher value at the peak of the expansion in August 1929, the rates on 3 to 6 month Treasury notes and certificates and on other short-term money market instruments soon fell below the lowest values achieved in previous recessions. By the summer of 1930 short-term market rates were at the lowest levels in more than a decade and, of course, they continued to fall.

The cumulative changes in short-term rates during the early part of the three recessions are, to a great extent, the result of currency movements. The decline in the public's holding of currency during the first fourteen months of the 1929 depression was accompanied by a decline in the monetary base and the money supply. The return flow of currency provided reserves that were used to reduce member bank borrowing and short-term interest rates. Since market interest rates fell, the Federal Reserve believed that monetary policy was "extremely easy."

The first large increase in the public's demand for currency started in November 1930 and restored most of the preceding decline in currency holdings within a few months. Although this currency drain produced a series of bank failures and forced a large additional decline in money, it was not accompanied by an increase in short-term market interest rates. An inflow of gold—mostly from South America and Japan—offset the effect on short-term money market rates, so most of the members of the Open Market Conference believed that policy remained "easy." In their view there was no reason to produce increased "ease." In fact, several of the members believed that monetary policy was much too "easy" during this period and recommended a policy of open market sales.

On our interpretation, there is one—indeed only one—explanation of Federal Reserve policy in 1929-33 that is consistent with Federal Reserve behaviour during the two previous recessions and in subsequent periods. The Governors of the Federal Reserve System believed then, as for the most part they appear to believe now, that short-term money market rates are the most reliable indicators of monetary policy. The very large decline in short-term rates and the very low level to which rates fell at the start of the depression convinced the Governors that policy was "easy."

**Outline of some additional evidence**

Our explanation of Federal Reserve policy during the first twenty months following the peaks in 1923, 1926, and 1929 is consistent with other, independent evidence on Federal Reserve policy. In this section we sketch some of the additional evidence that is available to support our proposition that the use of short-term market interest rates as an indicator of monetary policy...
explains both the decisions to purchase and sell and the decisions not to purchase or sell that were made between 1929 and 1933. Then we briefly discuss recent monetary policy.

Charts 3 and 4 show that from August to December 1929, the Federal Reserve more than offset the decline in member bank borrowing and that short-term market interest rates declined. During the next eleven months the Federal Reserve rarely engaged in open market purchases, allowed its acceptances to decline slightly, and failed to take action to restore the reserves eliminated by the reduction in member bank borrowing. The reason is that short-term market interest rates continued to fall during most of this period. In the late fall of 1930 short-term market rates rose slightly because the effect on interest rates of the public’s increased demand for currency was not immediately compensated by an inflow of gold. The Federal Reserve began to accumulate acceptances (bills) and more than offset the decline in member bank borrowing. Once market interest rates reached a new cyclical low in January 1931, the Federal Reserve sold securities.

There can be no doubt that the Governors were well aware of the nature of the crisis that they faced. At their meeting in November 1929, they recognized the “serious threat to business stability.” In January 1930 the decline was described as a recession; by March, the Governors were convinced that the depression then underway was more severe than the recessions of 1923-24 and 1926-27. The preliminary memorandum prepared for the September meeting describes the depression as the worst of the century and compares its severity to the depression of the 1880s. Yet, the Committee repeatedly refused to authorize open market purchases and seriously considered open market sales.

The minutes leave little doubt about the reasons that the Governors failed to act. Monetary policy is described repeatedly as “easy.” The Governors referred time and again to the level of market interest rates, to the volume of member bank borrowing, to the decline in both interest rates and borrowing that had occurred to the time of the particular meeting. Later, they discussed the gold inflows and considered what might be done to prevent the banks from using the reserves acquired as a result of the gold inflow to purchase acceptances from the Reserve Banks. During currency crises, the Governors discussed the amount of currency that had been “hoarded” as a result of the various currency drains. The failure to act cannot be ascribed to ignorance of the then current events. The Governors were both aware and concerned.

Table I shows the simple correlations between cumulative changes in short-term interest rates and cumulative changes in some of the variables affecting interest rates during the first twenty months of three recessions. The data suggest that the sum of cumulative changes in currency held by the public and in gold flows explains a large and relatively consistent portion of the cumulative change in short-term market interest rates in the three periods. Although changes in currency and changes in gold stock are a use and a source of the monetary base respectively, the relation between changes in the extended monetary base and changes in short-term rates is far from uniform in the three periods. On our interpretation, there is no reason to expect a negative simple correlation between changes in the extended base and changes in short-term
market interest rates. The Federal Reserve used open market operations to expand the base and lower interest rates only if gold inflows, changes in the demand for currency by the public, or other market forces failed to lower interest rates. Once short-term market interest rates had fallen, the Federal Reserve was convinced that its policy was "easy"; the Open Market Committee could find no reason for open market operations or other expansive policy actions.

TABLE I

<table>
<thead>
<tr>
<th>Changes in currency held by the public minus changes in gold</th>
<th>Changes in the extended monetary base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in short-term market interest rates</td>
<td></td>
</tr>
<tr>
<td>1923-24</td>
<td>.92</td>
</tr>
<tr>
<td>1926-28</td>
<td>.83</td>
</tr>
<tr>
<td>1929-31</td>
<td>.86</td>
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<tr>
<td>Changes in the extended monetary base</td>
<td></td>
</tr>
<tr>
<td>1923-24</td>
<td>-.85</td>
</tr>
<tr>
<td>1926-28</td>
<td>-.12</td>
</tr>
<tr>
<td>1929-31</td>
<td>.64</td>
</tr>
</tbody>
</table>

*Interest rates are rates on 3 to 6 month Treasury notes; all data are from Banking and Monetary Statistics; the extended base has been adjusted for seasonal variation.

The simple correlations shown in the table suggest an explanation for the different results achieved in the three periods. During the 1923–24 and 1926–27 recessions, the simple correlation between the extended monetary base and short-term market interest rates is negative; for the 1929–31 period, the correlation is positive. Since interest rates fell during the three recessions, it is clear that during the first two the cumulative change in the base was generally opposite to the movement of short-term interest rates. The extended base rose as interest rates fell during the earlier recessions; the extended base fell as interest rates fell in the first twenty months of the 1929 recession.

The extended base is the main indicator of Federal Reserve policy and the main determinant of the stock of money. During the two recessions of the middle twenties, monetary policy raised the base and thus raised the stock of money; during 1929–31 monetary policy sharply reduced the base and the stock of money. We need not elaborate on the consequences of this difference in the direction of monetary changes other than to note that direction in which prices and output changed in subsequent months are the directions that were to be expected given the changes in money induced by the changes in the extended monetary base. We have noted repeatedly that the reason for the

difference in monetary policy was the belief that falling and/or low interest rates meant that monetary policy was easier or had produced monetary "ease."

The recoveries from the first two recessions began well within the twenty-month period covered by the data we have used. The decline from the 1929 peak continued for more than twenty months. The open market policy during the remainder of the 1929-33 decline continued the policy pursued in the first twenty months. Most of the decisions to purchase securities or to expand the acceptance portfolio came when interest rates were rising or when they remained well above the low levels reached in the spring of 1931.

Although the main reason for the failure of the Open Market Committee to act was the use of short-term interest rates as an indicator of monetary policy, there was often less than complete agreement within the Committee. Two main groups can be distinguished. One group believed that purchases could do no good unless they were properly timed and were used to offset increases in short-term interest rates arising from increased member bank borrowing and an increased demand for loans by the domestic public or by foreigners. The other group, led by Governors Norris of Philadelphia and McDougall of Chicago often wanted to raise interest rates because they believed that money was too "easy." One group generally argued that purchases would do no good; the other generally thought purchases would be harmful.

Harrison was the leading spokesman for the first group and, contrary to the Friedman and Schwartz interpretation, appears to have been able to rally majority support for his position most of the times that he pressed for an authorization to purchase. While we cannot document our position fully in the present paper, we believe that one incident is most revealing of Harrison's role and his position.

At the meeting of 30 September, 1930, the depression was described as one of the worst in the country's history, as we noted above, and lack of purchasing power was named as the main cause of the crisis. Harrison called attention to the fact that most central banks had increased their gold reserves during the previous year because of the "very substantial" decline in note and deposit liabilities.

Traditionally, the committee devoted most of its attention in the early fall to the seasonal increase in the quantity of money or in bank reserves. That year, however, member bank borrowing and short-term interest rates were falling, and the discussion at the meeting was concerned with whether the time had come to sell securities. After some discussion, the Committee approved Harrison's motion that "it should be the policy of the System to maintain the present easy money rate position in the principal money centres... that... no further easing of such money rates would be advisable and that no firming of rates would be desirable whether because of seasonal requirements, gold exports, or other causes." This motion was approved by a vote of 9 to 2 with one abstention.

In the discussion that took place with members of the Federal Reserve Board after the committee meeting, Adolph Miller of the Board asked why the open market committee had discussed whether or not the time had come to sell securities and had not considered purchases. Governor McDougall said that
"easy money" had been tried and while it could not be said that the policy had achieved nothing, "it had not done what we hoped." And he added, significantly, "We are all in agreement that nothing should be done to make things easier."

Governor Norris expressed similar views: "I think the large majority felt that there might be some little hardening in some rates without doing any harm and possibly doing some good." He had voted for the resolution as Harrison presented it, because he did not want to take responsibility for a firmer policy at that time in view of the seasonal problem. In a lengthy appeal to the others, he urged them to recall that the *Tenth Annual Report of the Federal Reserve Board for the Year 1923* spelled out the policy to be pursued. They had been doing the opposite "putting out credit in a period of depression, when it is not wanted and cannot be used, and we will have to withdraw credit when it is wanted and can be used."

Miller urged the members to consider a more expansive policy and stated the case for counter-cyclical policy as clearly as it has ever been done in the minutes we have examined. He reminded them that "a money rate is a very imperfect indicator of the true state of credit. . . . You have lower rates precisely because business is stagnant. . . ."

Governor Harrison replied that what Miller was urging was a policy of deliberate inflation, a policy "fraught with a great many dangers." There were "some in the organization of the New York bank" who wanted to pursue the policy Miller now urged upon them, but the Governors had not considered this alternative. One of the great dangers, he felt, was that the policy would fail to generate much expansion and would lead instead to a gold outflow so that after they used all their Reserve Bank credit, they "would be stumped." Much of the rest of Harrison's statement in the exchange with Miller clearly places him in opposition to an expansive policy. This is by no means the only meeting at which he took such a stance. At the meeting in January 1931, for example, Harrison advocated open market sales.

**Conclusion**

Our reading of the reasons for policy decisions in the minutes of the open market committee supports our interpretation of the empirical data. The failure of monetary policy to stop the contraction from 1929 to 1933 does not require a special explanation. It is the result of the same mechanism that produced the policy of 1922 to 1928 that has been so highly praised. Both can be explained as the result of a mistaken belief that low and/or falling interest rates were a sign of "easier" policy.

In the recessions of 1923-24 and of 1926-27, the gold inflows and the decline in the demand for currency and for bank loans that produced a decline in interest rates were accompanied by an increase in the extended monetary base. The decline in the demand for currency and the increase in the extended base produced a rise in the money supply, and the economy expanded. In 1929-31, the gold and currency changes, the decline in the demand for loans, etc., produced a very sharp reduction in short-term interest rates early in the
depression. The extended base and the money supply fell, and the depression worsened.

Since interest rates had fallen to much lower levels in 1930 and in 1931 than in either of the earlier recessions, virtually all of the members of the Open Market Committee agreed that policy was “easy.” They were reluctant to make policy easier, mainly for one of two reasons. One group believed that open market purchases should be made only to offset an increase in the demand for Reserve bank credit. The second group feared that the Federal Reserve would use all of its power to purchase before the private sector was ready to expand. Both of these arguments and still a third argument about the danger of inflation had a common core in the real bills doctrine. This doctrine—perhaps more than anything else—led the Governors to believe that short-term market interest rates are the most reliable indicator of the direction of monetary policy.

The reasons for concern about the level of short-term market interest rates may have changed. Yet, the use of short-term interest rates as an indicator of US monetary policy and the high correlation between free reserves and interest rates explains the prolonged attachment to free reserves. More importantly, the use of short-term interest rates as an indicator of monetary policy explains why the Federal Reserve regards its policy as counter-cyclical despite the fact that the monetary base and money supply (currency and demand deposits) grow at a greater rate during periods of economic expansion and at a lower rate during recessions. Since falling interest rates are regarded as a shift to “ease,” the decline in the base and the money supply (or in their rates of growth) is ignored. Similarly, higher interest rates are interpreted as “tighter” even if the money supply and the base increase or accelerate.

Changes in short-term market interest rates explain why the Federal Reserve regarded its policy as contractive in early 1966 when short-term rates rose and the base and the money supply grew at one of the highest rates in peacetime history. The use of short-term rates as an indicator of monetary policy also explains why monetary policy was described as expansive in the fall of 1966 when market interest rates fell and the base and the money supply either fell or remained unchanged.

These recent errors in monetary policy do not differ greatly from the errors made in the twenties. As long as short-term interest rates remain the principal indicator of monetary policy, the errors are likely to persist and we will have learned very little about monetary policy-making from the experience of the Great Depression.