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THE FOMC'S COMMITTEE ON THE DIRECTIVE: BEHIND VOLCKER'S NEW OPERATING PROCEDURES

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Abstract: On October 6, 1979, Chairman Volcker announced that the Federal Reserve was embarking on a new, forceful, and ultimately successful campaign to lower the rampant inflation of that time. At the center of this campaign were new operating procedures for conducting monetary policy—procedures that focused daily open market operations on controlling the quantity of monetary reserves and on the quantity of nonborrowed reserves in particular. This was a dramatic shift from the prior focus on targeting the federal funds rate.

These new operating procedures were preceded by well over a decade of work that was directed by the Federal Open Market Committee (FOMC) and was carried out by its Committee on the Directive (COD). Prior to 1979, the COD had recommended operating procedures based on controlling nonborrowed reserves but subsequently rejected them. It was the Volcker Fed that accepted and implemented these reserves-based operating procedures, and it did so with the goal of targeting the monetary aggregates to have restrained and stable growth rates.

Keywords: Federal Reserve, Great Inflation, Monetary Policy, Volcker

JEL Codes: E52 (Monetary Policy), E58 (Central Banks and Their Policies)

*Nicholas Burk: Federal Reserve Bank of San Francisco. David H. Small: Federal Reserve Board. The analysis and conclusions set forth are those of the authors and do not indicate concurrence by other members of the Federal Reserve Board staff or the Board of Governors. The authors would like to thank Edward Nelson for helpful comments.

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1 Introduction

On October 6, 1979, Chairman Volcker announced that the Federal Reserve was embarking on a new, forceful, and ultimately successful campaign to lower the rampant inflation of that time. At the center of this campaign were new operating procedures for conducting monetary policy—procedures that focused daily open market operations on controlling the quantity of monetary reserves and on the quantity of nonborrowed reserves in particular.[1] This focus on nonborrowed reserves as the target for open market operations was a dramatic shift from the previous focus on targeting the federal funds rate.

It may seem surprising that the Volcker Fed could design and implement new operating procedures when Volcker had been Chairman for only two months.[2] However, the New Operating Procedures were preceded by well over a decade of work directed by the Federal Open Market Committee (FOMC) and carried out by its Committee on the Directive (COD)—sometimes also called a subcommittee.[3]

As its name suggests, the COD worked to improve the Domestic Policy Directive (the Directive), which is issued by the FOMC after each of its policy meetings.[4] The Directive instructs the Open Market Trading Desk at the Federal Reserve Bank of New York (the Desk) on how it should conduct open market operations between FOMC meetings.

Just prior to when the first COD was formed in 1964, the Directive consisted of two paragraphs. The first paragraph discussed the general aims of monetary policy in

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[1] Axilrod and Sternlight (1979), p. 10.

[2] Paul Volcker became Chairman of the Board of Governors of the Federal Reserve System on August 6, 1979, although he had been Vice Chairman of the Federal Open Market Committee and president of the Federal Reserve Bank of New York for the previous four years. Stephen Axilrod (2011) (former Staff Director for Monetary and Financial Policy at the Board of Governors of the Federal Reserve System and former Staff Director and Secretary of the FOMC) stated:

> ... I recall indicating to Volcker, shortly after he took office, that I had an idea how a policy aimed at a more direct and certain control of the money supply could be practically implemented any time he was ready to embark on one. It was not a great mystery. Some years prior to Volcker's arrival I had chaired a staff group that had examined the subject for an FOMC subcommittee (headed by Sherman Maisel, then a Fed governor) in Burn's tenure to study how its policy directive might be improved. (p. 96).

Also see Axilrod (2008), pp. 32–33.

[3] The COD was generally known as the Committee on the Directive but was sometimes called a subcommittee. Throughout this paper, including in the references list, we shall use the name "Committee on the Directive." The COD was comprised of both Board members and Reserve Bank presidents, although the chairman of the COD always was a Board member.

[4] Prior to March 1973, it was called the "current economic policy directive."

the context of recent economic developments. The second paragraph, also called the "operational paragraph," contained the instructions from the FOMC to the Desk.

The general objective of the COD was to give the Directive more structure, with the policy goals and instruments being well defined, specific, and having numerical settings where feasible. Such a Directive was seen as promoting discussions within the FOMC of how these target variables and their numerical values were to be chosen and discussions of the economic linkages among the targets and instruments. As a result, policy would be improved and the public would be better informed about the policies being implemented.[5]

In promoting a more structured policy framework with quantified elements, the early CODs were at odds with Chairman Martin and his focus on "money market conditions" as the operating target for monetary policy. Nonetheless, under Chairman Martin, the COD continued to refine its recommendations to recast the Directive, including greater roles for the monetary aggregates as intermediate targets and for reserve aggregates as operating targets.

Under Arthur Burns, Martin's successor as Chairman, the COD continued its work. But after having proposed a Directive with quantified measures of monetary aggregates as intermediate targets and with nonborrowed reserves as the operating target, the COD reversed course in 1976 and recommended that reserve measures not be used as operating targets and that further work on reserve-based operating targets no longer proceed. Chairman Burns supported this change. This left the FOMC using monetary aggregates as intermediate targets and using the federal funds rate as the operating target.

But in October 1979, the Volcker Fed decided to reach back to the earlier COD studies that advocated the use of reserve measures—and nonborrowed reserves in particular—as the operating target. Accepting the risks associated with these new operating procedures, the Volcker Fed chose to target nonborrowed reserves so that the monetary aggregates would have stable and restrained rates of growth.

2 Impetus for Change

It was the year 1964: The Federal Reserve System had just passed its 50-year anniversary, and over a decade had passed since the Federal Reserve had started operating independently from the U.S. Treasury as allowed for under the Treasury–

[5] The COD did not focus on the larger issue of the appropriate choice of the FOMC's policy objectives—such as the appropriate level of unemployment or rate of inflation— but rather focused on the policy framework best suited to achieve the FOMC's objectives. See Rotemberg (2013) and Romer and Romer (2002) for discussions of the choice of policy objectives.

Fed Accord.[6] Pressure for change at the Federal Reserve was coming from both external and internal sources.

Externally, Congressman Wright Patman, chairman of the Committee on Banking and Currency, U.S. House of Representatives, was holding hearings during which the performance of the Fed was reviewed.[7] The lack of an explicit framework for the conduct of monetary policy was one criticism. Allan Meltzer, speaking of the Federal Reserve, stated: "They do not have a valid, appropriate understanding of the money supply process. In 50 years they have not developed one."[8] Similarly, Professor G. L. Bach of Stanford University and the Carnegie Institute of Technology complained that "The Federal Reserve has not made it clear that it has a clear, explicit framework, or rationale, for its monetary policy, specifying the mechanism or steps connecting particular Federal Reserve policy changes with the desired end results."[9]

Also, the particular variables used by the FOMC for the short-run conduct of monetary policy came under criticism. Bach stated that "Federal Reserve officials appear to have generally been overly concerned with short run, 'feel-of-the-market,' considerations, relative to longer run goals."[10] And Brunner and Meltzer criticized the Federal Reserve's use of free reserves as a target for the Desk's open market operations.[11] In their criticism, Brunner and Meltzer stated, "If the Federal Reserve's conception of the monetary process, centered on the position of free reserves, were the only admissible view, we would have to concede that monetary policy is little more than a futile exercise."[12] Although the term "free reserves" did not appear explicitly in the Directive at this time, it did so indirectly through the term "conditions in the money market."[13] Similarly, Milton Friedman criticized the Federal Reserve for being

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[6] See Romero (2013).

[7] Committee on Banking and Currency, U.S. Congress, House (1964).

[8] Meltzer (1964), p. 941.

[9] Bach (1964), p. 1389. Sherman Maisel, who became a member of the Board of Governors in 1965 and who chaired the second Committee on the Directive, concluded regarding these hearings: "But with the criticism of Brunner, Meltzer, and the Congress that the Fed had no theory, the Fed felt it had to get a theory. So it set up the first Committee on the Directive. George Mitchell ran that." See Maisel (2009), p. 10.

[10] Bach (1964), p.1390.

[11] Free reserves are excess reserves minus borrowed reserves. Negative free reserves are called net borrowed reserves. See Federal Reserve Bank of New York (1958), p. 163.

[12] Brunner, Karl and Meltzer, Allan H. (1964). pp. 63–64. Bordo (2019) examines the Brunner and Meltzer critique of the conduct of monetary policy.

[13] Robert W. Stone (1964), Manager of the System Open Market Account, wrote: "I have understood the 'money market conditions' clause to encompass a number of indicators of marginal reserve availability and use that are frequently cited by members of the Committee in commenting on

erratic because of, in part, its use of money market conditions and its "variants"—including interest rates, the availability of credit, free reserves, and borrowings by banks.[14]

Inside the Federal Reserve, three specific criticisms were being made of the Directive. It was seen as being potentially internally inconsistent, providing insufficient accountability of the Desk to the FOMC, and focusing too much on interest rates and too little on reserves.

Governor Mitchell raised the issue as to whether the Directive exhibited potential internal inconsistency as regards the signals it gave for the short-run conduct of policy. He noted that "... there were some typical problems in the directive, involving conflicts between objectives specified in terms of interest rates and money market conditions on the one hand, and in terms of bank reserves on the other."[15]

Governor Mitchell also raised a problem that had been a long-running source of tension between the FOMC and the Desk. This problem was the issue of the accountability of the Desk regarding the extent to which the Desk's actions conformed with the intent of the FOMC: "... under present procedures one might argue that there were occasions when the responsibilities of the Open Market Committee were in fact transferred to the Manager of the Account ... ."[16] Accountability was somewhat limited when the operating instructions for the Desk were stated in terms as vague and multifaceted as "money market conditions."

Governor Robertson noted the issue of the lack of flexibility in short-term interest rates, saying the FOMC should "… gradually work away from so intense a focus on stable money market conditions as our prime operational target ... to reorient our attention towards more objective reserve measures ..."[17]

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policy—for example, the Federal funds rate, a range of average free reserves and of average member bank borrowing, and Treasury bill rates." p. 1.

Federal Open Market Committee Secretariat (1964) commented on this description of money market conditions by stating "This list is illustrative; a fuller list probably also would include the volume and direction of Federal funds flows, rates on dealer loans, other short-term rates, the degree of difficulty experienced by dealers in obtaining financing, and perhaps additional factors." p. 6.

[14] Friedman (1964), pg. 1139.

[15] Federal Open Market Committee (1964a), p. 9.

[16] Federal Open Market Committee (1964a), p. 7.

[17] Federal Open Market Committee (1964a), p. 11.

At the March 3, 1964, FOMC meeting, Governor Mitchell suggested that staff work on improving the Directive.[18] Chairman Martin then directed the FOMC Secretariat to undertake a study of the Directive.[19]

At that March meeting, the Directive consisted of two paragraphs. The first paragraph stated the Committee's general objectives for bank credit and money market conditions as they affected the Committee's goal for the capital account of the balance of payments. Additionally, that paragraph noted the current economic and financial developments influencing the attainment of its policy objectives.

The second paragraph of the Directive (the operational paragraph) directed the Desk in terms of both money market conditions and bank reserves but did so in very general terms. The operational paragraph was:

> To implement this policy, System Open Market operations shall be conducted with a view to maintaining about the same conditions in the money market as have prevailed in recent weeks, while accommodating moderate expansion in aggregate bank reserves.[20]

3 Preliminary Work

In response to the FOMC request that staff provide suggestions for improving the Directive, on April 8, 1964, the FOMC Secretariat sent to the FOMC a memo largely drafted under the responsibility of Arthur Broida.[21] That memo made three suggestions for improving the Directive.

First, the opening paragraph of the Directive would do more to provide to the public and markets a statement of the FOMC's general policy posture. It would state the intermediate-term objectives of the Committee for major financial variables (aggregate reserves, money supply, and bank credit) in light of current economic growth, inflation, credit availability, and the country's international payments. This paragraph would be where the public and the markets would look for the FOMC's policy intent, rather than looking for it in the operational paragraph (the second and last paragraph of the Directive).[22]

[18] Federal Open Market Committee (1964a), p. 6.

[19] Federal Open Market Committee (1964a), p. 17.

[20] Federal Open Market Committee (1964a), p. 89.

[21] See Young (1964). Also see the accompanying staff memorandum: Federal Open Market Committee Secretariat (1964). Arthur L. Broida was a member of the staff of the Board of Governors of the Federal Reserve System and future Secretary of the FOMC.

[22] Broida (1961) had earlier stressed the need for the Directive to provide a clearer statement of the policy intent of the FOMC.

Second, variables such as bank reserves, bank credit and the money supply that had been in the second paragraph of the Directive would be moved into the first paragraph.[23] This relocation of the monetary and credit aggregates importantly changed them from being short-term operating targets to being variables expressing the intermediate-term policy intent of the Committee.

An advantage of monetary and credit aggregates not being in the operational paragraph was that the Desk would not be faced with at least one type of potential inconsistency within the operational paragraph, namely between movements in money market conditions on one side and movements in the monetary and credit variables on the other side. In the new Directive, any divergent movements between variables in the first paragraph and those in the second paragraph would not necessarily lead to the Directive being inconsistent because of the different time periods to which those paragraphs applied. However, there still could be inconsistencies within the first paragraph and within the second paragraph.

The third recommendation was for the continuation of money market conditions as the preferred, if less than perfect, target in the operational paragraph.[24] However, some disadvantages were seen in using money market conditions in this role, including that it would leave open the possibility of inconsistency among the variables included within the collection of variables constituting money market conditions. Also, targeting money market conditions would tend to reduce the flexibility of short-term interest rates because some short-term rates were included in the targeted money market conditions.

Furthermore, the practice of market participants reading changes in money market conditions as reflecting changes in the stance of policy was seen as tending to tie the Committee's hands. In some instances, the Committee might want a change in money market conditions for purely technical reasons but would keep money market conditions unchanged because it was concerned any such change might be interpreted by the markets as a change in the Committee's basic policy intent. The result was less flexibility in money market conditions and therefore in short-term interest rates more generally. Allowing for greater flexibility in short-term interest rates was seen as desirable.

[23] See Federal Open Market Committee Secretariat (1964) pp. 26–27 and also see the first page of the cover memo: Young (1964). Federal Open Market Committee Secretariat (1964), p. 26, also noted that the Directive had tended to refer to money market conditions and its components, on one hand, and also to reserve, money and credit aggregates on the other, as in the operational paragraph from the March 3, 1964, FOMC meeting given above—a practice it did not recommend.

[24] Federal Open Market Committee Secretariat (1964), pp. 26–7: "... it would probably be desirable in the future to formulate the second-paragraph instructions to the Manager primarily, if not necessarily entirely, in terms of money market variables."

4 First COD (Mitchell): Toward a More Structured Policy Framework

Having received the Broida memorandum, the FOMC then decided at its May 5, 1964, meeting to form the Mitchell COD.[25] The Mitchell COD agreed with the recommendation of the Broida memo that the Directive should do more to clearly express the Committee's policy intent and, likewise, should move monetary and reserve aggregates (other than free reserves) out of the operational paragraph.[26]

The Mitchell COD proposed other changes to the Directive, ending up with a proposed framework of four paragraphs. Within that framework, the Mitchell COD made specific recommendations regarding the "content"—that is, regarding the particular variables that were used to specify the intermediate and operating targets of monetary policy. However, the Mitchell COD emphasized the greater importance it placed on its proposed framework relative to the importance it placed on the particular content it had chosen, writing:

> Finally, we believe the basic framework of the proposed directive would be appropriate for an extended period, but we would expect to see continuing development and refinement of the component elements with experience and with advances in knowledge.[27]

The four paragraphs, or what the COD called "elements," of the Directive proposed by the Mitchell COD were: (1) a broad description of those current economic conditions that bear directly on the Committee's ultimate objectives, such as the balance of payments, inflation and the level of resource utilization, (2) an analysis of recent credit and monetary developments, (3) a specification of the Committee's longer-run policy intent in light of those economic and financial developments, and (4)

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[25] This committee was composed of George W. Mitchell, Board of Governors; George H. Ellis, Federal Reserve Bank of Boston, president; and Eliot J. Swan, Federal Reserve Bank of San Francisco, president. See Federal Open Market Committee (1964b), p. 58.

[26] Ellis, Mitchell and Swan (1964a), pp. 4–6.

[27] Ellis, Mitchell and Swan (1964a), p. 13.

short-run operating instructions to the Desk.[28] This framework provided a way for the FOMC to work back from its ultimate objectives, through its intermediate policy goals, and then to short-run operating targets.

This framework was meant to have broad appeal within the FOMC since the COD did not see its proposal as taking a stand on any particular theory linking policy intent in the third paragraph to the monetary and credit aggregates in the second paragraph and finally to the Committee's ultimate objectives in the first paragraph:

> The proposed directive was drafted specifically to avoid a commitment to any particular theory of monetary causation. Both the views of those who feel the impact of policy runs from reserves to the money supply to economic activity, and the views of those who feel it runs from reserves to bank credit to credit conditions to economic activity, are accommodated within the framework of element 3.[29]

Nor did the Mitchell COD make any recommendation as to whether monetary policy should be implemented with discretion or a fixed policy rule.

As in the Broida memo, the Mitchell COD proposed to move references to money and reserve aggregates out of the operational paragraph and move them either into the third paragraph to specify policy intent or into the second paragraph as indicators of financial conditions. The Mitchell COD argued that this change would help reduce the inconsistency due to divergent movements in such aggregates and money market conditions when both appeared in the operational paragraph and would reduce ambiguity in specifying the operational target.[30]

With this proposed framework, the COD turned to the content of the framework; that is, deciding which variables would be chosen to specify policy intent (in the third paragraph) and the operational target (in the fourth paragraph). Regarding policy intent, paragraph 3:

> … would specify the Committee's longer run policy intent. It would indicate the seasonally adjusted annual rate of increase the Committee would like to achieve in reserves required to support private demand deposits over the intermediate-term period (not necessarily limited to three weeks but also not for so long a period as to be meaningless operationally), and the Committee's position with respect to the provision of reserves

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[28] Ellis, Mitchell and Swan (1964a), pp. 4–6.

[29] Ellis, Mitchell and Swan (1964b), p. 12.

[30] Ellis, Mitchell and Swan (1964a), p. 7.

> required to support changes in time and savings deposits, Government deposits, and currency in circulation.[31]

In explaining the use of a reserves-based measure to express policy intent, the COD stressed that the FOMC's open market operations worked, in the first instance, by affecting reserves:

> Whatever one's analytic preference, there can be no argument with the proposition that the System's policy is effectuated by changes in the reserves made available to the banking system. Such changes influence both the money supply and the banking system's contributions to total credit flows. The common element in both theoretical structures is bank reserves. ... the full and longer lasting impact of policy is through changes in bank reserves resulting from open market operations. ... no analytical commitment is implied by the proposed use of reserves for specifying policy intent.[32]

For the operational target, the Mitchell COD chose one of the variables within the collection of money market conditions, and that variable was free reserves. Regarding its choice of free reserves, the Mitchell COD noted several reasons. First, the COD thought that free reserves "... will 'work,' in the sense that a change in the free reserve target would have quick and significant (if not always identical) consequences for other variables reflecting the Committee's intermediate and longer-range objectives; ..." Second, free reserves are "specific." Being specific helped to limit the accountability issues noted above. Third, they were seen as having lesser seasonality problems than would aggregate reserves measures. And fourth, choosing free reserves would avoid targeting the T-bill rate and other money market rates as implicitly occurred when targeting money market conditions.[33] Any tendency to target the T-bill rate was seen as a possible step back to a type of pegging that had occurred prior to the Treasury–Fed Accord. However, the Mitchell COD did recommend making the attainment of the free reserve target conditional on the T-bill rate staying within prescribed bounds.

The COD's response to critics of the FOMC's use of free reserves as an operating target was that, under its proposal, the target value for free reserves was not to be maintained at some fixed value but was to be derived from its measure of policy intent, namely from its target for required reserves against private demand deposits:

> Moreover, the manner in which it is proposed that free reserves be used— for <u>short-run</u> operating target purposes—would give the Committee a substantial measure of protection against misunderstanding or misuse.

[31] Ellis, Mitchell and Swan (1964a), p.5.

[32] Ellis, Mitchell and Swan (1964b), pp. 12–13.

[33] Ellis, Mitchell and Swan (1964a), pp. 7–8.

> The proposed directive is intentionally designed to cause the Committee to review every three weeks the free reserve target specified in the light of actual changes in required reserves behind demand deposits and in other variables. In any demand situation, there is some free reserve level—however high or low it may be—that is best calculated to achieve whatever objectives the Committee is seeking. Under the proposal the Committee, with the staff's assistance, would estimate that level and would modify it as necessary at three-week intervals.[34]

Nonetheless, the Mitchell COD seemed to be quite uneasy in its acceptance of free reserves as the operating target. It stated that its endorsement of free reserves "… is limited to <u>the time being</u>" and that regarding possible alternatives to free reserves, "We believe that research along these lines is needed urgently."[35]

With this proposed framework and content, the COD embraced shifting to the use of quantified terms throughout the Directive, stating, "More explicit language would be used throughout, including statements cast in quantitative terms to the extent feasible, ..."[36] The advantage of using quantified terms was seen as:

> Quantitative statements have a great advantage over purely verbal statements: of accuracy in communication, among Committee members in their deliberations, between the Committee and the Account Manager, and between the Committee and the public.[37]

For example, in a trial Illustrative Directive, the Mitchell COD proposed that the Committee's policy intent be:

> ... to provide the reserves required to support about the same seasonally adjusted annual rate of increase in private demand deposits in the months ahead as has prevailed to date this year, namely, on average about 3 per cent.[38]

Also in this Illustrative Directive, quantitative measures were used in the operational paragraph:

> To implement this policy, System open market operations over the next three weeks shall be conducted with a view to maintaining weekly average free reserves in the $50–150 million range; provided, however, that free

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[34] Ellis, Mitchell and Swan (1964a), p. 8.

[35] Ellis, Mitchell and Swan (1964a), p. 8 and p. 9, respectively.

[36] Ellis, Mitchell and Swan (1964a), p. 2.

[37] Ellis, Mitchell and Swan (1964b), pp. 17–18.

[38] Ellis, Mitchell and Swan (1964a). See Illustrative Directive (as of May 5, 1964), given at the end of the memorandum, p. 3.

> reserves should be permitted to move above or below this range in order to moderate any movement in the Treasury bill rate outside the range of 3.40–3.55 per cent or any serious constriction or excess in the availability of Federal funds or dealer financing.[39]

As shown in this Illustrative Directive, the time frame for achieving the intermediate target was "in the months ahead" and for achieving the operating target was "over the next three weeks," which corresponded to the time between FOMC meetings.

The FOMC discussed the Mitchell COD proposal on July 28, 1964, with continuations on September 29 and October 20. At the July 28 meeting, Chairman Martin noted his skepticism as to whether much could be done to improve the Directive. President Hayes (president of the Federal Reserve Bank of New York) also thought the existing type of Directive worked well and had objections to the recommendations in each of the four paragraphs of the Mitchell COD proposal.[40] At the meeting on October 20, 1964, Chairman Martin proposed that the staff continue to produce trial directives.

At the FOMC meeting on March 23, 1965, President Ellis noted that it had been nearly a year since the Committee had received the Broida memorandum and that the Committee had not yet succeeded in holding a full discussion of elements 3 and 4 of the proposed new Directive. In particular, a discussion of specifying numerical quantities in the Directive had been regularly scheduled but had not yet materialized.[41] Ellis proposed, and the FOMC accepted, that a new study be undertaken by the staff. The Mitchell COD came to an end.

At the FOMC meeting of March 23, 1965, the Directive issued by the FOMC still consisted of two paragraphs with no single variable being used to express policy intent in the first paragraph, and with the operational paragraph still focused on money market conditions. That Directive stated:

> The economic and financial developments reviewed at this meeting indicate a generally strong further expansion of the domestic economy and the continuing need to improve our international balance of payments, as highlighted by our heavy gold outflows in recent months. In this situation, it is the Federal Open Market Committee's current policy to reinforce the voluntary restraint program to strengthen the international position of the dollar and to avoid the emergence of inflationary pressures, while

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[39] Ellis, Mitchell and Swan (1964a). See Illustrative Directive (as of May 5, 1964), given at the end of the memorandum, p. 4.

[40] Federal Open Market Committee (1964c), pp. 57–63. Also see Hayes (1964).

[41] Federal Open Market Committee (1965), pp. 93–94.

accommodating moderate growth in the reserve base, bank credit, and the money supply.

> To implement this policy, System open market operations over the next three weeks shall be conducted with a view to attaining slightly firmer conditions in the money market.[42]

5 Second COD (Maisel): Monetary Aggregates and Nonborrowed Reserves

About three and a half years after the Mitchell COD ended and in response to a letter from Governor Maisel to Chairman Martin on September 24, 1968, the Maisel COD was established at the FOMC meeting of October 8, 1968.[43] At that time, the Directive was similar to those at the end of the Mitchell COD except that greater movements in money market conditions were allowed to help control bank credit, as expressed by the proviso clause in the Directive.[44] For example, the end of the first paragraph and the full operational paragraph of the Directive from the FOMC meeting of September 10, 1968, were as follows (with emphasis added below):

> In this situation, it is the policy of the Federal Open Market Committee to foster financial conditions conducive to sustainable economic growth, continued resistance to inflationary pressures, and attainment of reasonable equilibrium in the country's balance of payments.
>
> System open market operations until the next meeting of the Committee shall be conducted with a view to maintaining about the prevailing conditions in money and short-term credit markets; **provided** however, that operations shall be modified if bank credit appears to be deviating significantly from current projections.[45]

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[42] Federal Open Market Committee (1965), pp. 100–1.

[43] See Maisel (1968) and Federal Open Market Committee (1968b), p. 90. The Maisel COD members were Sherman J. Maisel, Board of Governors, COD chairman; Frank E. Morris, Federal Reserve Bank of Boston, president; and Eliot J. Swan, Federal Reserve Bank of San Francisco, president.

[44] See Axilrod (1971) for a review of the Directive in the late 1960s and the role of money market conditions in particular.

[45] Federal Open Market Committee (1968a), p.70. Speaking of the proviso clause in the Directive, Maisel (1973) later stated that he thought this represented some, but limited, progress in the FOMC moving away from conducting policy using money market conditions:

> The real significance of the proviso lay in the fact that a majority of the FOMC had agreed that some improvements in operating procedures were necessary. One part of the doctrine

In his letter of September 24, 1968, Governor Maisel indicated that, in his view, the main shortcoming of the Directive was related to the vague specification of policy intent:

> The major problem area seems to be in what the previous subcommittee labeled as information concerning the Committee's "policy intent" or what others have called "the intermediate-term objectives of Committee policy."
>
> While policy statements and the surrounding discussions vary, most show but slight attention to any specification of either over-all policy objectives or the Committee's aims for monetary variables in any intermediate period. The major exception is in the normal inclusion of two or three formula-type phrases, such as "resist inflationary pressures" or "aid in progress toward balance of payments equilibrium," at the end of the first paragraph of the directive.[46]

In deciding how to specify the intermediate target, the Maisel COD framed the choice as being between interest rates (a proxy for money market conditions) and a monetary aggregate:

> The choice between monetary aggregates, on the one hand, and money market conditions or interest rates, on the other hand, for the conduct of monetary policy is in theory a question of the best method of monetary control under conditions of uncertainty. In part, the choice will depend on whether the demands for money and other financial assets are more stable than the demand for goods, under given income and financial market conditions.[47]

This is a standard Poole (1970) analysis of policymaking under uncertainty.

Some of the COD staff believed that the demand for money and other financial assets was more stable than the demand for goods and thus preferred monetary aggregates as the intermediate target. Other staff felt the evidence on relative stability was ambiguous but felt a monetary aggregate was still preferred to money market

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> of the age of innocence–that of measuring monetary policy only by a feel for the degree of accommodation of demand gained by looking at money market conditions—had been recognized as inadequate. (p. 86)

See Duggar (1971), who says: "The inclusion of the proviso clause in the FOMC directive represents a movement away from target levels of free reserves and money market conditions—although a small movement—and toward greater control of total deposits, the so-called bank credit proxy." p. 885. Also see Axilrod (1971), July; pp. 67 and 20–21.

[46] Maisel (1968), p. 1.

[47] Axilrod and others (1970), p. 2.

conditions because the use of money market conditions had led, in practice, to sluggish adjustments to money market conditions.[48] For the intermediate target, the COD chose the monetary aggregates:

> … the Committee on the Directive believes that the FOMC can improve its ability to accomplish its basic policy objectives by placing emphasis on selecting desired movements in the monetary aggregates as intermediate targets for monetary policy.[49]

In terms of determining the desired path of the monetary aggregates, the COD acknowledged money demand did shift and, in that light, expressed a preference for discretionary policy rather than policy being set according to a fixed rule (with text in brackets added below):

> When [money] demand is shifting, the FOMC should decide whether or not to alter the quantity of money it is willing to see created. The question as to the degree to which movements in the demand for money should be met will depend upon the Committee's views of what is happening to the economy and of what monetary policy will best aid in achieving national goals. The FOMC should not accept any monetary path as predetermined.[50]

The Committee then needed to select the short-term operating target. As the COD noted, even though it chose monetary aggregates to be the intermediate target, it could still choose the operating target to be a monetary or reserve measure on the one hand or an interest rate or money market conditions on the other:

> However, we want to stress the fact that the choice of operating directives, instructions, and variables is independent of the choice of intermediate targets for monetary policy.[51]

Again, the Maisel COD framed the issue in terms of policymaking under uncertainty and applied the Poole analysis—this time to determine whether the monetary aggregate chosen as the intermediate target could be better controlled with the operating target being a reserve measure or an interest rate.

> If money demand is less predictable than money "supply," it is best to pursue a reserve target. If money supply is less predictable, it is best to pursue a Federal funds rate target.

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[48] Axilrod, and others (1970), pp. 2–3.

[49] Maisel, Morris and Swan (1972), p. 6.

[50] Maisel, Morris and Swan (1972), pp. 4–5.

[51] Maisel, Morris and Swan (1972), p. 6.

> We believe that demand is less predictable and, therefore, that the System can achieve better control by operating in terms of reserves.[52]

The Maisel COD noted a further advantage of a reserve variable as the operating target is that "… reserves are what the Federal Reserve System is all about" and there are advantages to the System focusing its operating instructions on a variable for which it is responsible.[53]

For the operating target, the particular measure of reserves chosen was nonborrowed reserves adjusted for reserves required for government and interbank deposits.[54] The reason for choosing nonborrowed rather than total reserves was twofold: the Desk had greater control over nonborrowed reserves (through open market operations)—and by targeting nonborrowed reserves, borrowings were allowed to vary in response to changes in market demands for reserves and thus borrowings provided a buffer for such shocks.[55]

As the final specification for its proposed policy framework, the Maisel COD proposed time frames for hitting the intermediate and operating targets of three to four months and week-by-week, respectively.[56] Furthermore, they preferred greater quantification of the operating target.[57]

The COD also addressed how the Directive would be implemented by the Desk. The proposed procedure was presented in an appendix to a report of the Maisel COD.[58] This operating procedure, like the New Operating Procedures initiated in 1979, was designed to supply the quantity of nonborrowed reserves consistent with the monetary aggregate targets. As proposed by the Maisel COD, the operating procedure would start with the staff providing alternative scenarios for macroeconomic variables including the monetary aggregates and interest rates. Using these alternative scenarios,

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[52] Maisel, Morris and Swan (1972), p. 11. Also see Kalchbrenner (1976): "Although the evidence is not conclusive, it is usually concluded that short-run money demand is subject to relatively greater shocks than money supply. If this is true, a reserve operating target is preferable to an interest rate target to achieve a monetary aggregate target." See pages 64–65, citing Poole (1970).

[53] Maisel, Morris and Swan (1972), p. 11. The Desk did not support a reserves target. As stated by Holmes (1972), the Manager of the Desk: "The officers of the Trading Desk are dubious that a reserve target per se would result in better control of the aggregates, and it should be clear that we are not recommending such a change." p. 1.

[54] Maisel, Morris and Swan (1972), p. 3.

[55] Federal Open Market Committee (1972a), pp. 9–10. See summary of the comments made by Axilrod.

[56] Maisel, Morris and Swan (1972), p. 1.

[57] Maisel, Morris and Swan (1972), p. 12.

[58] Maisel, Morris and Swan (1972). See "Appendix A, Implementation of a Nonborrowed Reserves Strategy."

the FOMC would choose a preferred scenario. From that scenario, the staff would then construct week-by-week projections of required reserves and nonborrowed reserves. Then, as summarized by the staff, at the operational level:

> … the procedure can be described as one in which the Manager works with a week-by-week nonborrowed reserves target which, however, he is expected to adjust as needed by the amount of unforeseen changes in required reserves against liabilities not directly included in the Committee's target.[59]

During this period when the Maisel COD was working on its proposals to change the Directive, the FOMC was adjusting the actual Directive in a monetarist direction. The actual Directive started to give more weight to the monetary aggregates than heretofore. In particular, the Directive issued at the FOMC meeting of January 15, 1970, ended with the following operational paragraph that incorporated a monetary target (with emphasis added below):

> To implement this policy, while taking account of the forthcoming Treasury refunding, possible bank regulatory changes and the Committee's desire to see a modest **growth in money** and bank credit, System open market operations until the next meeting of the Committee shall be conducted with a view to maintaining firm conditions in the money market; provided, however, that operations shall be modified if money and bank credit appear to be deviating significantly from current projections.[60]

Regarding this Directive and discussing the operational paragraph, Maisel (1973, p. 250) stated:

> The directive ... expressed the desire "to see a modest growth in money and bank credit." This was the first time that the FOMC had specifically adopted the monetary aggregates as a target.[61]

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[59] Maisel, Morris and Swan (1972). See "Appendix A, Implementation of a Nonborrowed Reserves Strategy," p. 3. Immediately after this statement, Appendix A goes on to say: "Alternatively, and equivalently, the procedure proposed may be described as a *free reserve* target which, however, is changed as needed by the amount of unforeseen changes in required reserves against liabilities that <u>are</u> directly included in the Committee's target." (Italics added.)

[60] Federal Open Market Committee (1970), p. 110.

[61] Also see Maisel (2009), pp. 20–21. The operational paragraph of Directive of the December 16, 1969, FOMC meeting was: "To implement this policy, System open market operations until the next meeting of the Committee shall be conducted with a view to maintaining the prevailing firm conditions in the money market; provided, however, that operations shall be modified if bank credit appears to be deviating significantly from current projections or if unusual liquidity pressures should develop." See Federal Open Market Committee (1969), p. 69.

At its meetings on February 14 and 15, 1972, the FOMC had an extensive discussion of the Maisel COD's recommendations.[62] In those meetings, Chairman Burns outlined a proposal for conducting policy that he characterized as one that fell short of what the COD proposed but went further in the direction of those proposals than what some FOMC members would have preferred. That outline as given by Burns, with values suggested by him in brackets, was:[63]

1. Desired rate of growth in aggregate reserves expressed as a range rather than a point target. [Growth in reserves for private nonbank deposits of 6–10 percent.]
2. Range of toleration for fluctuations in Federal funds rate narrower than envisioned by Maisel Committee–enough to allow significant changes in reserve supply, but not so much as to disturb markets. [A range of 2¾ to 4 percent.][64]
3. Federal funds rate to be moved in an orderly way within the range of tolerance (rather than to be allowed to bounce around unchecked between the upper and lower limit of the range).
4. Significant deviations from expectations for monetary aggregates (M1, M2 and bank credit) are to be given some allowance by the Manager as he supplies reserves between meetings. [Ranges of growth rates of 7–8 percent for M1, approximately 12 percent for M2, and 8–9 percent for the bank credit proxy.]
5. If it appears the Committee's various objectives and constraints are not going to be met satisfactorily in any period between meetings, the Manager is to notify the Chairman who will then consider whether the situation calls for special Committee action to give supplementary instructions.

With these proposals, Burns moderated the recommendations of the Maisel COD by proposing some narrowing of the fluctuations for the federal funds rate (point 2) and a range of fluctuation for aggregate reserves rather than a point target (point 1).

As revealed by the first of these five points, the FOMC was shifting its operating target towards a reserve aggregate, and in particular toward reserves available to support private nonbank deposits (RPD):

> ... the Committee considered the relative merits of money market conditions and various measures of bank reserves as "operating targets" -

[62] For those recommendations, see Maisel, Morris and Swan (1972).

[63] Federal Open Market Committee (1972a), pp. 46–48. Also see Federal Open Market Committee (1972b), pp. 49–51, pp. 77–78, and Attachment C, "FOMC Guidance to Manager in Implementation of Directive."

[64] Maisel, Morris and Swan (1972) proposed a band with a width of 200 basis points, pp. 3–4.

> - that is as variables for guiding day-to-day open market operations in the effort to achieve its intermediate monetary objectives ...
>
> At this meeting the Committee decided to express its reserve objectives in terms of reserves available to support private nonbank deposits -- defined specifically as total member bank reserves less those required to support Government and interbank deposits.[65]

Even though RPD and the other specifics contained in this outline were not mentioned in the Directive for that February 15 FOMC meeting, Burns noted that the Desk was to interpret the Directive in light of them.[66]

This was effectively the end of the Maisel COD, with Governor Maisel leaving the Federal Reserve Board in the spring of 1972, but this "experiment," as it was called, in using RPD as an operating target continued.

While the FOMC preferred the RPD measure of reserves, Maisel (1973, p. 301) subsequently stated:

> I wanted the guide to be in terms of nonborrowed reserves, but others felt that total reserves, with the exceptions agreed upon, would be easier to operate. Thus the guide became "Reserves Available to Support Private Nonbank Deposits," known as RPDs.

6 Third COD; Part 1 (Holland): A Congressional Resolution

A June 8, 1973, staff analysis, based on the RPD experiment run since February 1972, found the use of RPD as an operating target to be "mixed and difficult to interpret" in terms of improving control of the monetary aggregates.[67] The analysis noted that this use of RPD could be improved if RPD was targeted more narrowly and the tolerance range for the federal funds rate was widened. The staff recommended further research on using as an operating target not only RPD but also nonborrowed reserves.

A month later, at the FOMC meeting of July 17, 1973, President Balles (president of the Federal Reserve Bank of San Francisco) noted these staff findings and

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[65] Federal Open Market Committee (1972c), pp. 5–6.

[66] "The Chairman then proposed that the Committee vote on a directive … It would be understood that in implementing that directive the Manager would be guided by the specifications agreed upon earlier under the five-point procedure, including a range of 2-3/4 to 4 per cent under point 2." Federal Open Market Committee (1972b), pp. 77–78.

[67] Axilrod, Pierce and Wendell (1973), p. 2.

recommended that a new COD be formed. This third COD was initially chaired by Governor Holland.[68] The Holland COD was to examine the formulation and implementation of the Directive and, in particularly, investigate whether the FOMC should "continue to focus on RPD's or use some other measure such as non-borrowed reserves or the monetary base."[69]

The spring of 1975 saw Congressional involvement in the longer-term conduct of monetary policy and in the role of monetary aggregates in particular. As quoted by Stephen Axilrod, the Congressional resolution on March 24, 1975, stated:

> ... the Board of Governors shall consult with Congress at semi-annual hearings ... about the Board of Governors' and the Federal Open Market Committee's objectives and plans with respect to the ranges of growth or diminution of monetary and credit aggregates in the upcoming 12 months.[70]

The FOMC discussed this resolution at its meeting of April 14, 1975. The monetary and bank credit aggregates for which the FOMC decided to report twelve-month ranges were the bank credit proxy and the monetary aggregates M1, M2, and M3. The ranges were published in the Record of Policy Actions of that FOMC meeting, with the FOMC retaining its flexibility by stating that "these ranges, as well as the particular list of aggregates for which such ranges were specified, were subject to review and modification at subsequent meetings."[71]

Reflecting on this resolution about a year after its passage, Volcker (1976, p. 252) wrote (with text in brackets added below):

> More than a year ago, however, responding to Congressional intent, the practice of each quarter announcing such targets [for monetary aggregates] a year ahead was adopted, always retaining the right to change the targets in light of emerging developments.
>
> From my viewpoint, this experiment in "practical monetarism" has proved useful.

At its regularly scheduled meeting on March 15–16, 1976, and at a special meeting on March 29, 1976, the FOMC discussed a report by the Holland COD. For the

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[68] Broida (1973). The committee consisted of Robert C. Holland, Board of Governors, chairman of the COD; John J. Balles, Federal Reserve Bank of San Francisco, president; J. Dewey Daane, Board of Governors; and Frank E. Morris, Federal Reserve Bank of Boston, president.

[69] Federal Open Market Committee (1973), p. 82.

[70] Federal Open Market Committee (1975a), p. 3. Also see U.S. Congress, House (1975).

[71] Federal Open Market Committee (1975b), p. 7. At the April 1975 FOMC meeting, the COD was asked to undertake a study of possible means of modifying the Directive to include quantified information on targets. Federal Open Market Committee (1975a), p. 39.

intermediate target, and consistent with the Congressional Resolution, the COD recommended flexibility in the pursuit of the monetary targets:

> ... it appears wise to us to continue the practice of characterizing monetary policy in terms of intermediate monetary aggregates rather than ultimate economic objectives. But we believe these monetary variables should be interpreted as intended values subject to modification based on Committee reassessment of unfolding economic performance rather than as invariant targets.[72]

In this passage, the COD was clear that it was not recommending that the targets for the monetary aggregates were to be set by a fixed rule. Rather, discretionary responses to evolving events were envisioned.

Regarding the operating target, the Holland COD recommended that the FOMC put more weight on reserves. However, its choice for the reserve target was not RPD but was nonborrowed reserves.[73]

The COD also suggested a width of the range for the federal funds rate of 2 percentage points.[74] In comparison to the range during other periods, at its earlier January 20, 1976, and February 17–18, 1976, meetings the FOMC's expected ranges for the weekly-average federal funds rate had widths of only ¾ and one percentage point, respectively.[75] And later, with the introduction of the New Operating Procedures

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[72] Committee on the Directive (1976a), pp. 4–5.

[73] Federal Open Market Committee (1976d), p. 10. The COD also examined and rejected using the federal funds rate as the operating target. In this regard, Chairman Burns saw the staff as having a monetarist bias:

> CHAIRMAN BURNS: It's the staff supporting document, and here is how it goes: "Given current incomplete evidence, it appears the federal funds rate should be rejected tentatively on the grounds that, first, the relationship between the federal funds rate and the monetary aggregates is not closer than the relationship between nonborrowed reserves or the nonborrowed source base and the monetary aggregates." Well, a purely objective statement would be, if there's nothing to choose between them, why reject a federal funds rate?
>
> MR. HOLLAND. The results are weak –
>
> CHAIRMAN BURNS: Well, you know I want to put this right on the table–there is a monetarist bias, I think, in these documents. … And I see, as I say, a definite bias, and I can read many statements in the staff report that indicate bias to me. (Federal Open Market Committee (1976d), p.14.)

[74] Committee on the Directive (1976a), pp. 11–12.

[75] Federal Open Market Committee (1976a), p. 10 and Federal Open Market Committee (1976b), p. 8.

in October 1979, the width of the range for the weekly-average federal funds rate was 4 percentage points.[76]

For the March 1976 FOMC meeting, the staff prepared a memorandum on how a nonborrowed reserve operating target might be implemented by the Desk.[77] Steps were given on how two-month ranges for M1 and M2 could be used to derive a nonborrowed reserve target for an intermeeting period. Then weekly nonborrowed reserve targets could be derived and, consistent with them, daily operations could be determined. This was the type of operating procedure later used in the New Operating Procedures.

The FOMC accepted the COD recommendation to stop using RPD as an operating target.[78] As a replacement, the FOMC began an experiment using nonborrowed reserves as the operating target.[79] At the March 15–16, 1976, meeting, Volcker, as Vice

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[76] Federal Open Market Committee (1979), p. 8.

[77] Tschinkel (1976a).

[78] As stated in the Record of Policy Actions:

> In accordance with the understanding reached at a special meeting held on March 29, 1976, the Committee did not specify an expected range for growth in reserves available to support private nonbank deposits (RPD's). At the March 29 meeting, the Committee had agreed it should consider the rates of growth in several reserve measures–including nonborrowed reserves, total reserves, and the "monetary base" (total reserves plus currency)–that were likely to be associated with growth in the monetary aggregates at the rates it specified for 2-month periods. (Federal Open Market Committee (1976e), p.15.)

[79] The nature of the experiment was explained by Holland and Burns (with text in brackets below in the original source):

> MR. HOLLAND. … my second recommendation would be that the Committee tell its staff that, in all the materials it prepares for the FOMC, it should supply the information that would enable the FOMC to actually use nonborrowed reserves and the related analytical techniques, as recommended by our subcommittee. ... I'd extend that even to the Manager's weekly and monthly reports, where he would [explain how he would] have operated if nonborrowed reserves had indeed been his primary target since the last meeting and what he thinks might have happened to money market conditions had he followed that. That is as close to a hands-on experiment as this Committee can get. (Federal Open Market Committee (1976d), p. 11.

And also (with text in brackets below in the original source):

> CHAIRMAN BURNS. … as I understand you, you are not really recommending that we adopt the nonborrowed reserves as [part of our] operating procedure immediately and use it at the Desk [but rather that we should] let the Desk carry through some simulations, some experiments, and advise us.
>
> MR. HOLLAND. I am trying to come as close to that as I can without the Committee doing it – so that the Committee can have the benefit of as close to an online experiment

Chairman of the FOMC and president of the Federal Reserve Bank of New York, expressed some "intellectual sympathy" for using nonborrowed reserves as an operating target but also had some practical reservations.[80]

7 Third COD; Part 2 (Partee): Rejecting Reserve Targets

In May of 1976, Holland resigned from the Board of Governors and was replaced by Governor Partee as the chair of the COD. The experiment with nonborrowed reserves as an operating target continued.

Later that fall, in its memo of November 10, 1976, the COD recommended changes that updated the Directive to reflect the Committee's current conduct of policy.[81] Longer-run four-quarter numerical target ranges for growth in the monetary aggregates, as per the Congressional Resolution of March 1975, were to be reported in the penultimate paragraph of the Directive. The short-run operating instructions in the last paragraph of the Directive were to include numerical target ranges for short-run growth rates of the monetary aggregates that were consistent with the longer-run ranges.

Then, in a December 15, 1976, memorandum, the COD rescinded its proposal to use a reserve measure as the short-term operating target:

> On balance, the subcommittee would recommend against including a reserve objective in the short-run operating specifications given to the Manager. Evidence from the experiment of the past six months does not suggest that nonborrowed reserves–or any other reserve aggregate–would improve the Committee's ability to achieve short-run objectives for the monetary aggregates. Thus, there appears to be no advantage to including a reserve measure as a short-run operating guide (in addition to the funds rate) in instructions to the Manager covering the interval between FOMC meetings.[82]

At the FOMC meeting of December 21–22, 1976, Partee stressed that the COD was rejecting nonborrowed reserves and other reserve aggregates as operating targets

as possible without committing itself until it feels comfortable doing so. (Federal Open Market Committee (1976d), p. 12.

[80] Federal Open Market Committee (1976c), p.15. Also see Federal Open Market Committee Meeting (1976d), p. 28.

[81] Committee on the Directive (1976b).

[82] Committee on the Directive (1976c), pp. 6–7.

because the two-month period for achieving the operating target was too short (with text in brackets added below):

> The first [recommendation] is … that there isn't anything much to be gained in adopting nonborrowed reserves as a target for the Desk so long as we continue to have a two-month short-run horizon …
>
> So that it would be a longer-term emphasis on the provision of bank reserves at an adequate and not excessive rate rather than a short-term attention given to that factor. That's our second recommendation.
>
> Our third [recommendation] is that, since the short-range experimental attempt has not shown great success, that the Committee ought to now tell the staff to discontinue the short-range experiment … and, indeed, that the subcommittee should now look at other problems rather than the short range control question having to do with nonborrowed or any other aggregates reserve measures.[83]

Similarly, Axilrod stressed that the rejection of nonborrowed reserves as an operating target was related to their usefulness (or lack thereof) in the short run:

> So, essentially this is an experiment which says that in each four-week period you can't do much better than you did with the federal funds rate but says very little about what would have happened over a sustained six-month period if you stuck rigorously to a fixed rate of growth in a nonborrowed reserve target.[84]

Volcker shared this reservation about short-run control, writing in 1978:

> ... the evidence seems to show that month-to-month control of the aggregates would be no more accurate with the reserve targets (relying on projections of the money multiplier) than with the 'money market' approach currently in use. Because the FOMC meets monthly to readjust its sights, it is the *monthly* time horizon that is relevant for such comparisons. Thus, I see no purely technical reasons for expecting monetary control to be easier with a reserve target."[85]

Although the COD recommended against the use and further study of a reserve-based operating target, it did recommend studying several other issues, which were:

1. how short-run objectives for the monetary aggregates might better be related to longer-run growth ranges adopted by the FOMC;

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[83] Federal Open Market Committee (1976f), pp. 26–27.

[84] Federal Open Market Committee Meeting (1976f), p. 25.

[85] Volcker (1978), p. 336.

2. how excessive dependence of the market on the funds rate and hence on weekly movements in the aggregates believed to foreshadow movements in the funds rate might be reduced;
3. how week-to-week variations in the money supply figures and their projections might most appropriately be reflected in Desk operations;
4. issues involved in establishing a base for and up-dating longer-run ranges for the aggregates, including such questions as base drift and the role of levels of the aggregates as compared with growth rates; and
5. exploration of possible changes in concepts of money, and how these should be taken into account in the FOMC's selection of both short-run and longer-run monetary guides.[86]

Chairman Burns agreed with the recommendation that the COD move on from studying reserve targets and move onto considering the first four of these issues, although he felt that the fifth issue need not be studied by the COD because it was currently being examined by System staff and outside researchers.[87]

8 Fourth COD (Partee): Moving on From Reserve Targets

At the December 20–21, 1976, FOMC meeting, Burns discussed appointing a new COD. He thought that the current membership had been in place long enough and there was a need for different people to get involved.[88] On February 2, 1977, Burns announced a new COD with Governor Partee continuing as chairman.[89]

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[86] Committee on the Directive (1976c), pp. 8–9.

[87] Federal Open Market Committee (1976f), p. 32. While supporting these studies, Chairman Burns expressed some skepticism regarding the stability of the monetary aggregates, stating (with text in brackets added below):

> You know, we use terms such as "control the money supply," and that is becoming an increasingly ambiguous statement. We live in a world in which financial technology has been exploding and [in] which former relations between narrowly defined money and the dollar value of the nation's output no longer seem to hold, and we'll continue to live in such a world. And I think that monetary policy has to be judged increasingly by the results we get rather than on whether we are hitting a certain target figure that we have set for ourselves. (Federal Open Market Committee (1976f), p. 31.)

[88] Federal Open Market Committee (1976f), p. 32.

[89] Broida (1977). The other members were Stephen S. Gardner, Board of Governors; David P. Eastburn, Federal Reserve Bank of Philadelphia, president; and Paul A. Volcker, Federal Reserve Bank of New York, president.

In a February 7, 1977, memorandum, Partee (along with Bank presidents Balles and Morris and Governor Wallich) recommended detailed language for the implementation of the proposal made by the COD in its November 10, 1976, memo.[90] Reflecting these suggestions; the Directive of the February 15, 1977, FOMC meeting gave numerical longer-run and shorter-run targets for growth of the monetary aggregates and stipulated an anticipated level of, and a tolerance range for, the federal funds rate as the operating target:

> In light of the foregoing developments, it is the policy of the Federal Open Market Committee to foster bank reserve and other financial conditions that will encourage continued economic expansion, while resisting inflationary pressures and contributing to a sustainable pattern of international transactions.
>
> At its meeting on January 18, 1977, the Committee agreed that growth of M-1, M-2, and M-3 within ranges of 4-1/2 to 6-1/2 per cent, 7 to 10 per cent, and 8-1/2 to 11-1/2 per cent, respectively, from the fourth quarter of 1976 to the fourth quarter of 1977 appears to be consistent with these objectives. These ranges are subject to reconsideration at any time as conditions warrant.
>
> The Committee seeks to encourage near-term rates of growth in M-1 and M-2 on a path believed to be reasonably consistent with the longer-run ranges for monetary aggregates cited in the preceding paragraph. Specifically, at present, it expects the annual growth rates over the February–March period to be within the ranges of 3 to 7 per cent for M-1 and 6-1/2 to 10-1/2 per cent for M-2. In the judgment of the Committee such growth rates are likely to be associated with a weekly average Federal funds rate of about 4-5/8 to 4-3/4 percent. If, giving approximately equal weight to M-1 and M-2, it appears that growth rates over the 2-month period will deviate significantly from the midpoints of the indicated ranges, the operational objective for the Federal funds rate shall be modified in an orderly fashion within a range of 4-1/4 to 5 per cent.
>
> If it appears during the period before the next meeting that the operating constraints specified above are proving to be significantly inconsistent, the Manager is promptly to notify the Chairman who will then decide whether the situation calls for supplementary instructions from the Committee.[91]

The last three paragraphs above replaced the following single paragraph in the Directive from the FOMC meeting of January 17–18, 1977:

[90] Partee (1977).

[91] Federal Open Market Committee (1977b), pp. 20–21.

> To implement this policy, while taking account of developments in domestic and international financial markets, the Committee seeks to achieve bank reserve and money market conditions consistent with moderate growth in monetary aggregates over the period ahead.[92]

The new format of the Directive of February 15, 1977, was similar to that of the forthcoming Directive of September 18, 1979, which was from the FOMC meeting just before the New Operating Procedures were adopted. Both Directives specified annual target ranges for the monetary aggregates, stipulated shorter-run two-month target ranges for the monetary aggregates that were to be consistent with the longer-term ranges, set short-term operating targets for the federal funds rate and set ranges for the federal funds rate of only ½ or ¾ percentage points in width. But, within three weeks after the FOMC meeting on September 18, 1979, the New Operating Procedures were introduced.

9 The New Operating Procedures

On October 6, 1979, Chairman Volcker announced the New Operating Procedures and, in his press conference that day, stated the objective as getting greater control over the supply of reserves and the monetary aggregates:

> The Federal Reserve for some years has ordered a good deal of its emphasis in actual day-to-day operations to maintaining a high degree of stability in the Federal Funds rate which we most directly influence. That rate, of course, has been influenced in one direction, but generally by small increments in order to effect the growth in the money supply. Now what is implied here is a somewhat difference [sic] approach where the primary emphasis is put on the supply of reserves which ultimately controls the money supply.[93]

The Directive issued at the October 6th meeting used "reserve aggregates" as the operating target for achieving the shorter-term and longer-term targets for monetary growth:

> In the short run, the Committee seeks to restrain expansion of reserve aggregates to a pace consistent with deceleration in growth of M-1, M-2, and M-3 in the fourth quarter of 1979 to rates that would hold growth of

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[92] Federal Open Market Committee (1977a), p. 25.

[93] See Board of Governors of the Federal Reserve (1979), pp. 2-3. Also see the Federal Open Market Committee (1979) for the Record of Policy Actions for that meeting, which state: "The principal reason advanced for shifting to an operating procedure aimed at controlling the supply of bank reserves more directly was that it would provide greater assurance that the Committee's objectives for monetary growth could be achieved." See p. 4.

> these monetary aggregates over the whole period from the fourth quarter of 1978 to the fourth quarter of 1979 within the Committee's longer-run ranges, provided that in the period before the next regular meeting the weekly average federal funds rate remains within a range of 11-1/2 to 15-1/2 percent. The Committee will consider the need for supplementary instructions if it appears that operations to restrain expansion of reserve aggregates would maintain the federal funds rate near the upper limit of its range.[94]

While the operating target in the October 6, 1979, Directive is stated in general terms as "reserve aggregates," the background memo for that FOMC meeting by Axilrod and Sternlight made clear that the day-to-day operating target would be nonborrowed reserves—but with an intermeeting-period focus on controlling total reserves and the monetary base:

> The Desk's objective under the approach envisioned here would be to operate on a "family" of monetary base and reserve targets. In the sense of an immediate objective of day-to-day Desk action the focus would be on nonborrowed reserves, but over the course of an intermeeting period there would also be an effort to reach, or move toward, the paths for total monetary base and total reserves, making needed interim adjustments in the short-run nonborrowed reserve objective.
>
> The starting point for open market operations would be the average level of reserve aggregates to be attained over the intermeeting period, together with estimates of weekly path levels for these aggregates consistent with the intermeeting average (all seasonally adjusted).
>
> … the path levels for NBR are derived by starting with the total monetary base path consistent with desired performance of the aggregates, subtracting currency outstanding, and then subtracting an assumed level of borrowings.[95]

To increase the likelihood of achieving its nonborrowed reserve target, the New Operating Procedures incorporated a much wider target range for the federal funds rate—increasing the width from 1/2 percentage point in the September 1979 Directive to four percentage points in the New Operating Procedures.

These new operating procedures were similar to those recommended by the earlier CODs that had advocated a nonborrowed reserve operating target in that both

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[94] Federal Open Market Committee (1979), p. 8. For subsequent changes to the Directive see Lindsey (2003); Section II, October 1979 to September 1982: Controlling M1 and Operating on Nonborrowed Reserves, pp. 39–65.

[95] Axilrod and Sternlight (1979), p.10.

frameworks worked back from a desired path for the monetary aggregates, through a total reserves target, and ultimately to an operating target directed towards nonborrowed reserves.[96] But the FOMC, with agreement of the COD, had rejected those earlier recommendations that had such a strong focus on total and nonborrowed reserves.

10 Conclusion

Although the New Operating Procedures were implemented only two months after Volcker became Chairman of the Federal Reserve, the COD had paved the way by working on and recommending an operating target based on nonborrowed reserves and intermediate targets expressed in terms of monetary targets. Those recommendations had previously been given to the FOMC, but the recommendation to target nonborrowed reserves was subsequently rescinded by the COD with the approval of the FOMC. It was the Volcker Fed that implemented that recommendation. The Volcker Fed did so despite the risks associated with potential problems in short-run control that earlier FOMCs, and Volcker himself, had seen as problematic.

Under the New Operating Procedures, interest rates were given more flexibility in a pursuit of attaining nonborrowed reserve and monetary targets—helping to add "discipline" to the attainment of the monetary targets:

> I keep coming back to the NY Fed speeches, in which I gave a rationale for spending more time on the monetary aggregates. It reached the point where we wanted to discipline ourselves. It was easier to nail our flag to the mast of the monetary aggregates than to continually fiddle around directly with interest rates, where you always had the danger of being too late. From the transcript, it's clear why people were hesitant about raising interest rates directly. We needed some other tool to discipline ourselves. It was also a better message to the public. (Volcker (2008), p. 85.)[97]

Furthermore, the New Operating Procedures were implemented in a way to help enhance the Fed's credibility to lower inflation. At that time, a surge in money growth was threatening to place the monetary aggregates above their existing 1978:Q4 to 1979:Q4 target ranges.[98] Rather than accepting an overshoot of these targets, the Volcker Fed targeted a path for nonborrowed reserves directed toward restraining money growth over the remainder of the year so as to meet the Q4/Q4 monetary targets.

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[96] Axilrod, Davis, Pierce and Sternlight (1971); Maisel, Morris and Swan (1972), p. 3 and see "Appendix A, Implementation of a Nonborrowed Reserves Strategy;" Tschinkel (1976a); and Tschinkel (1976b).

[97] For three of those NY Fed speeches, see Volcker (1976), Volcker (1977) and Volcker (1978).

[98] See Federal Open Market Committee (1979) pp. 3–4 and Axilrod and Sternlight (1979).

It was restrained money growth, along with high interest rates, that ultimately tamed inflation.[99]

[99] For Chairman Volcker's views on the New Operating Procedures, see Volcker (2008), pp. 84–87. Also see Lindsey, David E., Athanasios Orphanides, and Robert H. Rasche (2005).

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Note: The three entries for the "Committee on the Directive" actually have the "Subcommittee on the Directive" as the author. But in keeping with footnote three of the text, these entries are listed as authored by the "Committee on the Directive."

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[100] For historical FOMC documents and staff memorandums to the FOMC, see the following on the Federal Reserve Board's public website: https://www.federalreserve.gov/monetarypolicy/fomc_historical.htm.

[101] For an overview of types of reports from FOMC meetings, see Danker and Luecke (2005).

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