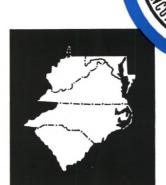
FEDERAL RESERVE BANK OF RICHMOND

MONTHLY REVIEW

Perspective On Monetary Policy
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For 1970
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Perspective On Monetary Policy

Remarks by J. DEWEY DAANE

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Before the Monetary Policy Seminar of the Federal Reserve Bank of Richmond
Richmond, Virginia, February 22, 1970

When I was first invited to take on this assignment, I was asked to "just tell them what monetary policy is all about." More than 30 years ago, when I worked at the Federal Reserve Bank of Richmond, I could have done this with rather more self-assurance than I feel tonight.

In taking a "tell it like it is" approach, I am reminded of one of former Chairman Martin's stories about himself. It seems that when he was at the New York Stock Exchange back in the 1940's he exercised regularly at a well-known nearby gymnasium run by a man named "Gunboat" Smith. One day "Gunboat" was bemoaning the fact that one of his preliminary fighters in a charity fight that evening at Madison Square Garden had had to drop out and he asked Mr. Martin if he would substitute. The Chairman thought about it awhile and, as he puts it, decided that "after all, life was just a series of experiences." So he accepted the engagement. It seems, however, that word got around the street and that night a crowd from the Exchange showed up at the fight. Mr. Martin relates that he managed to get through three rounds, although when he looked over at the other man and saw him glowering all he could do was smile back because he wasn't mad at anyone! At any rate, at the end of the fight the referee lifted Mr. Martin's arm too, called it a draw, and the men from the Exchange climbed into the ring and carried our former chairman off on their shoulders.

This story typifies not only Mr. Martin's attitude toward life but illustrates why he was so well suited to manage monetary policy. His ability to treat each experience as it came along stood him in good stead. For if I am to "tell it like it is," I would have to

say that monetary policy is a series of individual experiences that often bear little resemblance to each other or to the textbook descriptions. This does not mean that monetary policy is simply pragmatic but rather that each of the experiences in the monetary area represents something different in terms of problems and policies. For example, right now we are confronted with a slowing economy, an illiquid banking system, strong capital demands and business spending, continued inflationary expectations and upward cost-price pressures. And all these developments are taking place against the background of an Administration dedicated to braking inflation without a recession. Small wonder so many people would like to substitute a fixed rule for discretionary action with respect to monetary policy.

Fact and Fancy in the Policy Process

And just how far we sometimes are from the textbook descriptions is easily illustrated. In Chandler's excellent Money and Banking text-and the same is true of the present edition of our own Federal Reserve Purposes and Functions—there is no mention. in the discussion of the instruments of credit policy, of the Regulation Q ceilings on interest rates which were an integral—some think too much so—part of the Federal Reserve restraint policies of 1968-69. Even the rather pleasant picture of considered coordination, in some stuffy sanctum, of the use of monetary policy instruments as described in the textbooks sometimes may be somewhat at variance with the real world. Take the case of the decrease in the discount rate in August 1968. When I was at the Federal Reserve Bank of Richmond, I lectured very learnedly, or so I thought, to similar seminars year after year about the discount rate as a tool of monetary policy. But this 1968 decrease in the discount rate, first proposed by the Directors of the Federal Reserve of Minneapolis, is illustrative of the mixture of fact and fancy that we often encounter regarding the instruments of credit policy.

Looking back, in July of 1968 questions were being raised within System counsels whether, in light of the passage of the tax surcharge, monetary policy should not flex with the change in fiscal policy and become somewhat easier. The staffs at the Board and the Reserve Banks—like economists generally—were talking about impending recession and some perhaps even used the term "overkill." Members of the Board also were talking about the desirability of flexing, and some were expressing a sympathetic view toward a reduction in the discount rate of as much as one-half per cent.

The meeting of the Board of Directors of the Federal Reserve Bank of Minneapolis took place in Rapid City, South Dakota on August 15, 1968. Once a year the Minneapolis Directors meet outside of Minneapolis as part of their attempt to familiarize themselves with the entire Ninth District. I was an invited guest at this particular meeting. At breakfast that morning in the hotel we were made honorary citizens of Rapid City by the Mayor, who then rushed off to lead the Annual Rodeo parade which passed just outside the windows of the same hotel room where the Board of Directors was meeting. Against the background of bands playing, and with the feeling of being almost part of the parade, the arguments pro and con as to a discount rate change were presented. The principal argument for a change of one-half per cent, presented by President Galusha, was the prospective impact of the surcharge and the general outlook for fiscal restraint. principal argument against this change was the lack of tangible evidence of a slowdown and some skepticism as to the actual achievement of fiscal restraint. After debate—interrupted at one point by the discovery that a newspaperman had strayed into our midst to take a picture—the Directors compromised on a one-quarter per cent change and forwarded this action to the Board in Washington for approval.

The "Politicization" of Monetary Policy

Obviously this was a highly unusual meeting but the story illustrates two points about the nature of monetary policy. First, it illustrates the sort of differing experience in real life that frequently confronts monetary policy, not only in terms of economic considerations but also with respect to the institutional setting for decision-making. Second, it also illustrates what I would call the "politicization of monetary policy"-a process that I have witnessed at firsthand over the last three decades. By "politicization" I mean in the broader sense of involvement in the crucial issues of the day-just as you and your fellow faculty colleagues have undergone "politicization"—as well as in the narrower sense of necessarily meshing with governmental policy generally. I could further illustrate this with another experience, namely, the change in the discount rate in December 1965. I do not need to elaborate on that episode, which involved eventual confrontation with the President, because the FOMC minutes covering that period have been released and are part of the public record. Again, acting in part out of a skepticism as to the adequacy, present and prospective, of fiscal restraint—a skepticism that in retrospect proved all too well founded-monetary policy began to move toward restraint, culminating in the so-called crunch in financial markets in August 1966. But, as the record shows, that first move was deliberately delayed in an attempt at coordination within the prevailing political milieu.

Thus, as I view the role of monetary policy it has been called upon, in an increasingly political environment, to bear much too much of the burden of stabilization policies generally—a burden that has led to inequities in impact on sections and sectors of the economy, such as the housing industry. This does not absolve us in the Federal Reserve of our responsibility to do what we can in the interest of sustainable economic growth but underscores the need to do so with a recognition of the limitations on our own role. One of the principal gaps that I encounter in descriptions of monetary policy is the inadequate recognition of its practical relationship to fiscal policy. The role of monetary policy must be viewed in the context of the appropriate mix of monetary and fiscal policy and all too often this has not been done, either by academicians or practicioners. We need to rely less on monetary policy and to find ways to innovate in the use of fiscal policy.

Again, as I view the role of monetary policy, too often we have ignored, or insufficiently examined, the role of interest rate ceilings in policy and both the short- and long-run implications of using ceilings as the cutting edge of monetary policy. The story of monetary policy in 1969 is a story of the how and why of interest rate ceilings and of bank efforts to find other sources of funds to substitute for the massive disintermediation which, combined with the strength of credit demands, brought their liquidity positions to record lows. Time and again in meet-

ings in Europe of central bank governors of leading Western European countries I was taken to task for the effects our Regulation Q ceilings were having on supplies and rates of Eurodollars—at the same time they were praising our general restraint policy without recognizing fully that the rate ceilings were serving to make effective that restraint.

The Monetary Aggregates as Policy Guides

A related area in any overview of monetary policy and its role is the role of monetary aggregates. As is evident in the public record of monetary policy actions, increased attention has been given in formulating monetary policy to variations in the monetary aggregates. Just as we are all Keynesians in the sense of using Keynes' analytical apparatus apart from his policy applications so, too, I suppose we are all more or less Friedmanesque in looking at the monetary aggregates while rejecting his single-sided applications.

When I was at the Richmond Federal Reserve Bank Eddie Wayne¹ sometimes accused me—unjustly of course—of using the phrase "as has been so well stated before" to refer back to a memorandum or speech of my own. But not to disappoint those who took him seriously, I will refer you back to a talk which I made at Dartmouth last October dealing with the monetarists' position. In brief, my own position—which you will be surprised to learn has not changed since last October—is that I do not accept the Friedman thesis that money (or monetary policy) alone matters and that we can prevent undesirable fluctuations in GNP simply by keeping the money supply—however defined—growing at a relatively stable rate. I concede-and in fact our own FRB-MIT model and related studies showthat monetary policy, despite significant lags in effects, does appear to be an important, effective component of our economic stabilization programs. But I see no reason to swallow whole the simple causal relationship posited by the Friedmanites. think it is important, even vital, to know how the conversion of money into demands takes place and with what sectoral effects-rather than to ignore the conversion process.

More important, I see no reason—and our FRB-MIT model clearly supports this view—to dismiss fiscal policy as an important tool of stabilization policy. The monetarists' dismissal of fiscal policy is, I think, not justified. In fact, as I have indicated tonight, my own approach would be the contrary—namely to innovate *more* with fiscal policy and

¹EDITOR'S NOTE: Edward A. Wayne was President of the Federal Reserve Bank of Richmond from March 1961 to April 1968.

rely *less* on monetary policy. As to the kinds of innovations I have in mind, without being too specific, I think they fall in two categories: one, standby powers granted to the President to make temporary changes; two, some easier, and possibly more automatic, Congressional procedures to make tax changes in response to Administration requests related to cyclical developments.

And from my own point of view as a policymaker, I do not think we can simply rise above definitional problems in trying to use money supply as a target of monetary policy. Not only do the monetarists have to make up their minds as to which money supply variable should guide us: M₁, the money supply narrowly defined as currency and bank deposits; M₂ adding time deposits; or with other adjustments such as taking account of large denomination CD's. Policymakers also need to know what variable they are talking about even in giving greater, without exclusive, emphasis to the monetary aggregates. The Council of Economic Advisers in their recent annual economic report make a plea for monetary policy to concentrate more on the steadiness of the main monetary aggregates such as the supply of money, of money plus time deposits, and of total bank credit. Then they add: "This still leaves questions of policy to be resolved when these aggregates are tending to move in different directions, or at different rates of change, as they often do." When I came across this caveat, I immediately thought of a meeting of the FOMC—not too long ago—in which the Manager of the System Open Market Account, trying to respond to some members' admonitions to watch the monetary aggregates more closely, pointed out that one measure was rising rapidly, the other declining. He asked, "How do I weigh them?" And quick as a flash the answer came back, "Equally!"

People, Events, and the Policy Process

Finally, and perhaps reflecting the bias of my own long career in the System, I find it difficult to put monetary policy in perspective without reference to people and events. For certainly monetary policy has over the years also reflected leadership within the System as well as the circumstances surrounding it. In the formative years of the System, through the 1920's, it was Benjamin Strong who left his imprint on the System and its policies. In the period of monetary reconstruction following World War I, he was mainly responsible for the System coming of age and assuming its rightful place in the panoply of central banks around the world. Then, during the recession years of the 1930's, and throughout the war and postwar years of the 1940's, Marriner

Eccles did much to change both the locus of power within the System and the kinds of monetary policies adopted by the System. And, for my part, without any reflection on such stalwarts as Allan Sproul, Karl Bopp, or my Richmond associates, I would characterize the 1950's and 1960's as the "Martin Era" both in terms of the institutional and monetary policy facets of the System.

Taking first an inward look at the institutional aspects, what hath the Martin Era wrought? As I have seen it over the years—and my own service with the Fed precedes that of our former Chairman by more than a decade—several things stand out. First, I do not think it is simply trite or a cliche to say that Chairman Martin in a very real way made the word "System" in Federal Reserve System a meaningful one. I have observed his contribution in this respect at firsthand, a contribution not only in terms of the role of the Presidents and Directors of the Federal Reserve Banks, but also with regard to the character and meetings of the Federal Open Market Committee. I well remember driving back from an FOMC meeting to Richmond one day with then President Hugh Leach2—a man not given to excessive words-who spoke at some length about the differences that Chairman Martin had brought about in making it possible for the Federal Reserve Presidents to contribute in the formulation of policy. Among other things, he said that it was a great contrast from prior times, when their views had remained largely unexpressed, to the present practice where each President freely and regularly presents his own views. In the earlier days the Federal Open Market Committee met only four times a year while in between there were bi-weekly meetings of an Executive Committee. I attended those meetings, too, with Hugh Leach because at that time the state of transportation dictated that the two Reserve Bank Presidents, joining the Chairman of the Federal Reserve Board and two other Governors in making up the Executive Committee, come from New York and Richmond. Be that as it may, Chairman Martin brought about the present practice of regular meetings of the Federal Open Market Committee every three or four weeks with all the Presidents attending and presenting their views. (Unless a vote is taken I never can remember which Presidents are on or off the statutory Committee.)

Recently, a newspaperman asked me whether this change was good or bad. My answer was that it is a good thing and has served to strengthen the System. Specifically, for example—and as this group

knows from my remarks I am no monetarist—at each of the meetings now Darryl Francis, President of the Federal Reserve Bank of St. Louis, gives a full presentation of a monetarist's position on current policy and, while he has few if any adherents, I think it is a healthy thing to have other views such as his expressed. For I do not think all wisdom resides in the Board. On this same score, the Reserve Bank Presidents, who are closest to major industries or segments of the economy, can bring to bear an intelligence system—sort of an early warning radar system-of impending developments that relate to policy. In the same way, I think Chairman Martin revitalized the Reserve Banks' Directorships and by his efforts—and he frequently indicated to us that he spent more than a third of his time on the composition of the Reserve Banks' Boards of Directors and particularly their Board Chairmenbrought forward men who could make a contribution to the effective functioning of the Federal Reserve as a System.

The Board of Governors in the Martin Era

Second, on the institutional side, over and above the System's external relationships, Chairman Martin made a real contribution to the Board's internal arrangements, making it more of a working whole with respect to both the staff and the members of the Board. At the time Chairman Martin came in, the staff was clearly dominated by one or two and while I have always had every respect for their intellects, which is why they dominated, we now have in my judgment a much better balanced arrangement with the staff forming a more cohesive force in assisting the entire Board. Similarly, with respect to the Board itself, by contrast with the pre-Martin days when Board members carved up little bailiwicks of their own, we had under Martin daily Board meetings and all decisions have been basically the business of every Board member.

Third, on the institutional side of things, Chairman Martin was zealous to preserve the System's independence, but independence in the proper sense of the term, namely within, not from, the Government. His efforts in bringing about the Treasury-Federal Reserve Accord obviously come to mind. But as all of you know, the popular notion in the press that the Board sits in splendid isolation from the rest of Government simply is not true. In serving five Presidents, Chairman Martin reflected a constant awareness of the political realities and of the System's image. At firsthand, I observed his influence on at least two of those Presidents, an influence that was earned by his judgment and in-

²EDITOR'S NOTE: Hugh Leach was President of the Federal Reserve Bank of Richmond from March 1936 to March 1961.

tegrity. But while he advised and counseled with the Presidents and Secretaries of the Treasury, he never allowed the System to become simply another part of the Executive Branch of Government, either by personally attending Cabinet meetings or otherwise committing the Board in his consultations.

Turning to the monetary policy aspects of the Martin Era, my own judgment as to the record is that it has been a remarkable one, particularly in terms of the timing and direction of monetary policy. As far as Chairman Martin's role is concerned, I think this reflected both the extraordinary sources of information which he enjoyed at all levels here and abroad plus his own exceptional intuition and judgment. He has a great sense of humor and an inquiring mind and always asked questions of his contacts wherever they might be. I am reminded here of the recent experience he had on coming out of his apartment on 5th Avenue in New York to find a crowd of marchers moving down the street in the same direction he was going and carrying placards labeled "Ho Chi Minh" and shouting "Ho Chi Minh." The Chairman fell in step with one of the participants and asked, "Are you for him or against him?" Receiving no response he continued walking with the group until he reached his destination.

Again, recently one of the journalists with a national weekly magazine asked me: "In view of your judgment about the success of Martin's policies how do you defend against the charge of errors, including the error in 1968?" My answer is that of course there were errors—which Chairman Martin too has cheerfully conceded—but, as I have already indicated, I believe they reflected for the most part the inadequacies of fiscal policy and overreliance on monetary policy. We have simply tried to do too much with monetary policy.

As to 1968, specifically, I think that Chairman Martin's, and the System's, errors on the side of ease reflected two things: first, an overestimate by our own staff—along with economists everywhere else in Washington or wherever—of the immediacy and extent of the impact of the surcharge and, second, Chairman Martin's own feeling that having been in the forefront of the battle to get the surcharge in place (and I credit his efforts along with Secretary Fowler's dogged determination with winning that battle) the System would be in a better posture, its image would be better, if it evidenced some flexibility and meshed with fiscal policy. Again this illustrates the "politicization" I referred to earlier.

But the chief characteristic of the Martin Era from the policy standpoint was that the policy process was not a one-man operation. His leadership reflected his personality and integrity. He constantly led by indirection, subtly and in a low key way, never pressing his own views. And I would be remiss if, in this connection, I failed to mention that he was a superb Chairman, qua Chairman; and this brought a continuity and coherence to policy decisions. His technique in chairing was really remarkable—for example, at the conclusion of a meeting of the FOMC in which everyone had been all over the lot, Chairman Martin would simply smile and say, "Well, Gentlemen, this is an easy meeting —we are all really not very far apart" and so on. And suddenly one found a unanimous or nearunanimous decision had emerged.

The Economy at the End of the Martin Era

As to where we find ourselves domestically at the end of the Martin Era, I know Chairman Martin was not happy with his legacy. At the farewell dinner which the President had in his honor at the White House a few weeks ago, Chairman Martin spoke with considerable feeling as to how he wished he could leave saying that inflation was under control but in his view it was not—we still had too much of it around us and in expectations.

The immediate Martin legacy on the international side of things is a much brighter picture, at least with respect to the international monetary system. Here Chairman Martin's efforts over the years led to the developments culminating in 1969—developments which were brought to fruition this past year due in no small part to Undersecretary of the Treasury Volcker's negotiating skill. First of all, I regard it as significant progress for the international monetary system that we now have in being, and in prospect, substantial amounts of Special Drawing Rights that should enable a better functioning of the adjustment process and serve generally to strengthen the system. Here Chairman Martin's wise counsel was always available to Secretary Fowler—he was at the Secretary's right hand in the meetings of the Group of Ten Finance Ministers and Central Bank Governors-in London, in Stockholm, in Rio and elsewhere, and supported the Treasury's efforts throughout.

Second, I give Chairman Martin much credit for the establishment of the two-tier gold system which has demonstrated its durability, despite its critics who looked for an early demise, and which has now been reinforced and generalized by the agreement with regard to South African gold production. The Chairman called and chaired the meeting in Washington in March 1968 and without his skill in chairing that group I am not sure we would have seen the emergence of the two-tier system.

Last, but not least, we have had a significant realignment of exchange rates, again serving to strengthen the functioning of the international payments system. Here, too, Chairman Martin was in the forefront of the efforts to bring about the much needed realignment, especially in the case of the West German mark. I am not entirely sure how to evaluate his contribution because at the famous Bonn Conference in November 1968 when the central bankers were asked out of the meeting we ended up playing ping-pong at two in the morning! But his friendship and close contact with President Blessing of the Bundesbank surely did not impede the final resolution to revalue.

As I conclude these comments about Chairman Martin's leadership, I will only add that I do not know what Bill Martin will be doing now that he has left the System, although he has mentioned going on a couple of Boards of Directors. But I am reminded of the story about one of his experiences when he was first in the service, in training during World War II. As you know he left his job as head of the New York Stock Exchange and enlisted as a private. The other trainees were not quite sure how to treat him; some may have resented him. But, as I understand it, one day when he was slated for K.P. duty he took over for another trainee who was ill, and yet another who had cut his hand, and ended up with about eighteen hours straight of K.P. duty. The next day one of the trainees asked him to hitchhike into Columbia with him and Bill agreed. As they stood there thumbing a ride the other trainee turned to Bill Martin and said, "You know, you're not such a bad fellow after all. When you get out of the service I don't think you'll really have any trouble getting a job at Bickfords."

The Current Economic and Financial Milieu

I have dwelled at some length on the personal side of the System monetary policy equation. But the other side—the circumstances surrounding monetary policy—also cannot be omitted if one is to obtain a practical perspective on the role of monetary policy. And here, perhaps, the current setting well illustrates the problems and perplexities that confront monetary policy and monetary policymakers as we enter a period of new leadership under Chairman Burns.

As we look at the financial picture at the moment, we see financial markets still under pressure as evidenced by relatively high interest rates and by a general squeeze on liquidity positions of key financial institutions, particularly bank and nonbank

thrift institutions. Despite some slight drop in market yields, rates payable under Regulation Q limits on time and savings deposits at banks are still relatively unattractive to savers. The recent action by the Board raising the Regulation Q ceilings may help to stem the recent heavy shifting out of large negotiable certificates of deposit. However, with their liquidity squeezed, with deposit outflows sizable, and nondeposit sources limited, bank lending terms and conditions are still relatively stringent. These tight credit conditions have been accompanied in the latter part of 1969 and early 1970 by a decline in stock prices. And thus far in 1970, liquidity positions have remained under pressure although interest rates have declined somewhat, particularly in the Treasury bill area.

The credit tightness which I have described, in combination with some degree of fiscal restraint, resulted in little economic growth in the fourth quarter of 1969 and prospects for little growth in the period immediately ahead. Virtually every large sector of demand has shown declining strength. Almost everywhere one looks, whether toward industrial production, or retail sales-particularly new car sales-or outlays by state and local governments, or residential construction, or defense spending by the Federal Government, the picture is one of an economy that is slowing down. With respect to monetary policy, the impact has been most marked in reduced residential construction activity and curtailment of state and local government spending. But there has also been weakness in consumer markets, especially in durables, which is clearly a significant factor in the slower growth of demand and activity. Perhaps the only exception to this evidence of slowing has been business fixed investment, which has continued on an expansive path despite the tight financial

Although economic activity has slackened and the labor market appears less taut, prices have continued to increase at a rapid rate. Over the last three months of the year, wholesale and consumer prices rose at annual rates of about 5 and 6 per cent, respectively. While current weaker demand may moderate price increases somewhat over coming months, cost pressures—particularly in view of collective bargaining ahead—seem likely to persist. On the international front, while the international monetary system seems stronger, little progress has been made toward a sustainable equilibrium in our balance of payments.

The Current Policy Problem

The tendencies in the economy evident in late 1969 and early 1970, therefore, suggest two principal

problems facing public policy, including monetary policy, over the balance of the year. First, aggregate demands for goods and services appear to be abating, and output is declining; thus, one problem is to avert a cumulative decline in demands and output that would assume the characteristics of a significant recession. Second, price increases have been continuing at an unsatisfactory rate. Thus another problem is to bring the rate of price increase within acceptable bounds so as to avoid distortions in the domestic economy and a consequent inequitable reduction in the real incomes of those whose money incomes adjust only sluggishly, if at all, to price increases.

Under the circumstances, an effective strategy for monetary policy involves the delicate task of attempting to keep the economic readjustment now in process from cumulating while at the same time ensuring that reasonable price stability is restored so as to lay the basis for sustainable long-term growth. Such a desirable outcome may not be completely within the control of monetary, or other public, policies during the current year. A certain amount of momentum has been built into economic developments as a result of past public policies and of business and labor wage-price policies. Moreover, the reactions of consumers and businessmen are not completely predictable. To a degree their behavior is independent of monetary policy, depending on such developments as the appeal of new products or technological innovations. But also to the degree that their actions do depend on money and credit conditions, their response to monetary policy can and has varied from period to period, depending on such elements as profit prospects and inflationary expectations.

While 1970 is filled with uncertainties, it is possible that it may prove to be a watershed year in the

fight against inflation. This will depend in part on restraint on the part of labor and management with respect to wage and price policies. It will also depend on prudent restraint in public policies, both fiscal and monetary. In 1969, the principal aim of policy was to cool down demands for goods and services, but in 1970 demand conditions may well prove to be such that the earlier restraint can gradually be lessened. On the other hand, the need to encourage sustainable long-run economic growth, requiring as it does an abatement of inflationary expectations and an environment of overall price stability, suggests that any major shift in monetary policy could be counterproductive. While the broad outlines of a potential monetary approach could be sketched this early in the year, as we are trying to do within the necessarily confidential confines of our own policy group, any approach we sketch can only be tentative. The timing and magnitude of monetary moves will have to be, as I suggested in opening these remarks tonight, dependent on events as they unfold.

As I look ahead at the possible monetary policy course, and the role of monetary policy in the period ahead, I am reminded of the colloquy in Chairman Burns' testimony to the House Banking and Currency Committee just two weeks ago. Mr. Hanna of the Committee addressed the following question to Chairman Burns: "Now that the President has submitted his budget, the tax bill has passed, what do you say about the prospects of changing your policies?" To which Chairman Burns with his customary dry wit replied, "Monetary policy is something that is constantly under review by the Federal Reserve Board, and I assure you the coming week will be no exception." I assure you that the same statement can be made about monetary policy and its role for a considerably longer period ahead.

The Agricultural Outlook for 1970

Agriculture's prospects for 1970 were recently analyzed by leading economists of the U. S. Department of Agriculture at the National Agricultural Outlook Conference. The following is a thumbnail sketch of their forecasts.

Boiled down, the outlook for the nation's agricultural sector in 1970 reads like this: Farmers will gross more income, but they'll spend more and end the year with about the same net income from farming as in 1969.

Keys to the outlook are prospects for a slowing in general economic activity and some easing in inflationary price pressures. Despite the anticipated moderation in economic growth, disposable personal incomes—boosted by increased social security payments, tax reductions, and higher wage rates—are expected to rise further and help maintain consumer demand for farm products. An indicated upturn in agricultural exports, even though moderate, is still another significant key to the situation.

Here's a rundown on some of the more important aspects of the agricultural outlook.

Income and Expenses The nation's realized gross farm income holds promise of chalking up a further gain in 1970, possibly rising to around the \$56-billion mark—a record high and about \$1.5 billion larger than in 1969. The expected increase in gross income this year will likely stem from a combination of a larger volume of farm marketings and slightly higher average prices. Most of the gain will probably center in the livestock sector, as was the case last year.

Farm costs are expected to continue their persistent upward trend, with their 1970 advance probably as large as the prospective rise in realized gross farm income. Here's what farmers face: Prices paid for production items, interest, taxes, and wage rates may be up as much as 5%, compared with the 5.7% increase experienced in 1969. Not only are prices paid likely to be higher, but farmers are also expected to increase their use of purchased inputs, such as fertilizer, pesticides, and machinery. And the bill for overhead items will probably show an increase, too.

Expectations that 1970's prospective gains in farmers' gross income will be eaten up by higher costs of production point to a realized net farm in-

come that will probably match 1969's estimated \$16 billion—third highest on record and some \$1.2 billion over that in 1968. With the continuing downtrend in the number of farms, net income per farm may well register a slight gain over last year's record-high average of \$5,401. Some further gain in the income of the farm population from nonfarm sources is also foreseen.

Food Situation and Outlook The average American consumer ate a record amount of food last year and spent a record amount of money for it. Retail food prices rose sharply, despite the availability of large food supplies, and for the year averaged 5.2% higher than in 1968. Restaurant food prices, which moved up steadily throughout the year, rose 6.1%. Food purchased at grocery stores, led by the price advances for red meats and eggs, went up 4.8%. This year, with a further slight gain in food supplies per person likely, retail food prices may record a smaller increase—possibly 3.5% to 4%. Gains in prices of restaurant foods will probably outstrip those for store-bought food again. And price increases for livestock products, especially red meats, will most likely be larger than those for crop foods.

People spent \$103.8 billion for food in 1969, up 4.4% over a year earlier. Disposable personal income rose 6.7%, however, and food expenditures of the average breadwinner took only 16.5% of after-tax income, down from 16.8% in 1968. Spending for food in 1970 is expected to rise by roughly the same amount as 1969's \$4.4 billion. But the increase will likely be smaller than the gain in consumers' disposable income. Thus, a further decline is likely in the proportion of after-tax income spent for food.

Commodity Highlights This is the way the outlook for some of the principal Fifth District commodities shapes up as the Department of Agriculture's economists see it.

Poultry and Eggs: Poultrymen enjoyed a successful year in 1969, with cash receipts from market-

ings recording a 15% increase over a year earlier. They can probably look forward to another increase in receipts in 1970, but the gain will likely be smaller. Prospects point to a larger output of broilers, turkeys, and eggs in 1970. Broiler production is expanding sharply during the current quarter and will likely continue well above a year earlier the rest of the year. Broiler prices, now near 1969 levels, will probably ease as the year progresses and average below a year ago in the final six months. Production of turkeys is expected to increase moderately, but smaller cold storage stocks are holding down total supplies. Turkey prices thus may average well above year-earlier levels through the first half of 1970 but will likely average lower in the last half.

Egg output will probably continue above 1969 levels throughout the year, with a moderate expansion during the first six months and a possible sharp increase in the second half. Prices of eggs, highest since the 1950's in the closing months of 1969, are expected to decline seasonally but will likely hold above a year earlier through spring and then drop below the high prices of late 1969.

Dairy Products: Dairy producers can look forward to another pretty good year in 1970. production, which hit a 17-year low in 1969, may slow its downhill slide in 1970. Milk cow numbers declined more slowly last year than in recent years, and the decline could continue to slacken this year. Should this occur, gains in output per cow could offset the decrease in the number of cows. Total milk output for the year may thus show little change from that in 1969. The farm price of milk may average moderately above last year's record levels, provided dairy price supports and Federal milk marketing order provisions remain unchanged. Consumption of milk per capita is expected to decline, but a growing population and a continuing high level of demand suggest that commercial sales of dairy products in 1970 could rise slightly. And Government donations of purchased dairy products are expected to continue at high levels.

Farm marketings of milk and cream will probably be about the same as in 1969, and if higher prices materialize, dairy farmers' gross cash receipts could reach a new all-time high. But rising production costs may well offset much of the gain.

Meat Animals: Last year was a good one for cattle and hog farmers, and indications point to another profitable year in 1970. With prospects for only a small increase in red meat supplies and further gains in disposable personal income, livestock prices may rise again. The increases are not expected to be

as sharp as in 1969, however. Should efforts to check inflation succeed, growth in consumer demand for meat may also rise more slowly.

Larger marketings of fed cattle and heavier average market weights are expected to boost beef output in 1970. Fed cattle prices, currently about the same as year-earlier levels, may well strengthen some in the months ahead, although they will probably be lower than last year's highs during the spring. Feeder cattle prices are expected to continue strong, reflecting the very strong demand for replacement cattle.

Pork production will remain considerably below a year ago through the first half of 1970. Some increase may occur later if farmers' plans for a 4% larger spring pig crop materialize. The lively feeder pig market points to strong producer interest in increasing production. Furthermore, the favorable hog-corn price ratio is such as to encourage expansion. Hog prices are currently running sharply higher than year-earlier levels, but gains over last year will narrow in the summer. By fall, hog prices will likely decline and average below last fall's, though well above those in most other recent years.

Tobacco: Supplies of tobacco in the 1969-70 marketing year are 3% below those last season because of smaller carry-overs. Should domestic consumption and leaf exports continue at last year's levels, as is now indicated, another reduction in carry-over stocks will occur this year.

United States cigarette output last year totaled 560 billion, 20 billion below 1968's record level, and cigarette consumption per capita declined some 4%. Retail prices of cigarettes rose 5% as the result of increases in State and local taxes and higher wholesale prices. Further price increases, reflecting tax hikes again this year, are likely. Even though the smoking-age population is larger and personal incomes are at an all-time high, cigarette consumption could decline further in 1970 because of retail price increases, growing smoking-health publicity, and slower economic growth.

Exports of unmanufactured tobacco may equal 1969's high level of 577 million pounds—third largest of record—if United Nations sanctions against Rhodesian tobacco continue. The United States export payment program, the high quality of recent flue-cured crops, and the fast-expanding output of cigarettes abroad are expected to help maintain exports despite big foreign crops.

Price support levels for the 1970 tobacco crops will be 4.3% higher than in 1969. The national flue-cured tobacco marketing quota has been set at 1,071

million pounds, 5% under that in 1969. The effective poundage quota is 1,206 million pounds, or 1% larger, however, because undermarketings of the 1969 crop exceeded overmarketings. For 1970, acreage allotments have been cut 10% on all burley tobacco farms not protected by minimum provisions. They have been increased 15% on most Virginia fire-cured farms; for Virginia sun-cured farms, allotments are about the same as in 1969.

Soybeans and Peanuts: The outlook for soybeans is bright. Strong home and overseas demand is underway and points to a 13% to 15% boost in consumption this year over the record 945 million bushels used in 1968-69. Growing domestic requirements for soybean oil and meal and the relatively low commercial carry-overs last fall, both here and abroad, lend added demand strength. The soybean carry-over next fall thus faces only a moderate increase at most. Farm prices during the peak harvesting months last fall averaged 10 cents per bushel less than in 1968. Spurred by strong demand, market prices moved up in January, and some further price strengthening in the months ahead is anticipated. Soybean oil and meal prices, on the other hand, have been above year-ago levels thus far this season and have resulted in the most favorable processing margins since 1965.

Peanut supplies for the current marketing year are roughly the same as last year's 2.9 billion pounds. Farmers' ability to produce peanuts continues to outstrip consumption, and output this season was again about one-fourth above requirements for food and farm use. Consequently, farm prices for the 1969 crop averaged near the support level and the Com-

modity Credit Corporation acquired the surplus under the price support program. Edible use, especially in peanut butter and salted peanuts, is running around 3% above a year ago, or only slightly above population growth. The gradual rise in the per capita consumption of peanuts is expected to continue, reaching nearly 8 pounds per person this year. The trend toward "snack-type" foods is an important factor in the steady increase in the consumption of peanuts. Peanut exports and crushings for oil are far below year-ago levels.

Cotton: Sharply smaller supplies and prospects for reduced disappearance (domestic mill use plus exports) highlight the cotton outlook again this year. Supplies, down because of the below-average 1969 crop, total 16.6 million bales. This is almost 1 million short of the 17.5 million bales of 1968-69 and the smallest since 1947. Expected disappearance of nearly 103/4 million bales, a little lower than last year because of reduced exports, is the smallest since 1938. Even so, disappearance may exceed the 1969 crop, and carry-over next August may fall to around 6 million bales—about one-half million below a year earlier and the lowest since 1953. Domestic mills are expected to use around 81/4 million bales, about the same as last year's small usage. Exports may total nearly 2½ million bales, down a quarter million from last year's low level. Competition from manmade fibers and foreign-grown cotton, large textile imports, and reduced military purchases of cotton textiles continue to weaken the demand for United States cotton.

Sada L. Clarke

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Bank Credit Proxy

At each Federal Open Market Committee meeting the Committee evaluates recent and prospective changes in economic activity, financial conditions, and the international situation. Taking into account the probable effects on these of past and current monetary and fiscal policy, it issues a policy directive to the Federal Reserve Bank of New York concerning the conduct of open market operations until the next meeting of the Committee.

Since July 4, 1967, these directives have been published with a three-month lag as part of the "Record of Policy Actions of the Federal Open Market Committee." The directive of the October 7, 1969 meeting of the Committee reads in part as follows:

In light of the foregoing developments, it is the policy of the Federal Open Market Committee to foster financial conditions conducive to the reduction of inflationary pressures, with a view to encouraging sustainable economic growth and attaining reasonable equilibrium in the country's balance of payments.

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 money and short-term credit markets; provided, however, that operations shall be modified if bank credit appears to be deviating significantly from current projections.

What does this mean? Some observers charge that the instructions are so imprecise as to be virtually meaningless. That is not correct. The Manager of the System Open Market Account understands what the Committee wants him to do. He interprets the directive within the context of the detailed discussion that has occurred during the course of a long meeting. Moreover, he and the Federal Open Market Committee have worked together through many difficult problems and have accumulated a vast background of common experience. The Manager reports daily, weekly, and at each Federal Open Market Committee meeting on his conduct of open market operations. The lines of communication are never down. So, while the directive may appear vague to those who approach it cold or out of context, the Manager has a rather precise idea of what he is instructed to do.

For many years the directive was couched almost exclusively in terms of such marginal measures of bank reserve positions as free reserves or member bank borrowings and in terms of conditions in the money and short-term credit markets. This practice led to charges of "money market myopia," i.e., excessive preoccupation with movements in free re-

serves and very short-term rates coupled with insufficient attention to movements in such variables as the money supply, bank credit, etc. The "myopia" argument is more a catchy phrase than a statement of fact. The System has always had bigger game in mind than minor movements in short-term rates. To put it another way, influencing money market conditions (except possibly for very short-run periods) has always been a means to an end and not an end in itself. The end has been such ultimate objectives as full employment and stable prices. In pursuit of these, the System has used money market conditions as a sensing device for detecting changes in financial flows and credit demands and as an immediate target of policy. But as an immediate target, money market conditions have been regarded only as a first link in the mechanism through which policy changes are transmitted to other financial variables and finally to aggregate demand.

Since August 1966 the directive has often made explicit reference to bank credit (total loans and investments of commercial banks), generally in the form of a proviso clause. If bank credit deviates significantly from that rate of change which is expected to be consistent with the target range of money market conditions, the deviation signals the Manager to aim at money market conditions slightly different from those specified in the directive.

Since actual information on bank credit does not become available quickly enough, the Federal Reserve uses a proxy measure of bank credit in implementing monetary policy through open market operations. What is the bank credit proxy? Why is it used rather than some alternative aggregate measure of money or credit? Why is an aggregate measure used at all? How is the proxy used in conducting open market operations? These are some of the questions discussed in this article.

What Is the Bank Credit Proxy? Very simply, the proxy is total member bank deposits subject to reserve requirements. These include time and savings deposits, private demand deposits, and demand deposits of the U. S. Government. Since total deposits comprise the bulk of the liabilities side of banks' balance sheets, a change in total deposits usually reflects the direction and approximate magnitude of change in bank credit, the principal component on the assets side. Some changes in bank credit are, of course, not picked up by changes in the proxy. There may be changes in bank credit

due to changes in nondeposit liabilities, changes in bank capital, changes in the banks' cash position, or changes in the proportion of total bank credit supplied by nonmember banks. These factors, of course, must be and are taken into account in using the proxy for policy purposes.

Why use a proxy when the real thing is available? The real thing simply does not become available soon enough. The Federal Reserve collects actual information on loans and investments as of each Wednesday from its member banks, but time is required to receive and process the data. As a result, the information does not become available to the Manager of the System Open Market Account until more than a week later. By contrast, some information on total deposits subject to reserve requirements is available to the Trading Desk each day with only a short lag. Most reserve city banks report deposit data to their Reserve Banks each day. Information for a given day reaches the Trading Desk the morning of the second business day following. These daily figures are used to see whether the deposit projection for reserve city banks for the week is holding up. These data are supplemented once a week by daily deposit data from a sample of 300 country banks. Each Tuesday these country banks report to their Reserve Banks daily average deposits subject to reserve requirements for the three preceding business days. Data from the country bank sample, which has proved extraordinarily useful, along with the daily reserve city data, are used to revise past estimates of total deposits and to provide a base for projections into the nearterm future. Thus, the Desk has reasonably current information with which to operate. Moreover, since the data are available daily, they can be combined into weekly and monthly averages. Data for a single day are sometimes very misleading.

How Is the Proxy Used? Since the Federal Open Market Committee issues its primary instructions in terms of money market conditions, it is first necessary to be clear on what is meant by "money market Normally, conditions in the money conditions." market are described by various short-term rates (rates on Federal funds, dealer loans, and short-term Treasury bills) and measures of banks' reserve position (borrowings and net borrowed or free reserves). While no rigid relationships among these money market indicators exist, it is possible to conceive of a range for each of the money market variables which will probably prevail in the coming period. This presumably consistent combination of ranges of rates and marginal reserves can be thought of as comprising the condition of the money market. The Federal Open Market Committee may want to maintain the prevailing conditions of the market or to change it either toward "ease" or toward "tightness." Easier conditions in the money market would imply lower money market rates, reduced borrowings from the Federal Reserve System, and either lower net borrowed or higher free reserves. Tighter conditions would imply the opposite.

It is possible to take into account many of the factors which will affect the bank credit proxy in the coming period. These include such things as the outlook for credit demands as influenced by interest rates and prospective economic activity, the relationship between Regulation Q ceilings and market rates of interest, the volume of CD maturities, tax dates, Treasury financings, other seasonal factors, etc. Taking these into account makes it possible to project the growth of the proxy, although with an admittedly large degree of uncertainty, for as much as four to six weeks ahead. Of course, one's estimate will also be affected by what the Federal Open Market Committee decides to do with respect to money market conditions. Other things being equal, the tighter the money market conditions, the slower will be the rate of growth of the proxy or the faster the rate of decline. Given all the other factors affecting growth of the proxy, each possible pattern of money market conditions will be associated with some rate of growth of the proxy which can be estimated to fall within some range with more or less accuracy.

In the directive cited, the Federal Open Market Committee wanted to maintain prevailing conditions in the money market. Judging from what happened in September, this meant something like the following: Federal funds fluctuating in a range from about 8.5% to 9.5%, the three-month bill in a range from about 7.0% to 7.25%, borrowings between \$1.0 and \$1.5 billion, and net borrowed reserves between \$900 million and \$1.2 billion. Consistent with these conditions in the money market would be some particular rate of growth in the bank credit proxy. For obvious reasons, this growth rate could not be projected three or four weeks ahead with pinpoint accuracy. But it could be and was projected to fall within some range. The particular wording of the directive in question required modification of money market conditions if growth of the proxy turned out to be either above or below the projected range. This was a "two-way proviso clause." If the proxy grew faster than projected (beyond the high point of the range by some amount considered significant) the Manager was instructed to achieve slightly firmer conditions in the money market; if slower than projected, slightly easier conditions.

A proviso clause can also be "one-way." For example, in an inflationary situation with a strong demand for credit, the Federal Open Market Committee might be more concerned with deviations of the proxy on the upside than on the down. Accordingly, it might instruct the Manager to achieve slightly firmer money market conditions than those called for in the directive if the proxy threatened to grow faster than projected. In other circumstances, the Committee might be more concerned with deviations on the downside. It would then instruct the Manager to ease money market conditions if the proxy grew at a slower rate than expected. Federal Open Market Committee meeting of October 29, 1968, provides an example of the first kind of proviso clause; the meeting of April 4, 1967, an example of the second type.1

Obviously, implementation of the proviso clause is a matter of judgment. This is evident from the wording of the directive of October 7, 1969: "... operations shall be modified if bank credit appears to be deviating significantly from current proiections."2 When dealing with projections, one can never be certain of the figures. Of course, for any given period of time, one acquires a better line on the actual growth rate as more and more firm statistics become available. But then there is the question of what constitutes a "significant" deviation from projections. Fortunately, matters of this sort can be discussed in the daily conference calls and collective judgment exercised. In periodic written reports and at each Open Market Committee meeting, the Manager explains and must justify his decision with respect to implementation of the proviso clause.

Rationale for Using an Aggregate in the Implementation of Policy The bank credit proxy is only one of several aggregate measures of monetary policy. Others include total reserves, nonborrowed reserves, required reserves, the monetary base, the money supply, money supply plus time deposits, total liquid assets, bank credit, total credit, etc. But why use any aggregate? Why not use interest rates only?

Basically, the reason is that the monetary and

²Emphasis added by author.

credit aggregates are believed to exert a major influence on economic activity. Consequently, they are regarded as important indicators of monetary policy and therefore useful as policy targets. Moreover, interest rates, taken by themselves, may mislead both as to the direction and strength of policy. Interest rates, which are prices of credit of various kinds, change both because of changes in the supply of credit and because of changes in demand. The economic consequences of, say, an increase in interest rates which is due primarily to an increase in the demand for credit may be entirely different from a rate increase due primarily to a decline in supply. In the former case, the tightening of credit markets as measured by rising interest rates might be due to heavy credit demands stemming from a surging economy and inflationary pressures. It would be a serious mistake in this instance to attribute the rising rates to restrictive monetary policy. Such a conclusion could lead the monetary authorities to supply reserves more liberally and thereby fan the inflation. On the other hand, rising rates might be due primarily to a diminishing supply of credit. In such a situation the economy might have run out of steam and be generating smaller demands for credit than earlier. Under these circumstances, a policy which would cause interest rates to continue rising might well lead to recession. Consequently, it is necessary to know not only what interest rates are doing, but why they are behaving as they are. The quantity of bank credit and other aggregates provide a clue. If interest rates are rising and the quantity of bank credit is increasing, the rise in interest rates is due primarily to increasing demand. On the other hand, if interest rates are rising and the quantity of bank credit is falling, the rise in rates can be attributed primarily to diminishing supply.

Exclusive use of interest rates as an indicator of policy may lead to excessively easy monetary policy during inflationary periods, and to overly restrictive policy during periods of incipient economic decline. In short, narrow focusing on interest rates could lead to procyclical rather than countercyclical monetary policy.

An additional advantage of aggregates as policy targets is that it is probably somewhat easier to choose an appropriate growth rate of an aggregate than to choose the appropriate level of interest rates, given wide fluctuations in the demand for credit. We know from past experience how fast real output has grown and approximately how fast it is likely to grow in the future. This serves as a guide as to how fast the aggregates can be allowed to grow without

In the October 29, 1968 meeting the Committee said: "... 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, to the extent permitted by the Treasury financing, if bank credit expansion appears to be exceeding current projections."

In the April 4, 1967 meeting the Committee said: "... System open market operations until the next meeting of the Committee shall be conducted with a view to attaining somewhat easier conditions in the money market, and to attaining still easier conditions if bank credit appears to be expanding significantly less than currently anticipated." ¹In the October 29, 1968 meeting the Committee said: ".

producing either inflation or underutilization of resources.

Which aggregate one should use as a target and/or indicator of policy is, of course, subject to much debate. The lack of agreement arises primarily because economic knowledge has not advanced to the point where linkages between financial and real economic variables are understood with much precision. But most economists would probably agree that explicit use of an aggregate, any aggregate, is a step in the right direction. It should be remembered, however, that aggregates were used in the formation and execution of policy long before one began to be mentioned explicitly in the directive.

The Bank Credit Proxy and Other Aggregates Over short periods of time the various aggregates frequently move divergently as various short-run factors influence the aggregates in different ways. For example, total reserves may increase rapidly in a given month while total deposits increase hardly at all because the public chooses to switch from time to demand deposits which carry higher reserve requirements. Total deposits may increase rapidly while the money supply declines because private demand deposits are transferred to Government accounts in payment of taxes. These examples suffice to show that the linkages between the various aggregates are fairly loose in the short run. The extent of divergent movement in the aggregates is evident

SELECTED MONETARY AND CREDIT AGGREGATES

Annual Rates of Change (Seasonally Adjusted Data)

Total Reserves	Money Supply	Money Supply Plus Time Deposits	Bank Credit ¹	Bank Credit Proxy ²
1969				
Jan. 8.0	6.3	- 2.1	- 0.6	- 3.2
Feb 3.4	3.1	- 0.9	1.6	- 1.2
March - 3.8	3.1	1.2	6.7	-10.1
April - 7.9	8.2	4.0	18.2	4.9
May 21.8	1.2	- 1.2	- 3.9	- 1.2
June - 7.4	4.3	- 0.6	6.9	-10.2
July -20.5	1.8	- 8.1	0.6	-18.9
Aug 5.5	- 1.8	-10.1	- 8.9	-11.3
Sept. 0.0	0.0	- 1.2	1.5	1.7
Oct10.8	0.6	- 1.5	- 0.3	- 9.2
Nov. -10.7	1.2	0.3	5.3	9.7
Dec. 4.5	1.8	3.4	4.9	- 0.4
1968				
2nd Half 10.9	7.1	12.5	13.9	13.4
1969				
1st Qtr. 0.1	4.2	- 0.6	2.5	- 4.8
2nd Qtr. 1.3	4.5	0.7	6.7	- 2.2
3rd Qtr9.1	0.0	- 6.5	- 2.4	- 9.4
4th Qtr. 1.0	1.2	0.7	3.3	0.0

 $^{^{\}mbox{\tiny I}}\textsc{Total}$ loans and investments of all commercial banks as of the last Wednesday of each month.

from the accompanying table which shows annual rates of change in the various series from month to month.

In the longer run the aggregates tend to move together to a much greater extent. The bottom panel of the table shows the annual rate of change in the second half of 1968 and in each of the quarters of 1969. All of the aggregates grew rapidly in the second half of 1968, and all displayed the same general pattern of movement in 1969. If one measures ease or tightness of policy by reference to the aggregates, one could say, regardless of the aggregate chosen, that monetary policy tightened substantially in the first half of 1969, became still tighter in the third quarter and became somewhat less restrictive in the final quarter of the year.

Most economists believe that monetary policy affects economic activity and prices only after some considerable lag. Consequently, short-term fluctuations in the aggregate indicators of policy are probably not very important. Since the aggregates tend to fluctuate together over periods as long as, say, three months, it may not make too much difference which aggregate is used as a target/indicator. The primary consideration may be choosing one which the Manager and the Federal Open Market Committee find workable in terms of forecastability, data availability, etc.

Troubles with the Proxy in 1969 While as a general rule, it may make little difference which aggregate is used, extended periods may arise during which a particular aggregate will give misleading information as to the degree of ease or tightness. The year 1969 was probably such a period. The growth of the proxy was greatly influenced in 1969 by the behavior of time deposits which in turn was determined largely by the relation between market interest rates and the ceiling rates banks were permitted to pay. The existence of restrictive ceilings may cause sharp and far-reaching changes which distort the normal relationship between a particular variable and other variables.

Such was the case in 1969. With market rates above the rates banks were permitted to pay on time and savings deposits, holders of these deposits shifted into such assets as Treasury bills, corporate bonds, etc. From the standpoint of the banking system, the result was a conversion of time deposits to demand deposits. Since demand deposits are subject to higher reserve requirements, the shift was tantamount to an increase in average reserve requirements. Thus, a given rate of growth of total reserves would tend to be associated with a slower rate of growth

 $^{^{2}}$ Daily average member bank deposits subject to reserve requirements.

of total deposits and a faster rate of growth in demand deposits and the money supply than would have been the case had the interest rate ceilings not been binding.

Banks responded to the interest rate ceilings by creating nondeposit liabilities, i.e., liabilities subject neither to reserve requirements nor to the interest rate ceilings. Many banks borrowed in the Eurodollar market, sold assets under repurchase agreements, and sold commercial paper in the money market. To the extent that these nondeposit liabilities replaced time deposits, required reserves were reduced, making possible an expansion of bank credit. Thus, change in the bank credit proxy became a poor indicator of the direction and magnitude of change in actual bank credit.

In order to make the proxy a more reliable predictor of bank credit, the monetary authorities adjusted the proxy to take into account, first, Eurodollar borrowings, then the other major nondeposit sources of funds, such as sale of assets under repurchase agreement and sale of commercial paper. The adjusted figures are not included in the table, but they parallel the movement of the other aggregates more closely than the unadjusted series.

Summary and Conclusion In the conduct of open market operations the growth of the bank credit proxy is used in a proviso clause as an intermediate target of monetary policy. The proviso clause began to be used in order to achieve a desired rate of growth in a monetary aggregate, especially during periods of rapid change in credit demands. Implementation of the proviso clause makes possible a modification of the primary target of money market conditions between meetings of the Federal Open Market Committee.

The proxy was chosen as an intermediate target both because it is regarded as a useful measure or indicator of the effect of monetary policy on economic activity and prices and because information on the proxy is available quickly. The diverse short-run movements of the various aggregates make it necessary to choose a single measure for operational purposes. Otherwise, there could seldom be agreement as to when the proviso clause should be implemented. However, the choice of the proxy rather than some other readily available aggregate does not necessarily imply that the Manager of the System Open Market Account or the Federal Open Market Committee regard it as the "best" indicator of the thrust of policy. Different members could believe that other aggregates were more important and still find the proxy operationally useful. Taking account of the normal relationship between the proxy and their favorite variable, they could express a preference for a growth rate of the proxy which would probably lead to the desired growth rate in their variable. Thus, it is not necessary to endorse the proxy as the "best" indicator of policy in order to regard explicit reference to the proxy in the proviso clause as a distinct improvement in the formation and execution of monetary policy.

Jimmie R. Monhollon

ERRATUM

In the February Monthly Review article, "Forecasts 1970," the range of GNP forecasts for 1970 given on page 4 should have read "from a low of \$966 billion to a high of \$990 billion."