MONETARY POLICY, INTEREST RATES, AND CREDIT ALLOCATION FOR SMALL BUSINESS

Report By

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Preface

This report was prepared at the invitation of the Office of the Chief Counsel for Advocacy of the Small Business Administration. It was motivated by a conviction that the day-to-day functioning of money and credit markets may result in discrimination against small business borrowers. It was also thought that - if such discrimination does exist - a program of formal credit allocation may offer a means of increasing the availability of funds to small businesses.

Several persons contributed to the preparation of this report. Dr. Thomas Mayer, Professor of Economics, University of California-Davis and Senior Economic Consultant in Brimmer and Company, drafted most of the sections on credit allocation in an historical context. He also conducted the survey of the economic literature dealing with the effects of monetary policy on small business. Ms. Yvonne Williams, Assistant Vice President, prepared a draft of the section on the Small Business Administration's Two-Tier interest rate program. Ms. Arlena Barnes, Consultant-International Economics, and Mr. John M. Wetmore, Senior Economic Consultant, worked on credit allocation by foreign central banks. Dr. Arthur J. Bailey, Economist, drafted the section on the Nixon Administration's dual prime rate program. He also helped me in the revision of a number of other parts of the report.

Ms. Margaret Henderson served as Research Assistant, Ms. Brenda Young had responsibility for administrative coordination, and Ms. Cassandra Harrison for ably seeing the manuscript through from its beginning to the final draft.

I had overall responsibility for the project. I contributed the section on the voluntary foreign credit restraint program - as well as the material on specific cases of credit allocation by the Federal Reserve System. I also had responsibility for the final version of the report.

Andrew F. Brimmer
President

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This inquiry was motivated by the conviction held by some officials in the Small Business Administration that there is a need for special arrangements to increase the availability or reduce the cost of credit for small business. The officials (and many small businessmen as well) believe that the credit markets do not work efficiently for small enterprises. In fact, some observers believe that the financial markets actually discriminate against firms at the lower end of the size spectrum. This conviction has led to a number or proposals to correct the deficiency by the adoption of measures to allocate credit (especially that provided by commercial banks) or to provide favorable (lower) interest rates on loans to small businesses.

In fact, on several occasions, steps to achieve these or similar goals have been taken. The most recent example is the Two-Tier rate structure adopted by some commercial banks in late 1978. An earlier example was the approach pursued by the Nixon Administration (through the Committee on Interest and Dividends) in 1971-74.

Beyond these instances, a number of general measures have been employed - and a number of steps have been taken - which have had the effect of allocating credit among specific sectors of the economy. These include the operation of the Federal Reserve Banks' discount window in the early days of the System; war-time consumer and mortgage credit
controls; voluntary restraints on commercial bank lending abroad; specific efforts to shield State and local governments against restrictive monetary policy; efforts to protect the commercial paper market during the Penn Central failure; efforts to protect the market for certificates of deposit during the failure of Franklin National Bank; efforts to assure commercial bank loans to real estate investment trusts; and efforts to assure bank loans to cattle feeders.

Looking abroad, a number of foreign governments have attempted to cope with problems arising from the differential availability and cost of funds to particular economic sectors. For this purpose, many of them have assigned special responsibility to their central banks. The latter, in turn, have adopted measures ranging from interest rate differentials to credit ceilings to direct central bank loans.

In this report, a number of the episodes constituting the body of experience sketched above are examined in some detail. The objective was to develop an understanding of the measures and how they worked. The analysis also seeks to identify those lessons which might be applicable - if it is concluded that a program is needed to assure the availability of credit to small business.

The report is organized as follows: Section II, "Credit Allocation in Historical Perspective," contains a survey of the long history of credit allocation efforts as instruments
of national economic policy. Section III, "The Nixon Administration's Dual Prime Rate Program," assesses the effectiveness of the attempt by the Committee on Interest and Dividends to protect consumers and small businesses from the impact of monetary restraint during the period 1971-1974. "The Small Business Administration's Two-Tier Interest Rate Program" is appraised in Section IV. The "Voluntary Foreign Credit Restraint Program" is discussed in Section V. The experience of "Foreign Central Banks and Credit Allocation" is reviewed in Section VI. Finally, "Monetary Policy and Credit Availability to Small Business" is examined in Section VII.

The conclusions reached with respect to these topics are presented in each of the sections. The main results can be summarized briefly.

Credit Allocation in Historical Perspective

Over the years, a number of measures have been adopted which influence the allocation of credit. One part of the study undertook to review and evaluate this body of experience.

 Eligible Paper Rule: In a rather special sense, credit allocation was written into the original Federal Reserve Act of 1913. The tool of the new Federal Reserve System was the rediscounting of promissory notes that the banks had received from their customers when extending loans. Hence, by making only certain types
of promissory notes eligible for rediscounting, member banks were given an incentive to favor these types of loans. It was believed that, since banks would want to ensure that they had access to Federal Reserve credit in a financial stringency (and the panic of 1907 was still on people's minds), they could be induced to change their loan portfolios - even though this required a significant shift in their lending practices.

The types of bank credit to be fostered were short-term self-liquidating loans. Self-liquidating means that the transaction that the loan finances itself generates the funds needed to repay it. For example, a loan to a wholesaler to acquire inventory is self-liquidating. As soon as the wholesaler sells the goods to a retailer, he can repay the bank loan from the proceeds. By contrast, a loan to acquire a machine (even if sound - in the sense that the borrower is sure to be able to repay) is not self-liquidating. For example, during the, say 90-day maturity of the loan, the new machine does not pay for itself. Not only were loans to be short-term and self-liquidating but they were also supposed to be for "real transactions" as opposed to speculation. For instance, loans to buy securities were not eligible for rediscount. But, since the true purpose of a loan is often hard to ascertain, the loan was frequently judged - not by its actual purpose - but by the type of collateral offered with it.
More specifically, the main regulations governing re-
discounting in the original Federal Reserve Act required
that the maturity at time of discount was not more than
90 days and that the note being rediscounted "must have
arisen out of actual commercial transactions, being issued
or drawn for agricultural, industrial, or commercial
purposes, or the proceeds must have been, or are to be,
used for such purposes."

There was considerable dispute whether the Federal
Reserve banks were required to rediscount all paper meeting
these criteria. The Federal Reserve Act was unclear on
this, but the Federal Reserve Board argued that it did not
have to. It added to the eligibility requirement a second
requirement - acceptability. This meant that a member bank
wanting to rediscount had to be in sound condition, and it
had to have not borrowed too much and too frequently in
the past since a bank was not supposed to make "undue" use
of Federal Reserve credit. Over the years, the eligibility
criterion lost emphasis and the acceptability test increased
in importance.

The fact that the Federal Reserve Act tried to influence
the lending practices of banks may seem surprising, not only
in view of the System's traditional opposition to credit
allocation, but also because in 1913 a laissez-faire view
was much more widely accepted than it is now. A major part,
probably the major part, of the explanation is that regulating
the type of loans made by banks was looked upon as a vital
part of monetary policy, and hence clearly within the
domain of the Federal Reserve.

**Consumer Credit Controls:** The United States has had
general consumer installment credit controls three times.
These periods were: during World War II, briefly in 1948-49,
and during the Korean War. These programs were administered
by the Federal Reserve under Regulation W, even though they
covered sellers of durables and various types of nonbank
lenders as well as banks.

Regulation W was first imposed in September, 1941. It
established minimum down payments and maximum maturities for
installment sales and for installment loans made to purchase
consumer durables. The terms originally set corresponded
to current trade practices. But in March, 1942, the terms
(for both down payments and for maximum maturities) were
tightened. Moreover, the scope of the regulation was ex-
tended to cover charge accounts and single payment loans.
The list of covered durables was broadened, and, certain
soft goods were covered too. This was followed by small
relaxations as the war approached its end in 1945. In
November, 1947, Regulation W was terminated. But this
phase did not last long. Seventeen days after the termin-
ation, the President asked Congress to reinstitute it.
With some delay, Congress did so. Regulation W became
effective again in September, 1948, but it lasted only until
June 30, 1949. However, in June, 1950, the Korean War broke
out, and President Harry Truman asked Congress to reinstitute Regulation W. Congress complied. Terms were subsequently tightened in 1950 - and eased again in 1951 to a level that more or less corresponded to standard trade practices. In May, 1952, Congress terminated the Federal Reserve's authority to control consumer credit. Subsequently, such controls were frequently advocated, and their reimposition was seriously considered in 1956. Several bills to do so were introduced in Congress over the years. Some were reported out favorably by either the Senate or House banking committee, but no such bills passed both Houses.

Finally, under an amendment to the Defense Production Act, Congress adopted the Credit Control Act of 1969. This Act gave the President authority to empower the Federal Reserve Board to reinstitute consumer credit controls. This was done on March 14, 1980, as part of a concerted campaign to check inflation. The controls were terminated in early July, 1980.

Since the imposition of consumer credit controls requires substantial interference with free market processes, and also imposes a substantial burden on many people, there is the obvious question of why this tool was used. The answer is that there existed special circumstances at those times when Regulation W was in effect, circumstances which seemed to call for consumer credit control.

One of these circumstances was that, during World War II and the Korean War, it was necessary, not only to con-
trol aggregate demand as a whole, but also to shift real resources out of consumer durable goods production and into the defense industries. During World War II, this was accomplished essentially by production controls. But consumer credit controls could, to some extent, backstop these direct controls. Moreover, since new durables were just not there to be bought, one could well argue that Regulation W was not hurting anyone. During the Korean War, when production controls were not used on a large scale, Regulation W played a more important role in inducing the consumer durable industries to shift to military production.

But the need to convert the consumer durable goods industries to war production is surely not the only reason for Regulation W; after all this could hardly explain why these controls were reimposed in 1948-49. In those years, there were two other reasons. One was that, with the lifting of wartime controls, substantial inflation prevailed in 1946-48, and excessive expenditure on consumer durables was considered one of the contributing factors. Indeed, President Truman requested Congress to reinstitute Regulation W as part of the anti-inflation program for which he had called Congress back into special session. The second special factor operative in 1948 was the rapid expansion in consumer credit itself. We now know that this rapid growth was merely the concomitant of consumers reequipping themselves with the durables
they had to forego during World War II. They were also shifting their balance sheets toward equilibrium by running down their large stocks of liquid assets. But this is not how the consumer credit boom was seen at the time. Rather, there was a common impression that consumer credit was out of control.

But the needs of the defense industries in wartime and the rapid postwar rise of consumer credit are only parts of the story. Another important part is that conventional monetary policy was considered inapplicable. After Pearl Harbor, the Federal Reserve System agreed to help finance the war at a low and stable interest rate by standing ready to buy at par all government securities offered to it. Hence, the supply of reserves was whatever the banks wanted it to be. This meant that open market operations, in effect, were at the option of the public rather than the Federal Reserve. Thus, there was no way the central bank could use the conventional tools of monetary policy to curb inflation. It could only rely on selective controls such as Regulation W and on moral suasion.

Reserve Requirements and Credit Allocation

Over the years, several proposals have been advanced to authorize the Federal Reserve Board to allocate credit by the use of differential reserve requirements. The mechanics of these proposals have differed widely, but the basic objectives were quite similar. In essence,
they have sought to tilt credit flows toward sectors which otherwise carried a disproportionate share of the burden of monetary restraint.

In 1970, Dr. Andrew F. Brimmer, who was then a Member of the Federal Reserve Board, proposed such a scheme. The key was a system of supplemental reserve requirements based on assets - rather than on deposit liabilities. The proposal was considered by Congressional Committees on several occasions. (It also attracted considerable oppositions in the banking community.) The objective of the supplemental reserve on loans would be to raise the cost of bank lending by reducing the marginal rate of return to the bank making the loan - and thereby dampen the expansion of bank loans.

The basic purpose of the supplemental reserve would not be simply to levy new reserve requirements on the banking system. If it were thought that its adoption would raise the average level of reserves required beyond what the Federal Reserve Board thought was necessary for general stabilization purposes, the regular reserve requirements applicable to deposits of member banks of the Federal Reserve System could be reduced.

This possibility was based on the conviction that the Federal Reserve needs a better means of influencing the availability of credit in different sectors of the economy. At the same time, it was highly desirable that - as far as possible - the instrument used minimize interference with normal business decisions and the
economic forces of the market place. The banking community - within whatever outer limits of credit expansion the central bank considers are consistent with stabilization policy - can best allocate financial resources among individual borrowers. Therefore, banks should be assured as much freedom of choice as the basic objectives of maintaining a balanced economy would permit.

**Dual Prime: Nixon Administration**

Between April, 1973, and April, 1974, the Nixon Administration promoted a dual-prime rate lending scheme. The program was administered by the Committee on Interest and Dividends (CID). The Committee itself was part of the Nixon Administration's Cost-of-Living Council. However, it was chaired by Dr. Arthur F. Burns who was also Chairman of the Board of Governors of the Federal Reserve System. The Board's staff operated the CID's secretariat and had day-to-day charge of the Committee's activities.

Under the program, the CID sought to protect small businesses and consumers from the brunt of a restrictive monetary policy conducted by the Federal Reserve Board. Although the latter had no direct responsibility for the dual-prime rate scheme, the fact that Arthur Burns was Chairman of the Federal Reserve Board and the CID undoubtedly gave the impression that it was a Federal Reserve program.
Results under the dual-prime were mixed. A number of the biggest banks in the country did offer a lower rate for small businesses. For example, on April 16, 1973, when the program began, New York City banks were quoting a prime rate of 6.50 per cent. Most small business borrowers were paying 1 or 2 percentage points above prime. By July, the large business prime had risen to an average of 7.75 per cent while the small business prime averaged 7.27 per cent. By October, the large business prime rate averaged 10.00 per cent, and that for small businesses averaged 8.5 per cent. This difference of 1.5 percentage points persisted until the program was terminated in April, 1974.

Nevertheless, a major question remains unanswered: did banks actually maintain the volume of loans to small businesses? Or, was the lower prime rate quoted mainly for cosmetic purposes?

**The Small Business Administration's Two-Tier Interest Rate Program**

On November 15, 1978, Mellon Bank of Pittsburgh, Pennsylvania, announced the establishment of a small business base interest rate designed to replace the prime rate for eligible small business customers in its trade area. Mellon's news release stated:

*Effective Thursday, November 16, 1978, Mellon Bank, N.A., has established a Small Business Base Rate which, until further notice, will replace the Prime Rate for those' customers of the Bank's 108 offices in its six county marketing area who meet the certain criteria.*
The Bank declared that its small business base rate would be 1 1/4 per cent below prime but not be less than 9 1/2 per cent. The rate was to be discontinued whenever the prime rate receded to 9 1/2 per cent. Loans previously determined using the Small Business Base Rate would "thereafter be based on the Bank's Prime Rate."

To be eligible for these rates, customer assets could not exceed $1.5 million. In addition, loan proceeds were not to be used for speculative purposes such as the purchase of securities or investment in real estate ventures, oil and gas syndicates, commodity trading ventures, or tax shelter investments.

Mellon's initiative stimulated the Small Business Administration (SBA) to encourage other banks throughout the country to offer special small business rates. This effort came to be known informally as the "Two-Tier Interest Rate Program." The SBA program is essentially a clearinghouse of lists of banks which either:

1. Agree to offer below-prime interest rates to customers meeting certain size and other eligibility criteria, or

2. Generally lend at rates below the national prime rate.

In managing the program, SBA obtains the names of banks, prepares lists, and distributes the latter to small businesses, trade associations, and business publications.
The SBA expressed pride that the Two-Tier Interest Rate Program originated in the private sector. In a speech prepared for delivery to the Missouri Bankers Association in February, 1979, SBA Administrator Vernon Weaver stated:

The special rate idea was a well-timed anti-inflation initiative that originated entirely with bankers, without any suggestions from government.

The first year of SBA's Two-Tier Interest Rate Program might well be described as a pilot project which raised issues and stimulated debate. However, it probably had only a modest impact on the general availability of credit to small businesses. There were many limiting factors. Because the program was set up in response to an initiative in the private sector and was preceded by little planning, many critical theoretical and policy issues were not confronted in advance by SBA.

Several issues emerged in bank responses to SBA's request for an explanation of their nonparticipation. The issues were economic, practical, and philosophical. They can be summarized in the following questions:

1. Do commercial banks discriminate against small business borrowers in periods of tight credit?

2. Does the availability of lower than prime interest rates help alleviate this problem for small businesses?
(3) Assuming special interest rates are beneficial to small businesses, is it good public policy for the government to promote or require that such rates be made available?

There is a fourth issue which was not raised by the banks - but which should be part of any review of the SBA Two-Tier program. Assuming that there is a problem of credit for small businesses, that the problem can be alleviated by some action by commercial banks, and that it is good public policy for some governmental entity to encourage banks to take such actions - we must still ask what agency could best coordinate such an effort? At least one person interviewed in the course of this study believed that SBA was not the ideal agency to promote such a program among banks. He thought that a request from SBA - as opposed to the Treasury Department - might suggest less than total governmental commitment to the policy.

The experience gained by SBA in the first year of the program can serve two useful purposes. First, it will permit research to be focused on those issues which appear critical in bank decision-making. Secondly, it provides a basis for a careful selection of banks and small business borrowers who could be the subject of intensive interviews with respect to their experiences in the Two-Tier program. The results of such research could be incorporated into the planning for any continued program, enabling SBA to fashion a strategy
focused more directly on banks of different size, location, and clientele.

It is perhaps at the level of the individual small businessman that the SBA program can have the potentially greatest impact. The Two-Tier program elicited the participation of almost 200 of the nation's 15,000 banks and stimulated another 74 to explain their noninvolvement.

Voluntary Foreign Credit Restraint

From March, 1965, to January, 1974, the Federal Reserve administered a Voluntary Foreign Credit Restraint Program (VFCR). It originated as part of the program adopted by the Johnson Administration to improve the U.S. balance of payments. Under the VFCR, commercial banks and other financial institutions voluntarily restricted the amount of foreign loans made from their head offices in the United States. Essentially, the VFCR penalized foreign lending while leaving loans for domestic purposes less restrained. But fundamentally, the VFCR stimulated the growth of foreign branches of U.S. banks and induced much of American international banking to migrate to foreign shores.

Foreign Central Banks and Credit Allocation

The allocation of credit through various selective controls has been pursued by a number of central banks. In the post-World War II era, Western European nations adopted controls to aid in the allotment of credit to
certain priority sectors of their economics. Activities by four of these central banking systems (the Bank of England, the Banca d'Italia, the Bank of France, and the Bundesbank of the Federal Republic of Germany) are examined in the study.

In contrast with the Western European history and practice, the effort at credit allocation in other regions is a more recent phenomenon. Within the last two decades, countries in the developing world have devised central bank instruments to influence selective credit flows. Credit practices followed in Latin American and Asian nations and in a number of African countries are evaluated.

Although many credit control tools are authorized by the individual central banks, certain ones seem to be in routine use. These include both direct and selective controls. Direct control of loans and investments has been employed frequently. Some central banking systems require prior authorization of loans above a maximum amount; other systems set loan limits or ceilings for particular sectors of the economy.

Special reserve requirements have also been used. These frequently provide for housing and construction needs. Moreover, where preferential discount policies exist, they are almost always applied to favor export trade and agricultural activities. These discount procedures include low interest rates, exemptions from ceilings, and easier eligibility requirements.
Currently, it seems that credit allocation practices are losing favor among Western European countries. With the rise of inflation and the concern over financial intermediation, there has been a greater reliance on market forces and price rationing. However, the reverse trend appears evident in the other regions of the world. With the continued demands for economic development, countries in Latin America, Asia, and Africa are turning increasingly to a wide range of credit allocation devices which are administered by their central banks.

In general, central banks in developing countries, while experimenting with innovations to promote economic development, have not neglected the main functions traditionally associated with central banking. In particular, they have tried to maintain domestic price stability and equilibrium in the balance of payments. While many of them have been fairly successful in pursuing this objective, a number of them have also found the results of their efforts disappointing.

Central banks have adopted a variety of innovative steps to encourage economic development. The mobilization of domestic savings has been of primary concern. Where measures were taken (such as lifting low interest rate ceilings) to assure that savers received a realistic rate of return in the face of sometimes serious inflation, the results were generally satisfactory. Numerous arrangements to enhance the liquidity of financial investment have
been fostered - including the organization of stock exchanges and the development of other capital market institutions.

In some countries, central banks were also authorized to conduct a commercial banking business, and some of them were given specific development assignments as well. However, most of these institutions have found such added functions to be incompatible with their basic missions.

Instead, a number of central banks have provided strong support to the formation of separate institutions to provide development finance. Some of them supplied capital for agricultural and industrial development banks; others extended credit to them, purchased their securities or helped to create a market for their obligations. On the whole, it appears that most countries have recognized the inflationary potential of heavy reliance on central bank funds to finance development institutions, but in a few instances this apparently was not the case.

Perhaps the greatest amount of innovative effort by central banks has been concentrated on measures to influence the flow of commercial bank credit away from traditional uses (such as the finance of foreign trade and domestic commerce) and toward development projects. In pursuit of this objective, a wide range of instruments has been brought to bear. The most popular ones have included preferential discount rates, differential reserve requirements, guidelines on the composition of loan portfolios, and ceilings on specific kinds of credit. A few attempts to allocate
credit seem to have been particularly successful - but on the whole the results have been rather mixed.

Monetary Policy and Credit Availability

A large body of evidence relating to the impact of monetary policy on small business was examined. The overall impression left by this examination is one of disappointment. It does not provide strong evidence for or against the hypothesis that a restrictive monetary policy discriminates against small firms. One study appears to be relevant for the British situation appraised. However, for the question at hand (i.e., the current situation in the United States), it provides only a cautionary note on the evaluation of evidence.

Three surveys - made at different times - provide little evidence that could be used in the evaluation undertaken here. However, another study, by contrast, provides useful - although far from conclusive - evidence which suggests that banks did not discriminate against small firms in 1955-57. But still another study which covered the same period provides some weak evidence suggesting that discrimination did occur. And such weak evidence is also provided by a set of findings on the interaction of loan volume and interest rates. All in all, these studies have not succeeded in generating a definitive answer.
However, the a priori discussions reviewed in the course of this project do provide some reasons for concluding that a restrictive monetary policy does discriminate against small firms. Thus, the existence of usury law ceilings is more likely to cause lenders to turn down loan requests from small firms than from large firms. (Recent legislation may greatly weaken the impact of these ceilings.) In addition, some aspects of bank credit rationing - namely the tendency of banks to pay indirect interest on demand deposits via easier access to credit, and the fact that small firms often cannot credibly threaten to change banks if their loan requests are turned down - suggest that small firms are discriminated against during a period of monetary restraint. Such discrimination is also likely to result from the fact that many small firms cannot shift to a bank with more liberal policies if their own bank is tight. Moreover, they usually cannot shift out of the bank credit market into the more general capital market.

Hence, it would be rather difficult to argue that a restrictive monetary policy does not impose a greater burden on small firms than on large firms. But is this differential effect large or small? Unfortunately, the available studies do not provide a reliable answer to this question.
SECTION II
CREDIT ALLOCATION IN HISTORICAL PERSPECTIVE

Credit allocation has long been an instrument of domestic economic policy. The Small Business Administration's Two-Tier Interest Rate Program and the Dual Prime scheme established by the Nixon Administration are two relatively recent examples of credit allocation. However, various forms of credit allocation date back to 1913 and the original legislation establishing the Federal Reserve System. Over the ensuing decades, the objectives and techniques of credit allocation have varied with the particular economic problems the specific program was adopted to correct.

Among the objectives have been: (1) discouraging bank involvement in highly speculative ventures and maintaining general economic stability; (2) ensuring that the government has adequate financing during periods of war; (3) maintaining capital availabilities to farmers; (4) limiting the rise in interest rates; and (5) ensuring that small businesses receive adequate financing during periods of restrictive monetary policy.

The techniques by which credit has been allocated have included: (1) limiting Federal Reserve Board rediscounting to bank loans made for approved purposes; (2) offering especially advantageous rediscount arrangements for loans made to government agencies; (3) extending the maturity dates
on rediscountable loans made to farmers; and (4) encouraging banks to offer special, below-prime interest rates to small businesses.

The Eligible Paper Rule

Perhaps the earliest example of credit allocation in this century was the Eligible Paper Rule adopted by the Federal Reserve Board soon after it was established in 1913. The rule was a tool by which the new Federal Reserve Banks rediscounted only certain promissory notes that member banks received upon extending loans to their customers. By limiting eligibility to promissory notes on short-term (90 day), self-liquidating, and nonspeculative loans, the Federal Reserve Board hoped to avoid a repeat of the circumstances that produced the "panic of 1907."

However, the Eligible Paper Rule has not survived as a permanent fixture of U.S. monetary policy for a variety of reasons, not the least of which is the fact that the theoretical assumptions upon which it was based soon proved fallacious - especially when compared to contending theories. For example, in 1913, three monetary theories were contending for hegemony among Federal Reserve System policy makers. One was the commodity theory of money, which pointed towards maintaining the gold standard. A second was the quantity theory of money, which focused on the supply of money. The third view, held by many economists and bankers, was the commercial loan theory
or "real bills doctrine." It was upon this latter doctrine that the Eligible Paper Rule was based.

The commercial loan theory starts from the logical premise that bank lending contributes to inflation when it raises aggregate demand faster than the growth rate of total production. Proponents of the theory believed that the most effective method of minimizing the inflationary impact of bank lending was to restrict commercial bank loan growth to an amount equal to the incremental increases in the supply of goods. Short-term self-liquidating loans, it was argued, do just that, since the total amount of such loans can only increase if output also increases. Thus, commercial loan theorists argued that aggregate demand, and therefore inflation, could be controlled by making the supply of commercial bank credit a function of the growth in aggregate production. Restricting Federal Reserve Bank rediscounting to promissory notes covering the stated types of bank loans was envisioned as an effective method for achieving the desired relationship between the growth of loans and the expansion of production. By maintaining this relationship in equilibrium, the new Federal Reserve Board hoped to control inflation.

The success of such an approach to monetary policy required the Federal Reserve Banks to monitor closely the purposes for which rediscounted commercial bank loans were being made. It was initially assumed that this could be accomplished through
Federal Reserve Board regulations specifying the types of loans eligible for rediscounting. As noted above, the main regulations specified that the maturity at the time of discount could not exceed 90 days, and that the note being rediscounted had to have arisen out of "actual commercial transactions, being issued or drawn for agriculture, industrial or commercial purposes."¹ This was meant to ensure that member bank funds were not used for speculative purposes.

However, vagueness in the original Federal Reserve Act and expediency soon produced several disputes which contributed to the eventual demise of the Eligible Paper Rule. The vagueness centered on the question of whether the Federal Reserve was required to rediscount all loans meeting the letter, if not the spirit, of the law. The volume of loans which had to be individually monitored for eligibility also proved difficult to manage. Therefore, the Federal Reserve Board adopted an expedient solution designed to solve both its problems simultaneously. That solution was to add a second set of criteria: only banks judged "acceptable" by the Federal Reserve

Board could obtain rediscount privileges even if the loan(s) of question met all the initial criteria. In time, banks and borrowers discovered a number of channels for circumventing the eligibility criteria, and bank acceptability became the Federal Reserve's most effective mechanism for allocating credit by means of the weakened Eligible Paper Rule.

**Effectiveness of the Eligible Paper Rule**

The effectiveness of the Eligible Paper Rule must be analyzed within the context of the original purpose for which it was adopted. That purpose was essentially to curb speculation by discouraging Federal Reserve member banks from making funds available to speculators. It was widely believed that excessive speculation would lead to inflation, financial panics, business failures, and eventually to depression. Yet, the fact that the worst depression in U.S. history followed adoption of the Eligible Paper Rule underscores its basic ineffectiveness.

However, prior to the Great Depression of the 1930's, a number of forces were at work to undermine the Eligible Paper Rule. For instance, in 1916, just three years after the original Federal Reserve Act was adopted, the Federal Reserve Board approved measures allowing member banks to borrow on their own promissory notes served by Federal government securities. The measures were designed to help finance United States involvement in World War I, but it also allowed banks to obtain the funds needed to make loans to their private
customers without regard for previously established eligibility criteria. The continuation of these World War I finance measures after the war ended opened a permanent alternative to rediscounting - and thus created an exception to the Eligible Paper Rule.

Another factor contributing to the demise of the Eligible Paper Rule was political pressure from farm lobbyists for preferential treatment by the country's monetary authorities. Thus, when the Agricultural Credit Act of 1923 was adopted, the Federal Reserve Board was directed to extend the rediscount privilege to certain types of agricultural loans regardless of maturities and other eligibility criteria.

Member bank abuse of the Eligible Paper Rule also contributed to its demise. For example, credit was withheld from the automobile industry by one bank on grounds that the industry was overexpanded.1/

Finally, the Federal Reserve itself lost enthusiasm for the rule. The reason for this development was that the rule imposed an excessive administrative burden on the Federal Reserve System. For example, in many cases, neither the notes presented for rediscounting nor the supporting loan documents provided

enough information for the Federal Reserve Banks to determine the real purposes of loans. Avoiding this problem would have necessitated the establishment of a system of bureaucratic cross-checks which most likely would have proven too cumbersome. Instead, the Federal Reserve Board abandoned the effort and concentrated on the acceptability of member banks applying for the rediscount privilege.

Hard empirical evidence on the extent to which the Eligible Paper Rule succeeded in inducing banks to change the types of loans they made is not available, and knowledgeable observers were in considerable disagreement as to the rule's effectiveness. Some felt that the rule had "...been valuable in improving the quality of the paper in member bank portfolios."1/ Most others felt that the Eligible Paper Rule had little influence on bank lending behavior.2/

Finally, it has been argued that the Eligible Paper Rule did not represent credit allocation in the modern sense of the concept. Certainly, the focus of the Rule was macroeconomic stability through controls on aggregate demand. On the other hand, contemporary credit allocation schemes are concerned with


2/ For example, see Seymour Harris, Twenty Years of Federal Reserve Policy (Cambridge: Harvard University Press, 1933), p. 305.
the microeconomic issue of the amount of credit obtained by small businesses and various other sectors of the economy. However, it is important to keep in mind that the Eligible Paper Rule did have as its central objective shifting commercial banks' funds away from speculators and toward businesses engaged in productive activity. While this early attempt to allocate monetary resources was largely ineffective, it did establish the legitimacy of federal government intervention in bank lending practices to achieve broader economic goals.

**Controls on Consumer and Mortgage Credit**

The next attempt by the Federal Reserve Board to allocate credit came during the Second World War and, except for two relatively short periods, continued through the end of the Korean War. The controls were embodied in Regulation W\(^1\) and Regulation X\(^2\). Regulation W sought to control general consumer purchases of durable and certain nondurable goods. Regulation X focused on limiting housing demand.

The specific objectives of both regulations were the same as that which caused the Federal Reserve Board in 1916,

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1/ Regulation W was initially in effect from September, 1941, to November, 1947. It was subsequently reinstated on two occasions between September, 1948, and June, 1949, and between June, 1950, and May, 1952.

2/ Regulation X was in effect from October, 1950, until September, 1952.
to permit banks to borrow against their own promissory notes secured by Federal government securities. That objective was to increase the supply of resources available to the government during war. However, the generally stated objective of Regulations W and X were more nearly comparable to that which motivated adoption of the Eligible Paper Rule in 1913: to control inflation at a time of rising consumer spending and relatively high government expenditures.

Although neither the Eligible Paper Rule, Regulation W, nor Regulation X can be considered to have been strict credit allocation measures in microeconomic terms, the later two regulations did influence the allocation of credit between consumers and business. Regulations W and X also influenced the allocation of material resources between consumers and government. Both sets of influences will be discussed below.

Regulation W was first imposed in September, 1941. It established minimum down payments and maximum maturities for installment sales and for installment loans made to purchase consumer durables. The terms of the original regulation corresponded with the prevailing trade practices. However, in March, 1942, following the Japanese attack on Pearl Harbor, the terms of Regulation W were tightened. Minimum down payments were increased. Maximum maturities were shortened, and the regulations coverage was extended to more categories of purchases. The effect of these controls was to encourage
manufacturers to shift away from consumer products and toward war production.

Following the end of World War II, in late 1945, the Federal Reserve relaxed Regulation W somewhat. However, given the rapid growth in consumer spending during the immediate post war years, and the implications of that spending for inflation, it was decided not to abandon the controls completely until their legal authority expired in November, 1947.

Less than three weeks later, President Harry Truman requested that Congress reinstate Regulation W. Although the President was largely motivated by the security implications of communist advances in Asia, Congress did not share his view of the urgency of the problem and so did not comply until September, 1948. A major contributor to Congressional reluctance was the unpopularity among voters of maintaining consumer spending controls in the absence of a direct military threat to the United States. The fact that voters had lived through credit controls for the last seven years was also a factor. It was, therefore, largely for these reasons that the reinstated Regulation W was given a limited life of only nine months - September, 1948, to June, 1949. However, by June, 1950, Regulation W was again reinstated in response to the start of the Korean War. The Regulation was finally terminated in May, 1952.

Regulation X was initially adopted in October, 1950, and largely paralleled Regulation W's final period. Its purpose
was to strengthen the credit controls initiated under Regulation W by extending them to mortgage loans. Like the restrictions on consumer loans, Regulation X established maximum maturities and set minimum down payments. It also fixed minimum amortization requirements. Originally, Regulation X applied only to credit extended for one- and two-family housing, but it was soon extended to all residential and commercial property. The credit terms for the two types of property loans were fixed in different ways, however.

Effectiveness of Regulations W and X

As was the case with the Eligible Paper Rule, the effectiveness of Regulations W and X must be assessed within the context of the objectives they were intended to achieve. As stated previously, those objectives were to shift credit away from consumers and toward businesses so that manufacturers would be able to meet the material needs of the country's defense establishment. Therefore, valid measures of the effectiveness of Regulation W would include the aggregate change it caused in the banks' business loans versus government securities, and the rate of change in the growth of consumer installment credit. Likewise, the effectiveness of Regulation X can be estimated as a function of the rate of change in new housing starts during the period of its imposition.

1/ For the period under review, consumer installment credit was the area of most concern. Consumer credit such as credit cards and check overdraft privileges did not enjoy widespread usage immediately following World War II.
In 1941, the year Regulation W was first adopted, non-real estate loans accounted for 76.7 per cent of total bank loan assets. This explains the initial lack of emphasis that the Federal Reserve placed on real estate loans in its attempts to control aggregate demand during World War II. However, the share of loans in the total asset structure of commercial banks declined from 27.0 per cent in 1941 to 16.2 per cent by 1945. Over the same period, investments in government and other securities grew from 31.6 per cent of total assets to 60.1 per cent. This suggests that Regulation W contributed to a shift in bank funds from private consumption to financing the war effort. Although the share of government and other securities slipped somewhat after World War II, their general dominance of bank assets continued through the close of the Korean conflict.

Additional evidence of the post World War II effectiveness of Regulation W is found in statistics on the growth of consumer installment credit after 1947. As shown in Table 1, consumer installment credit more than doubled between 1947 and 1950. The period from late 1945 to November, 1947, corresponded with the initial relaxation of Regulation W by the Federal Reserve Board. This relaxation and the subsequent termination of the regulation between November, 1947, and September, 1948, likely contributed to the rapid growth in consumer borrowing during that period. Further,
Table 1
Growth of Consumer Installment Credit,
1947-1977

<table>
<thead>
<tr>
<th>December:</th>
<th>Consumer Installment Debt Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billions of Dollars</td>
</tr>
<tr>
<td>1947</td>
<td>$ 6.9</td>
</tr>
<tr>
<td>1948</td>
<td>9.3</td>
</tr>
<tr>
<td>1949</td>
<td>11.9</td>
</tr>
<tr>
<td>1950</td>
<td>15.1</td>
</tr>
<tr>
<td>1951</td>
<td>15.8</td>
</tr>
<tr>
<td>1952</td>
<td>20.0</td>
</tr>
<tr>
<td>1953</td>
<td>23.8</td>
</tr>
<tr>
<td>1954</td>
<td>24.4</td>
</tr>
<tr>
<td>1955</td>
<td>29.7</td>
</tr>
<tr>
<td>1956</td>
<td>32.7</td>
</tr>
<tr>
<td>1957</td>
<td>35.0</td>
</tr>
<tr>
<td>1958</td>
<td>34.8</td>
</tr>
<tr>
<td>1959</td>
<td>40.4</td>
</tr>
<tr>
<td>1960</td>
<td>44.3</td>
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<tr>
<td>1961</td>
<td>45.0</td>
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<tr>
<td>1962</td>
<td>49.9</td>
</tr>
<tr>
<td>1963</td>
<td>56.7</td>
</tr>
<tr>
<td>1964</td>
<td>64.4</td>
</tr>
<tr>
<td>1965</td>
<td>72.5</td>
</tr>
<tr>
<td>1966</td>
<td>77.9</td>
</tr>
<tr>
<td>1967</td>
<td>81.6</td>
</tr>
<tr>
<td>1968</td>
<td>90.9</td>
</tr>
<tr>
<td>1969</td>
<td>100.2</td>
</tr>
<tr>
<td>1970</td>
<td>104.7</td>
</tr>
<tr>
<td>1971</td>
<td>114.6</td>
</tr>
<tr>
<td>1972</td>
<td>130.4</td>
</tr>
<tr>
<td>1973</td>
<td>150.5</td>
</tr>
<tr>
<td>1974</td>
<td>159.7</td>
</tr>
<tr>
<td>1975</td>
<td>167.3</td>
</tr>
<tr>
<td>1976</td>
<td>188.3</td>
</tr>
<tr>
<td>1977</td>
<td>223.3</td>
</tr>
<tr>
<td>1978</td>
<td>267.6</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce, Business Conditions Digest
the temporary reimposition of Regulation W from September, 1948, to June, 1949, obviously did little to reduce consumer spending pressures that had built up in the years since 1945. However, the imposition of Regulation W, for the third time, in the second half of 1950 together with the adoption of Regulation X in the fourth quarter of that year contributed to a substantial decline in the rate of expansion in consumer installment credit in 1952. For example, Table 1 illustrates that installment credit grew almost 30.0 per cent a year from the start of 1947 to the end of 1950. However, the 1951 growth rate was less than 5.0 per cent. Following the termination of Regulations in mid-1952, consumer installment credit accelerated once again.

Regulation X was in effect during the period October, 1950, to September, 1952. Table 2 shows that during the first full calendar year of the regulation - 1951 - new non-farm housing starts declined by 23.6 per cent. This was the largest drop in the ten-year period between 1945 - the end of World War II - and 1955. New housing starts in 1952 were 22 per cent below the 1950 level and only 0.9 per cent above the level of 1951. This suggests that Regulation X was highly effective in reducing housing starts during the Korean War. In fact, the 4.4 per cent negative growth in housing starts registered in 1953 indicates that the effects of Regulation X continued beyond its expiration.
TABLE 2
New Nonfarm Housing Starts, 1945-1955

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousands of Units</th>
<th>Per Cent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945</td>
<td>326.1</td>
<td>-</td>
</tr>
<tr>
<td>1946</td>
<td>1023.2</td>
<td>213.8</td>
</tr>
<tr>
<td>1947</td>
<td>1268.5</td>
<td>24.0</td>
</tr>
<tr>
<td>1948</td>
<td>1362.1</td>
<td>7.4</td>
</tr>
<tr>
<td>1949</td>
<td>1466.1</td>
<td>7.6</td>
</tr>
<tr>
<td>1950</td>
<td>1951.9</td>
<td>33.1</td>
</tr>
<tr>
<td>1951</td>
<td>1491.0</td>
<td>-23.6</td>
</tr>
<tr>
<td>1952</td>
<td>1503.9</td>
<td>0.9</td>
</tr>
<tr>
<td>1953</td>
<td>1437.6</td>
<td>-4.4</td>
</tr>
<tr>
<td>1954</td>
<td>1550.5</td>
<td>7.9</td>
</tr>
<tr>
<td>1955</td>
<td>1646.0</td>
<td>6.2</td>
</tr>
</tbody>
</table>

In summary, credit allocation or more precisely, controls on consumer and mortgage credit, have demonstrated some historical effectiveness in shifting commercial bank resources toward government and out of direct consumer spending channels. However, it is also important to keep in mind that the nature and magnitude of the political and economic problems confronted while Regulations W and X were in effect were judged to be much more serious than the problems presently facing small businessmen. As a result, the present national policy commitment to credit allocation in favor of small businesses does not appear to be as strong.

Reserve Requirements and Credit Allocation

In the past, several proposals have been advanced to authorize the Federal Reserve Board to allocate credit by the use of differential reserve requirements. The mechanics of these proposals have differed widely, but the basic objectives were quite similar. In essence, they have sought to tilt credit flows toward sectors which otherwise carried a disproportionate share of the burden of monetary restraint.

In 1970, Dr. Andrew F. Brimmer proposed such a scheme. The key was a system of supplemental reserve requirements based on assets - rather than on deposit liabilities. The proposal was considered by Congressional Committees on several occasions. (It also attracted considerable oppositions in the
banking community.) The objective of the supplemental reserve on loans would be to raise the cost of bank lending by reducing the marginal rate of return to the bank making the loan -- and thereby dampen the expansion of bank loans. The basic purpose of the supplemental reserve would not be simply to levy new reserve requirements on the banking system. If it were thought that its adoption would raise the average level of reserves required beyond what the Federal Reserve Board thought was necessary for general stabilization purposes, the regular reserve requirements applicable to deposits of member banks of the Federal Reserve System could be reduced.

This possibility was based on the conviction that the Federal Reserve needs a better means of influencing the availability of credit in different sectors of the economy. At the same time, it was highly desirable that -- as far as possible -- the instrument used minimize interference with normal business decisions and the economic forces of the marketplace. The banking community -- within whatever outer limits of credit expansion the central bank considers are consistent with stabilization policy -- can best allocate financial resources among individual borrowers. Therefore, banks should be assured as much freedom of choice as the basic objectives of maintaining a balanced economy would permit.
Since, during a period of inflation, the object would continue to be to restrain the growth of bank lending, rather than to burden the amount of lending achieved by some date in the past, the reserves might apply only to the amount of lending above some determined volume. That is, the cash reserves would constitute marginal, rather than average, required reserves.

For the sake of illustration, it was assumed that such a supplemental reserve requirement went into effect at the end of 1968. Also $220 billion was taken as the amount of loans on the books of member banks on that date. It was supposed further that a bank was required to set aside cash reserves equal to 20 per cent of the amount by which its outstanding loans exceeded the amount of such loans outstanding just before the reserve program went into force. Since loans at member banks rose by about $20 billion in 1969, they would have been required to put up an additional $4 billion -- under these assumptions. Since their required reserves averaged about $27 billion in 1969, this would have represented an increase of roughly 15 per cent.

This formulation might be varied so that a cash reserve requirement might be applied against whatever new loans the
bank might extend rather than apply a marginal reserve against the amount of loans above the amount outstanding on a particular date.

To illustrate, a bank that extended a loan during 1969 would have been required to set aside cash reserves of 20 per cent of the amount of that loan. Loans already outstanding as of the beginning of 1969 would have required no reserves nor would they have been under any quantitative restraint. Any extension of those outstanding loans, as well as any drawdowns of then-existing lines of credit, would have been treated as new loans and would have been subject to the reserve requirement. This variant would be especially attractive in being free of any relationship represented by differing volumes of loans outstanding among individual banks at a given base date.

Under either variant of this approach, the percentage reserve requirement would be set on the basis of the Federal Reserve's determination of the degree of influence to be applied, for economic stabilization reasons, against unchecked bank loan expansion. The restraint would be levied in proportion to the lending. The approach would not require immediate asset adjustments by each bank; instead it would leave the decision to individual banks to adapt their lending to the circumstances at the time.
The loans that would be subject to the supplemental reserve requirement could be defined in a way that would take account of whatever set of priorities that might be established from time to time. For example: if the objective of public policy were to give priority to loans to meet the needs of State and local governments, it could be given effect through a reserve ratio against such loans smaller than the ratio for other loans. Loans to acquire homes could be exempted -- if public policy calls for giving housing the highest priority -- by setting the requirement at zero. In contrast if policy called for differential restraint on consumer credit or on loans to business, the reserve ratio applicable to such loans could be set quite high. In fact, any array of loan priorities could be adopted and the reserve requirement scaled accordingly -- depending on the changing needs of public policy.

Such a supplemental cash reserve requirement system sketched above would have the effect of restraining bank lending, both in total and to particular sectors of the economy. However, it would do so without any direct interference by the Federal Reserve in lending decisions by individual banks. The new reserve requirement, being a fairly small proportion of the reserves now required against deposit liabilities, would not cause a significant disturbance
of domestic monetary policy. While there would be an impact on the required reserves of member banks, if the Federal Reserve wished, this could be easily offset by an appropriate reduction in reserve requirements on deposits or by open market operations.

As indicated above, the scheme outlined here was never adopted. However, on March 14, 1980, the Federal Reserve did take steps - based on the Credit Control Act of 1969 - which contained several of the elements recommended by Dr. Brimmer in 1970.

**Specific Cases of Credit Allocation**

Aside from the major programs described above, a number of specific examples of credit allocation can be cited. These include the following:

- In September, 1966, the Federal Reserve Board sent a letter to member banks cautioning them against the liquidation of State and local government securities to channel the funds into business loans. The commercial banks were told that their behavior in response to this advice would be noted when they applied to borrow from Federal Reserve Banks.

- Between June and September, 1970, the Federal Reserve Banks served as a direct source of central banking credit made available through commercial banks acting as a conduit. The action was taken to assure that industrial firms could replace funds lost through the sudden run-off of commercial paper in a market adversely impacted by the failure of Penn Central.

- Between May and October, 1974, the Federal Reserve Bank of New York lent $1.7 billion to Franklin National Bank - although the bank's ultimate failure was
accepted at the outset. The reason was the Federal Reserve Board's desire to protect the money market (especially the market for bank CD's) from the adverse pressures created by Franklin's failure.

- In the spring and summer of 1974, real estate investment trusts (REIT's) were experiencing considerable difficulty in marketing commercial paper and other instruments to raise funds. At the same time, they faced a large volume of commitments to supply funds to complete construction projects. Most of the REIT's had back-up lines of credit with commercial banks. However, as monetary policy became more restrictive, a number of banks became reluctant to extend additional loans to REIT's. In response to this situation, the Federal Reserve Board took specific steps to encourage commercial banks to make funds available to REIT's.

- In the summer of 1974, a delegation of cattle feeders complained to the Chairman of the Federal Reserve Board about their difficulty in obtaining commercial bank loans. In response, the Chairman issued a letter to the Federal Reserve Banks (for transmittal of member banks) urging that these would-be borrowers be accommodated.

In March, 1980, under the Credit Control Act of 1969, the Federal Reserve Board took several steps to control consumer credit and influence the allocation of funds among major sectors of the economy.
SECTION III

NIXON ADMINISTRATION'S DUAL PRIME INTEREST RATE PROGRAM

Between April, 1973, and April, 1974, the Nixon Administration promoted a dual-prime rate lending scheme. The program was administered by the Committee on Interest and Dividends (CID). The CID was itself a part of the Cost of Living Council established on August 15, 1971. The Chairman of the CID was Dr. Arthur F. Burns who was also Chairman of the Board of Governors of the Federal Reserve System. The Board's staff functioned as the CID's secretariat and thereby had day-to-day charge of the Committee's activities. Given these close ties with the Federal Reserve System, it was inevitable that the dual prime scheme would come to be known as a Federal Reserve Board rather than a Cost of Living Council program, although the latter was the case.

Under the program, the CID sought to protect small businesses and consumers from the brunt of the restrictive monetary policy being conducted by the Federal Reserve Board. The Committee enjoyed some success as shown by the fact that some of the country's biggest banks did offer a lower rate of interest to small business borrowers. For example, on April 16, 1973 (the day the dual prime program was instituted), New York City banks were quoting a prime rate
of 6.50 per cent. Most small business borrowers were paying 1 or 2 percentage points above that level. However, by July, the prime rate for large business borrowers had risen to an average of 7.75 per cent while the rates charged to small businesses averaged 7.25 per cent. The trend toward lower rates for small businesses continued to be manifested for the remainder of the life of the dual prime program.

Despite the evolution of interest rates under the program, a major question remains unanswered: Did banks offset the effects of a favored prime for small borrowers by reducing the volume of loans to small businesses? Stated otherwise, were the lower prime rate quotes primarily for public relations purposes? Before this question can be properly addressed, the evolution of events leading to the establishment of dual-prime rates needs explanation.

Background to the Dual Prime Scheme

The persistence with which inflationary pressures had increased between 1965 and 1969 led to the enactment of the Economic Stabilization Act in 1970 (P.L. 91-379). Among other things, the act empowered the President to take those actions he thought necessary to maintain price stability while ensuring economic growth. Pursuant to this grant of authority, on August 15, 1971, President Richard Nixon issued Executive Order No. 11615. The order essentially froze prices, wages, rents, and salaries for
a 90-day period beginning on the date of issuance of the Order. Executive Order 11615 also authorized the creation of the Cost of Living Council (Council) and directed it to prepare a more flexible and detailed program of price stabilization.

The members of the Council were mostly cabinet level officers and included as its Chairman the Secretary of the Treasury. Other members were the Secretaries of Agriculture, Commerce, Labor, and Housing and Urban Development. The Director of the Office of Management and Budget, the Chairman of the Council of Economic Advisors, the Director of the Office of Emergency Preparedness, and the Special Assistant to the President for Consumer Affairs were also named to the Council. The Chairman of the Board of Governors was made an Advisor to the Council. Two months later (October 15, 1971), when the Committee on Interest and Dividends (CID) was formed as a unit of the Council, he was made its Chairman.

The formation of the CID coincided with the Council report to the President on a more flexible and detailed program of price stabilization. It was also a manifestation of pressures (mainly within the Congress but also in the private sector) to extend the August 15 mandatory wage and price controls to interest and dividends. The Federal Reserve Board, while endorsing the Administration's effort
to reduce inflation, did not think mandatory controls on interest rates were necessary.

Indeed, at the time the wage and price controls were announced, and throughout the remaining months of 1971, interest rates were either holding steady or declining. For example, between December 31, 1970, and July 23, 1971, Federal Reserve Banks' discount rates (charged member banks when they borrow from the former) declined from an average of 5.50 per cent to 5.00 per cent. This trend continued through December, 1971, when the discount rate averaged 4.50 per cent where it remained throughout 1972.

A similar trend was manifest in the interest rates charged on consumer and small business loans throughout the later half of 1971, and the first half of 1972. For example, the average rate paid on new car loans declined from 12.13 per cent in June, 1971, to 11.84 per cent in July, 1972. The rate for small, short-term, and noninstallment loans to businesses dropped from 7.31 per cent in January, 1972, to 7.16 per cent in March of that year. Similar declines occurred in interest rates on loans made to farmers and, in general, on consumer installment credit other than credit cards. These reductions in the cost of credit to households and small businesses occurred despite a general upward trend in interest rates on federal funds (which are essentially excess reserves which Federal
Reserve member banks trade among themselves). They were also instrumental in demonstrating that mandatory controls were not necessary.

Immediately after the President announced the mandatory freeze on wages and prices in August, 1971, the Federal Reserve Board began to search for ways to achieve the objective of stabilizing interest rates while avoiding the imposition of mandatory guidelines. For example, on August 25, 1971, just 10 days after the wage-price freeze announcement, the Federal Reserve Board Chairman wrote to 300 member banks explaining the need to restrain interest rate increases. He also solicited statistical data that the Board would need to monitor voluntary compliance with the spirit of the President's program with respect to the costs of credit to small businesses and households. The results of the solicitation showed, as noted above, that interest rates were not rising as rapidly as prices generally. The results were distributed to the press and to concerned Congressional Committees. Since the overall costs of money were increasing, many political figures were critical of this development.

Therefore, when the Economic Stabilization Act (P.L. 97-210) was extended, effective December 22, 1971, interest rate controls were made mandatory - unless the Cost of Living
Council made an explicit finding that such controls were not necessary. On that same day, the Council did issue a determination that mandatory controls were not, in fact, necessary. In the place of mandatory controls, the Council recommended the establishment of a more formulized system of monitoring the voluntary restraint that the Federal Reserve Board argued was sufficient.

**Evolution of the Floating Prime Rate**

The banks themselves were also taking steps to forestall mandatory interest rate guidelines. During the first half of 1972, several banks adopted floating prime rates. The floating rates were based on formulas designed to protect each bank's market position while ostensibly limiting the speed of increase in their individual prime rates.

The Mellon National Bank of Pittsburgh based its prime rate on an unweighted average of the following 90-day rates: the 90-day commercial paper rate plus 1/8 percentage point, the going rate on finance company paper, and the going rate on secondary market CDs. To the average thus obtained, the bank added 5/8 percentage point to cover administrative costs.

The First National Bank of Boston did not have a mechanical formula. Instead, it based its floating rate on a combination of general conditions in short-term money markets and its overall portfolio position.
Three New York City banks adopted floating prime rates. Irving Trust surveyed dealers to obtain posted 90-day commercial paper dealer buying rates. The rates were averaged over a 5-day period and increased by 1/2 of a percentage point. First National City Bank based its floating prime on 90-119 day dealer-placed commercial paper as calculated by the Federal Reserve Bank of New York. The bank then added 5/8 to the computed average. Bankers Trust used two formulas. Under one, it averaged the effective rate of its own 89-day negotiable CDs plus 65 basis points. On the other, it took the 5-day averages on 90-day dealer-placed commercial paper and added 50 basis points.

Several other banks also adopted floating prime rate formulas. These included the Exchange National Bank of Chicago and the Michigan National Bank of Detroit.

Restoring Interest Rate Flexibility

In time, the implication of a restrained interest rate policy during a period of monetary restraint came under greater analytical scrutiny within the Federal Reserve. A question that plagued the Board of Governors was this: is it wise to make relatively cheap money available to large corporate borrowers when the policy objective being pursued is a reduction in aggregate demand? The answer eventually arrived at was no. Therefore, following a full year of holding the discount rate at 4.50 per cent, in
January, 1973, the Federal Reserve Board once again allowed the discount rate to rise, and other rates moved up sympathetically.

In place of the policy of restraining all interest rates, the Committee on Interest and Dividends adopted a policy of insulating households and small business borrowers from some of the adverse effects of rising interest rates. The instrument through which this protection was to be afforded was a dual prime rate scheme. Under the scheme, banks were encouraged to offer a lower prime rate to small business borrowers than to their larger customers. The following section will analyze the effectiveness of the dual prime in stabilizing interest rates paid by small businesses and households.

The Operation and Effectiveness of the Dual Prime Program

As stated above, the purpose of the dual prime program was primarily to afford some measure of protection against burdensome increases in interest rates to small businesses. Therefore, the type of debt covered by the program included debt of all types except mortgages whose original maturity was more than five years, and long-term debt generally. The latter category was excluded because it represented a type of indebtedness available to most business and individuals regardless of their asset size.

Essentially banks were asked either to establish a separate and lower prime rate covering the indebtedness
of small businesses or to fix the rates charged to this group of customers against a small business prime established elsewhere. For example, normally small business borrowers with approved credit pay the prime rate plus 1 or 2 percentage points. Under the dual prime scheme, banks without a separate small business prime were requested to charge the small business prime in a nearby money market plus 1 or 2 percentage points.

An important exception was in the handling of binding contracts. As stated in guidelines issued by the Committee on Interest and Dividends, loan rates embodied in binding contracts between a lender and a small business borrower were not affected by the new standards. Instead the CID "expected" that banks would continue to show restraint in adjusting such interest rates.

Initially the program covered only loans made by commercial banks, but it was eventually extended to finance company credit as well. Also adjustments in compensating balances required by lenders were covered where such adjustments had the potential effect of limiting credit.

The voluntary guidelines requested that banks not increase their interest rates to small business borrowers if such an increase would result in a higher profit on that portion of the banks' business than it earned in a fixed base period. The exception to this requirement was that increased bank borrowing cost could be passed along - but
only on that portion of the increase in cost accounted for by loans made to the covered category of borrowers. Table 3 outlines the method employed in computing the maximum permissible cost pass-through.

**Impact of the Dual Prime**

The effectiveness of the dual prime program is demonstrated by at least two facts: first, as noted previously, several major banks did establish and maintain prime rates for small businesses that were below their prime rates for larger borrowers. Second, as shown in Table 4, the rates charged to households under the program showed only modest monthly increases between April, 1973, and April, 1974. It can also be seen that the cumulative changes during the program were equally modest.

These findings suggest that interest rates on installment loans were not a major obstacle to credit in the period under review. Stated otherwise, the CID appears to have been successful in softening the impact of the Federal Reserve Board's restrictive monetary policy on consumers and small businesses.

Therefore, if the major credit rationing mechanism was not interest rates, then nonrate terms and the availability of credit become important determinants of the flow of funds to consumers and small businesses. This consideration returns us to the question of whether lenders offset the
Table 3

Calculation of Cost Pass-Through Adjustment for Commercial Banks a/
(Amounts in dollars)

<table>
<thead>
<tr>
<th>Item</th>
<th>Base period</th>
<th></th>
<th></th>
<th>Current period</th>
<th></th>
<th></th>
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<tr>
<td></td>
<td>Amt. outst.</td>
<td>Eff. int. rate</td>
<td>Annual amount</td>
<td>Amt. outst.</td>
<td>Eff. int. rate</td>
<td>Annual amount</td>
</tr>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
<td>(F)</td>
</tr>
<tr>
<td>Earning assets</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Loans to large bus.</td>
<td>10</td>
<td>6.50</td>
<td>.65</td>
<td>10</td>
<td>7.50</td>
<td>.75</td>
</tr>
<tr>
<td>2. Investments and other (incl. Fed. funds sold)</td>
<td>20</td>
<td>6.00 b/</td>
<td>1.20</td>
<td>20</td>
<td>6.10</td>
<td>1.22</td>
</tr>
<tr>
<td>3. Subtotal</td>
<td>30</td>
<td>6.00 b/</td>
<td>1.85</td>
<td>30</td>
<td>6.10</td>
<td>1.97</td>
</tr>
<tr>
<td>4. Other loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small business loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer loans</td>
<td>30</td>
<td>8.00</td>
<td>2.40</td>
<td>35</td>
<td>[8.09]</td>
<td>2.83</td>
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<td>Real estate loans</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>5. Total</td>
<td>60</td>
<td>4.25</td>
<td></td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources of funds</td>
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<td></td>
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<td>6. Money market instruments</td>
<td>5</td>
<td>6.00</td>
<td>.30</td>
<td>6</td>
<td>7.00</td>
<td>.42</td>
</tr>
<tr>
<td>7. Time &amp; savings deposits</td>
<td>30</td>
<td>5.00</td>
<td>1.50</td>
<td>34</td>
<td>5.03</td>
<td>1.71</td>
</tr>
<tr>
<td>8. Demand deposits</td>
<td>20</td>
<td>0</td>
<td>-</td>
<td>20</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>9. Equity capital and reserves</td>
<td>5</td>
<td>0</td>
<td>-</td>
<td>5</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>10. Total</td>
<td>60</td>
<td>1.80</td>
<td></td>
<td>65</td>
<td></td>
<td>2.13</td>
</tr>
<tr>
<td>Other operating expenses and operating margin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other operating expenses</td>
<td>1.75</td>
<td></td>
<td></td>
<td>1.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Total operating expenses (line 10 + line 11)</td>
<td>3.55</td>
<td></td>
<td></td>
<td>4.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Operating margin (line 5, minus line 12)</td>
<td>.70</td>
<td></td>
<td></td>
<td>[.76]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Operating margin as a percentage of earning assets (line 13 ÷ line 5)</td>
<td>1.17%</td>
<td></td>
<td></td>
<td>1.17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Calculation of interest rate increase to allow for a cost pass-through:

15. Total cost of funds at annual rate in current period (line 10, Col F) .. 2.13
16. Total other operating expenses at annual rate in current period (L.11,Col F) 1.91
17. Amount to maintain base period percentage margin (L. 5,Col D x L.14, Col C) .76
18. Total 1 + 2 + 3 to obtain aggregate revenue needed in current period .. 4.80
19. Subtract income from assets with market-determined yield (L.3, Col F) .. 1.97
20. Income needed on "other loans" to maintain base period operating margin .. 2.83
21. Average interest rate to yield income on line 20 (L.20 ÷ L.4, Col D). 8.09%
22. Average interest rate on "other loans" in base period (L.4, Col B) .. 8.00%
23. Allowable increase in interest rate on "other loans" (L.21 minus L.22) .. .09%

[ ] Derived from calculations shown in lines 15 through 23.

a/ For simplicity, the balance sheet has been abbreviated to show only earning assets and the sources of funds needed to finance them. To do this cash assets were netted against demand deposits and other nonearning assets against equity capital.

b/ Interest income on tax exempt securities is expressed on a fully taxable equivalent basis.
Table 4
Interest Rates Charged on Selected Types of Bank Loans
January, 1972 - July, 1974

Per Cent
1972

<table>
<thead>
<tr>
<th>Type of Loan</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small short-term non-installment loans to businesses 1/</td>
<td>7.31</td>
<td>7.19</td>
<td>7.16</td>
<td>7.21</td>
<td>7.28</td>
<td>7.23</td>
<td>7.34</td>
<td>7.32</td>
<td>7.44</td>
<td>7.44</td>
<td>7.52</td>
<td>7.54</td>
</tr>
<tr>
<td>Farm production loan (one year or less maturity):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder cattle operations</td>
<td>7.55</td>
<td>7.46</td>
<td>7.37</td>
<td>7.44</td>
<td>7.35</td>
<td>7.44</td>
<td>7.34</td>
<td>7.54</td>
<td>7.55</td>
<td>7.56</td>
<td>7.67</td>
<td>7.66</td>
</tr>
<tr>
<td>Other farm production operating expenses</td>
<td>7.63</td>
<td>7.62</td>
<td>7.51</td>
<td>7.57</td>
<td>7.58</td>
<td>7.73</td>
<td>7.55</td>
<td>7.58</td>
<td>7.75</td>
<td>7.72</td>
<td>7.82</td>
<td>7.95</td>
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<tr>
<td>Consumer installment credit for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New automobiles (36 months)</td>
<td>10.26</td>
<td>10.20</td>
<td>10.12</td>
<td>10.00</td>
<td>9.96</td>
<td>9.98</td>
<td>9.97</td>
<td>10.02</td>
<td>10.02</td>
<td>10.01</td>
<td>10.02</td>
<td>10.01</td>
</tr>
<tr>
<td>Mobile homes (84 months)</td>
<td>10.94</td>
<td>10.88</td>
<td>10.61</td>
<td>10.45</td>
<td>10.73</td>
<td>10.49</td>
<td>10.77</td>
<td>10.71</td>
<td>10.67</td>
<td>10.66</td>
<td>10.85</td>
<td>10.69</td>
</tr>
<tr>
<td>Other personal expenditures (12 months)</td>
<td>12.74</td>
<td>12.72</td>
<td>12.60</td>
<td>12.58</td>
<td>12.63</td>
<td>12.65</td>
<td>12.73</td>
<td>12.72</td>
<td>12.70</td>
<td>12.70</td>
<td>12.63</td>
<td>12.77</td>
</tr>
<tr>
<td>Credit card plans</td>
<td>17.11</td>
<td>17.13</td>
<td>17.20</td>
<td>17.22</td>
<td>17.24</td>
<td>17.25</td>
<td>17.25</td>
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<td>17.25</td>
<td>17.25</td>
<td>17.23</td>
<td>17.24</td>
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<td>Business loans - prime rate</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>To small businesses</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>To large businesses</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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</table>
### Table 4

**Interest Rates Charged on Selected Types of Bank Loans (Continued)**

1973

<table>
<thead>
<tr>
<th>Type of Loan</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small short-term non-installment loans to businesses 1/</td>
<td>7.70</td>
<td>7.71</td>
<td>7.83</td>
<td>7.95</td>
<td>8.10</td>
<td>8.19</td>
<td>8.41</td>
<td>9.03</td>
<td>9.40</td>
<td>9.76</td>
<td>9.66</td>
<td>9.69</td>
</tr>
<tr>
<td>Farm production loans (one year or less maturity):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder cattle operations</td>
<td>7.74</td>
<td>7.70</td>
<td>7.74</td>
<td>8.03</td>
<td>8.13</td>
<td>8.20</td>
<td>8.61</td>
<td>8.97</td>
<td>9.43</td>
<td>9.71</td>
<td>9.55</td>
<td>9.71</td>
</tr>
<tr>
<td>Other farm production operating expenses</td>
<td>7.89</td>
<td>7.90</td>
<td>7.97</td>
<td>8.01</td>
<td>8.06</td>
<td>8.13</td>
<td>8.35</td>
<td>8.69</td>
<td>9.17</td>
<td>9.09</td>
<td>9.23</td>
<td>9.33</td>
</tr>
<tr>
<td>Consumer installment credit for:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New automobiles (36 months)</td>
<td>10.01</td>
<td>10.05</td>
<td>10.04</td>
<td>10.04</td>
<td>10.05</td>
<td>10.08</td>
<td>10.10</td>
<td>10.25</td>
<td>10.44</td>
<td>10.53</td>
<td>10.49</td>
<td>10.49</td>
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<tr>
<td>Mobile homes (84 months)</td>
<td>10.54</td>
<td>10.76</td>
<td>10.67</td>
<td>10.64</td>
<td>10.84</td>
<td>10.57</td>
<td>10.84</td>
<td>10.95</td>
<td>11.06</td>
<td>11.09</td>
<td>11.19</td>
<td>11.07</td>
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<td>Other consumer goods (24 months)</td>
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<td>12.48</td>
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<td>12.67</td>
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<td>Other personal expenditures (12 months)</td>
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<td>12.84</td>
<td>12.96</td>
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<td>Credit card plans</td>
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<td>17.16</td>
<td>17.19</td>
<td>17.19</td>
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<td>17.24</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>7.27</td>
<td>7.83</td>
<td>8.17</td>
<td>8.31</td>
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<td>8.00</td>
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<td>9.75</td>
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<td>To large businesses</td>
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<td>-</td>
<td>7.50</td>
<td>8.00</td>
<td>9.00</td>
<td>9.75</td>
<td>9.75</td>
</tr>
</tbody>
</table>

1/ Includes small short-term loans (30 to 90 days) to businesses making one or more installment payments per year.
<table>
<thead>
<tr>
<th>Type of Loan</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small short-term non-installment loans to businesses 1/</td>
<td>9.78</td>
<td>9.82</td>
<td>9.60</td>
<td>9.80</td>
<td>10.67</td>
<td>11.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm production loans (one year or less maturity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder cattle operations</td>
<td>9.70</td>
<td>9.65</td>
<td>9.55</td>
<td>9.69</td>
<td>10.21</td>
<td>10.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other farm production operating expenses</td>
<td>9.15</td>
<td>9.26</td>
<td>9.14</td>
<td>9.30</td>
<td>9.63</td>
<td>9.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer installment credit for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New automobiles (36 months)</td>
<td>10.55</td>
<td>10.53</td>
<td>10.50</td>
<td>10.51</td>
<td>10.63</td>
<td>10.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile homes (84 months)</td>
<td>11.09</td>
<td>11.25</td>
<td>10.92</td>
<td>11.07</td>
<td>10.96</td>
<td>11.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other consumer goods (24 months)</td>
<td>12.78</td>
<td>12.82</td>
<td>12.82</td>
<td>12.81</td>
<td>12.88</td>
<td>12.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other personal expenditures (12 months)</td>
<td>12.96</td>
<td>13.02</td>
<td>13.04</td>
<td>13.00</td>
<td>13.10</td>
<td>13.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit card plans</td>
<td>17.25</td>
<td>17.24</td>
<td>17.23</td>
<td>17.25</td>
<td>17.25</td>
<td>17.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business loans - prime rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To small businesses</td>
<td>8.37</td>
<td>8.38</td>
<td>8.30</td>
<td>8.57</td>
<td>9.18</td>
<td>9.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To large businesses</td>
<td>9.75</td>
<td>9.50</td>
<td>8.75</td>
<td>10.00</td>
<td>11.25</td>
<td>11.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOTE: Except for the prime rate on loans to large businesses, the interest rates shown on this table are based on a survey conducted jointly by the Federal Reserve System and the Federal Deposit Insurance Corporation at 370 insured commercial banks. All rates except the prime rates represent simple unweighted averages of the "most common" effective annual rate on loans made during the first full calendar week of the month in each loan category. The "most common" rate is defined as the rate charged on the largest dollar volume of loans in the particular category during the week covered in the survey. Consumer installment loan rates are reported on a Truth-in-Lending basis as specified in the Federal Reserve Board's Regulation Z.

The prime rate on loans to small businesses, as provided for in the dual prime rate structure established by the Committee on Interest and Dividends in the interest rate criteria for commercial banks, issued April 16, 1973, is the best rate charged by a bank to its most credit-worthy local customers. For the Committee's purposes, a small business is defined as any domestic commercial, industrial, or agricultural borrower whose total borrowings outstanding at any one time over the preceding 12 months (exclusive of long-term real estate mortgage debt) did not exceed $350,000 and whose assets do not exceed $1 million. The figure shown is the simple unweighted average of the rates in effect on the last business day of the first full calendar week of the month; the range of variation of these rates is considerable. The large business prime rate is the rate most commonly quoted by large banks on that date. Since the prime rate information has not been converted to an effective rate basis, the rates shown are not directly comparable to the other rates shown on this release.

r - revised

1/ Loans of $10,000 to $25,000 maturing in one year or less.

2/ Includes upward revisions of data for a few respondents to correct reporting errors. Revisions not carried back, and data therefore not fully comparable with earlier months.

Source: Compiled by Brimmer & Company from data supplied by the Board of Governors of the Federal Reserve System.
effects of a lower prime for small borrowers by increasing credit eligibility criteria in other ways.

The evidence suggests that this did not occur. Among the nonrate rationing mechanisms available to lenders is increasing compensating balances, reducing average maturities on loans, and reducing the ratio of the loan to the value of the collateral.

Adjusting compensating balances to offset moderate interest rate policies were specifically excluded by the CID, and there is no evidence to suggest that bank lenders chose this route to circumvent the dual prime program. The average maturity on consumer installment loans, particularly those made by finance companies, increased rather than decreased under the program. Finally, loan/collateral ratios on consumer purchases either increased or remained constant while the program was in operation.

Therefore, based on the facts that interest rates tended to rise at fairly moderate and predictable rates, and that nonrate terms did not become more restrictive under the dual prime program, the CID's effort to insulate small businesses and consumers appears to have been successful.
SECTION IV
THE SMALL BUSINESS ADMINISTRATION'S
TWO-TIER INTEREST RATE PROGRAM

In late 1978, the Small Business Administration (SBA) instituted a program to encourage banks to make loans to small businesses at interest rates below the national average prime rate. Traditionally, such businesses borrow at rates above the national prime. However, on November 15, 1978, the Mellon Bank of Pittsburgh, Pennsylvania, announced a program under which borrowers meeting certain size criteria and agreeing to certain other conditions could obtain loans at interest rates that were up to 1 1/2 per cent below the bank's prime rate. The program went into effect the following day. This private sector initiative motivated the Small Business Administration to encourage other banks to adopt similar programs and publically to announce the new policies of generally lending at interest rates below the national average prime rate. Over 200 banks have so far cooperated with the Small Business Administration which acts as a clearinghouse - bringing participating banks and potential borrowers together.

The program is being promoted by the Small Business Administration on the assumption that lower-than-prime
interest rates will increase the availability of funds to small enterprises. However, a significant number of non-participants have challenged this assumption and have instead raised the possibility that the Two-Tier prime rate program could actually reduce the amount of credit available to small businesses. Other objections point to an absence of compatibility between the Two-Tier concept and the local market conditions of nonparticipating banks. Despite these objections, the Two-Tier Program apparently offers participating banks notable advantages in attracting new customers and in public relations benefits.

Bank Participation

During its first year, the Two-Tier Interest Rate Program attracted the participation of 112 banks representing 63 banking groups. An additional 58 banks indicated that they generally made loans at interest rates that were below the national average prime rate. This brought the total number of first-year participants to 170 banks.

Asset Size Characteristics and Regional Distribution of First Year Participants

The evolution of participation and asset size characteristics of the first year participants can be seen in Table 5. It shows that 79 (70.5 per cent) of the 112 banks offering Two-Tier interest rates joined the program in its first

---

A banking group is defined as a bank holding company or other instrument of bank ownership regardless of the number of banks held.
### Table 5

Banks Participating in the SBA, Two-Tier Prime Rate Program, by Size of Bank

<table>
<thead>
<tr>
<th>Bank Assets</th>
<th>Number of Banks (January, 1979)</th>
<th>Number of Banks (August, 1979)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Two-Tier Banks</td>
<td>Banks Generally Lending Below Prime</td>
</tr>
<tr>
<td></td>
<td>Individual Banks</td>
<td>Banking Groups</td>
</tr>
<tr>
<td>Over $1 billion</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>$100 million to $1 billion</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Less than $100 million</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>Unspecified</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: Compiled by Brimmer and Company from Federal Reserve Board and Small Business Administration statistics.

a/ Includes 48 subsidiaries of two bank holding companies.
b/ Includes the 2 bank holding companies identified in note a/ above.
c/ Includes 5 subsidiaries of two bank holding companies.
d/ Includes the 2 bank holding companies identified in note c/ above.
few months. This is equivalent to 36.5 new participants per month between November 16, 1978, and January 22, 1979. Thereafter, the rate at which new entrants adopted the concept slowed such that between January and August, 1979, the number of banks offering specific discounts from their prime rates to small business borrowers grew by only 4.7 per month.

Although the change between the two periods was less dramatic for banks that generally offered interest rates below the national prime rate, the pattern of evolution was the same as for banks offering specific discounts below prime. In January, 1979, the "generally below prime" banks numbered 19 and increased to 58 by August of that year. This was equal to a participation rate of 9.5 new banks per month between November, 1978, and January, 1979. However, during the period from January to August, 1979, the participation rate declined to 5.6 banks per month. This pattern of new participation suggests that the program reached a plateau of initial practical application fairly rapidly.

1/ The date that the Mellon Bank's Two-Tier Program began.

2/ The date on which the Small Business Administration first documented participation in its Two-Tier Program.
The asset size characteristics of participating banks can also be seen in Table 5. When only the number of individual banks is considered, exactly one half of those first year participants offering Two-Tier interest rates had assets of less than $100 million. However, when those participants belonging to the same holding company are grouped together, 50.8 per cent have assets in excess of $1.0 billion. Under the same groupings, another 41.3 per cent have assets of at least $100 million. This strongly suggests that there is a correlation between a bank's ability to offer special interest rate discounts to small businesses and the size of its asset base.

However, this does not appear to be true for banks that generally offer interest rates below the national average prime rate. Table 5 shows that of the 58 such banks in August, 1979, none had assets above $1.0 billion, and only 8.6 per cent had assets between $100 million and $1.0 billion. More than three-quarters of the banks in this category reported assets of less than $100 million. Despite the fact that 13.8 per cent did not specify their asset size, it seems reasonable to conclude that smaller banks more often offer general rather than specific dis-

1/ As of August, 1979.
counts below the national average prime rate. The reasons for this are probably related to the competitive position of small banks relative to larger lending institutions.

Table 6 illustrates the evolution of participation by Small Business Administration statistical region. It shows that participation was relatively higher in the heavily industrialized North East and North Central regions. This is a logical outcome given the concentration of banking establishments in those areas. However, it may also be seen as an accomplishment - given the Small Business Administration's objective of increasing credit availability in areas where small manufacturers are primarily located.

**Interest Rates Offered by Participating Two-Tier Banks**

The range of preferential interest rates offered to small businesses by participating Two-Tier banks is illustrated in Table 7. The pattern suggests that reported discounts from each bank's prime rate ranged from 3/4 per cent to 2.0 per cent. Throughout the first year of the program, the largest group of participants (50.6 per cent in January and 40.2 per cent in August, 1979) offered discounts below-prime of 1.5 per cent. Significantly, most of the banks joining the program after January, 1979, offered discounts - below-prime of less than 1.5 per cent. This indicates that not only did the rate at which new banks joined the program decline after January, 1979, but the size
Table 6
Number of Banks Participating in the SBA Two-Tier Prime Rate Program, by Statistical Region a/
January through August, 1979

<table>
<thead>
<tr>
<th>REGION</th>
<th>January, 1979</th>
<th>April, 1979</th>
<th>August, 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Two Tier Banks</td>
<td>Number of Two-Tier Banks</td>
<td>Number of Two-Tier Banks</td>
</tr>
<tr>
<td>I</td>
<td>8</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>II</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>III</td>
<td>11</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>V</td>
<td>7</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>VI</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>VII</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>VIII</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>IX</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>X</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>107</td>
<td>107</td>
</tr>
</tbody>
</table>

Source: Compiled by Brimmer and Company from data supplied by the Small Business Administration

(Footnotes on Next Page)
of offered discounts below-prime also declined in the same period. Given the general acceleration in prime rates throughout 1979, this was a troublesome development for the program.

It should be emphasized that the interest rates obtained after discounting each bank's prime rate were considered to be base rates. This meant that each bank reserved the right to consider the credit-worthiness of each small business loan applicant before setting a final interest rate. It is likely, therefore, that many loans made under the program carried interest rates above either the national average prime rate or the prime rate of the lending institution.

Eligibility Criteria Established by Bank Participants

Considering the credit-worthiness of each small business loan applicant before setting a final interest rate was only one method participating banks used to minimize their risks under the program. Another method was to adopt eligibility criteria which borrowers had to meet before they could even be considered for discounts below a bank's prime rate. The three most important and widely used of these criteria were: (1) the asset size of the small business applicant; (2) the uses to which the loan proceeds were to be put; and (3) the size of the requested loan.
Table 7
Small Business Base Rates Offered by Two-Tier Participating Banks and the Number of Banks Adopting Each Base Rate by Reporting Date

<table>
<thead>
<tr>
<th>Base Rate: Maximum Percentage Discount Below the Participating Banks Prime Rate</th>
<th>Number of Participating Banks Adopting Base Rate</th>
<th>January, 1979</th>
<th>August, 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00 per cent</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1.50 per cent</td>
<td>40(^{a/})</td>
<td>43(^{a/})</td>
<td></td>
</tr>
<tr>
<td>1.25 per cent</td>
<td>12</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>1.00 per cent</td>
<td>14(^{b/})</td>
<td>20(^{b/})</td>
<td></td>
</tr>
<tr>
<td>0.75 per cent</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Discount not specified</td>
<td>11</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Total number of participants</td>
<td>79</td>
<td>107</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by Brimmer and Company from data supplied by the Small Business Administration.

\(^{a/}\) Includes 36 subsidiaries of a single holding company.

\(^{b/}\) Includes 12 subsidiaries of a single holding company.
The 10 Small Business Administration statistical regions are:

Region I. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut;
Region II. New York and New Jersey;
Region III. Pennsylvania, Delaware, Maryland, The District of Columbia, Virginia and West Virginia;
Region IV. North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, and Mississippi;
Region V. Ohio, Indiana, Illinois, Michigan, Wisconsin, and Minnesota;
Region VI. Arkansas, Louisiana, Oklahoma, Texas, and New Mexico;
Region VII. Iowa, Missouri, Nebraska, and Kansas;
Region VIII. North Dakota, South Dakota, Montana, Wyoming, Colorado, and Utah;
Region IX. Arizona, Nevada, California, and Hawaii; and,
The information in Table 8 summarizes the maximum borrower asset size allowed by banks offering discounts below their prime rates. None of the banks that publicized their borrower size criteria considered customers having assets in excess of $1.5 million as eligible borrowers under the program. Most of the individual participating banks (67.1 per cent in January and 55.1 per cent in August, 1979) limited eligibility to borrowers with assets of not more than $1.0 million. However, it should be noted that, of the 59 banks in August, 1979, that limited eligibility to borrowers having $1.0 million or less in assets, 36 (61.0 per cent) belonged to a single holding company, and 12 (20 per cent) belonged to a second holding company.

It is also significant that most of the new participants in the program following January, 1979, either established borrower size criteria below $1.0 million or refused to disclose maximum asset size of eligible borrowers. When viewed within the context of the general slow-down in the rate of new participation, and the reductions in the level of interest rate discounts offered after January, 1979, this development cannot be seen as a positive occurrence.

The uses to which loan proceeds could be put specifically excluded highly speculative ventures. Among the uses disallowed by participating banks were
<table>
<thead>
<tr>
<th>Maximum Borrower Asset Size Allowed by Participating Bank</th>
<th>Number of Participating Banks Adopting Asset Size Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January, 1979</td>
</tr>
<tr>
<td>$1.5 million or less</td>
<td>15</td>
</tr>
<tr>
<td>$1.0 million or less</td>
<td>53&lt;sup&gt;2&lt;/sup&gt;/</td>
</tr>
<tr>
<td>$0.5 million or less</td>
<td>4</td>
</tr>
<tr>
<td>Unspecified</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>79</td>
</tr>
</tbody>
</table>

Source: Compiled by Brimmer and Company from data supplied by the Small Business Administration.

<sup>a/</sup> Includes 48 subsidiaries of two holding companies.
investments in common stocks, commodity futures contracts, certain real estate and oil and gas ventures, and tax shelters. Permissible uses included plant expansions, equipment purchases, and certain purchases for inventory.

The ceilings established on loans made under the program varied considerably from one bank to the next. Generally, the largest permissible loan did not exceed $500,000, while the smallest loans were around $250,000. Most participating banks limited their loan ceilings to approximately $400,000.

First Year Impact of the Two-Tier Interest Rate Program on Bank Participation: An Analysis

Despite several notable achievements, the results of the first year of the Small Business Administration's Two-Tier Program can best be described as mixed. Among the achievements were enlisting the active cooperation of 170 banks, and disseminating information about the program to several thousand small businessmen. The program also stimulated useful debate on the appropriate forms of credit assistance to small businesses. However, these results have been partly overshadowed by the program's apparent inability to increase substantially the number of bank participants.

The 170 banks that participated during the first year of the program represented only 1.2 per cent of the 14,000 banks operating in 1979. This low participation level
partly reflects the fact that many of the issues participation raised could not easily or quickly be resolved. For example, industry trade groups (such as the American Bankers Association, the Independent Bankers Association, and several state organizations) felt that any agreement among their members to fix interest rates, regardless of the purpose, would be a violation of U.S. antitrust statutes. This is a valid area of concern.

Other important objections were raised by individual nonparticipating banks in their responses to the Small Business Administration's solicitation for cooperation. These objections may be summarized as follows:

1. It is unfair to single out one segment of customers for preferential treatment. This is especially so where most of the bank's customers are small businesses.

2. For small businesses, the availability of credit is more important than the interest rate.

3. Most of the banks actually participating in the Two-Tier program have few small business customers.

4. The determination of the interest rate is best left to market forces.

5. Small banks are small businesses. Most of their customers also are small businesses. Given the high cost of money and the high cost of servicing loans, small banks cannot afford to offer preferential rates to small businesses.
6. A case-by-case method which assesses each customer's needs and credit history is preferable to an across-the-board program for small businesses.

7. There are approaches, other than a Two-Tier interest rate, which facilitate the availability of credit to small businesses.

The objection most often expressed by responding non-participating banks was that it was unfair to single out one group of borrowers for special treatment. This objection was expressed primarily by nonparticipating large banks having numerous large borrowers among their customers. Included in this group of respondents are the $3.9 billion Girard Bank of Pittsburgh, Pennsylvania; the $1.4 billion First Tennessee Bank of Memphis, Tennessee, and the $3.3 billion National City Bank of Cleveland, Ohio.

Smaller banks and those whose customer base is primarily small businesses objected to the program on grounds that to reduce interest rates uniformly for their small business customers would cause undue harm to their entire financial structure. Illustrative of the comments in this regard were those received by the Small Business Administration from the Zions First National Bank, Salt Lake City, Utah.
A large percentage of our total business is with what may be properly classified as small businesses. Therefore, if we were to adopt a lower rate system for such companies, we would be automatically having to reduce the rate charged to all such businesses. We couldn't arbitrarily make a better rate for a few of our smaller business concerns than we could for others and feel justified in doing so. There is no comparison between our bank and banks such as Mellon Bank, Morgan Guaranty, and other banks mentioned in your letter. I would venture to say that if you were to analyze the loan portfolio of Morgan Guaranty Trust Company, you would find that far less than 5% of their total loans would be to small businesses. So it would be very simple for them to state that they will make special rates to those kinds of concerns because there are so few of them. But in our case, we are almost the extreme opposite.1/

Zions' objection to the Two-Tier program is simultaneously philosophical, practical, and economic. Not only do they find it difficult to "justify" granting some of their small business customers lower rates than others, they also imply: (1) that, even if it were justifiable, it would still be difficult to determine an equitable cut-off point; and (2) that it would be costly. Each of these concerns was echoed by other banks.

Notwithstanding the above objections, the ability of an individual bank to participate in the Two-Tier Program appears to be a function of its size and competitive conditions in its local market area. Size is important because sound bank management requires that

1/ Letter from Roy W. Simmons, President, Zions First National Bank, One Rain Street, Salt Lake City, Utah, dated April 25, 1979.
reduced earnings incurred on loans made below prime rates to small businesses must be offset by increased earnings on loans to others. Large banks with more diversified loan portfolio can more readily accommodate such an offset than can smaller banks.

Further, large banks, located in areas where personal incomes are relatively high and the marginal propensity to save is more responsive to the cost of money, generally have more control over their liquidity and money costs than do smaller banks. One reason for this is the fact that an individual bank can vary its liquidity and money costs by varying the yields it offers on certificates of deposit, and by varying the range of other saving services offered to depositors. However, small banks usually have less flexibility in this regard than larger banks because smaller banks typically attract smaller deposits.

Given the fact that certain loan costs are constant regardless of the size of the loan (e.g., the salaries of loan officers and support staff), it could have created a serious squeeze on profits if some small banks had rushed to adopt the Two-Tier scheme without paying adequate attention to local market conditions. Therefore, it is not surprising that first year participation in the Two-Tier Program was mostly concentrated among large banking institutions located in heavily industrialized and
densely populated regions. Nor was it unexpected that first year participation has been relatively limited in terms of the proportion of total banks enrolling in the program.
SECTION V

VOLUNTARY FOREIGN CREDIT RESTRAINT PROGRAM

From March, 1965, to January, 1974, the Federal Reserve System Administered a Voluntary Foreign Credit Restraint Program (VFCCR). While the program was aimed at improvements in the U.S. international financial position, it also had a credit allocation effect. It did distinguish between domestic and foreign credit demands, since it limited the amount of the latter which banks and nonbank financial institutions could meet from their head offices in the United States.

The VFCCR was part of a series of Federal Government programs to moderate capital outflow and improve the country's balance of payments. When announced by President Lyndon Johnson on February 10, 1965, the programs were both voluntary and temporary. But three years later, the balance of payments was still in substantial deficit, and a major component of the programs was made mandatory.

This outcome was unanticipated. The key parts of the programs - administered separately by the U.S. Department of Commerce and the Federal Reserve Board - were launched against the background of a dramatic rise in the movement of U.S. funds abroad. However, it was also generally assumed within the Federal Government that the nation's external financial position was fundamentally
strong and that restraints on capital outflows were required only to provide short-term assistance until the basic strength of our trade surplus, rising earnings on direct investment, and other favorable elements could coalesce to restore a lasting balance. To a considerable extent, the business and banking community accepted this view and cooperated with the Federal Government in an effort to achieve the stated objectives. But within six months after the programs were launched, U.S. military activity in Vietnam was accelerated, and the country became enmeshed in a web of inflation. Both effects had seriously detrimental effects on our balance of payments.

At the end of February, 1974, the VFCR and the other restraints on capital outflows were abolished. The main motivation was political. The Nixon Administration thought that, since the U.S. dollar had been floating in the foreign exchange market since early 1973, capital restraints were incompatible with the operation of the free market.

Origins of the Balance of Payments Programs

Before proceeding further, it might be well to remind ourselves briefly of the circumstances which necessitated the adoption of restrictions on capital outflow. It might be recalled that the first step in this direction was the proposal of the Interest Equalization Tax (IET) in mid-1963, and its adoption about a year later. The measure was designed to lessen the attractiveness of the U.S. capital market to borrowers in Europe and other developed countries.
This first step itself was taken against the background of heavy balance of payments deficits to which a rising outflow of private capital was making an increasingly large contribution. For example, during the late 1950's, the movement of private capital from this country averaged about $2-1/2 billion per year; but in the 1960-64 period, the annual average was roughly $4-1/2 billion. In the single year 1964, the net outflow of private funds reached $6-1/2 billion. In contrast, during these years, the U.S. had the advantage of a large and growing surplus in exports of goods and services - which exceeded $8-1/2 billion in 1964. Nevertheless, our total payments abroad greatly outweighed our receipts from abroad, so substantial deficits appeared in the late 1950's and persisted into the early 1960's.

The second move in the evolution of restrictions on private capital outflow was triggered by a sharp deterioration in our balance of payments in the closing months of 1964. When the IET was adopted, it did not cover long-term bank lending, and this exemption encouraged foreign borrowers to shift from the sale of bonds in the U.S. market to reliance on bank financing. Simultaneously, other types of capital outflows (particularly direct investments and short-term bank credits) which were not subject to the IET also rose rapidly. By the last quarter of 1964, the balance of payments (measured on the liquidity basis) was in deficit.
at an annual rate of $5 billion, and private capital outflows were at an annual rate in excess of $8 billion.

Out of these developments came the voluntary balance of payments programs announced in February, 1965. At the time, it was fully realized that the voluntary restraint of capital outflows was an innovation. The classic solution to the balance of payments problem would have called for a substantially restrictive monetary policy, considerably reduced credit availability, and higher domestic interest rates. This policy was avoided because it would have hampered efforts to encourage an expansion of output as a means of reducing the prevailing high level of unemployment and of shrinking the backlog of unused resources. Furthermore, there was reason to believe that higher interest rates in the United States would have been countered by higher rates abroad - with no net benefit to our balance of payments. Under these circumstances, it was thought best to tackle the problem at its source - that is, to limit our capital outflow to a figure more nearly equal to our current account surplus, while at the same time pressing vigorously toward achieving an optimum rate of economic growth.

The Voluntary Foreign Credit Restraint Program: A Review

In appraising the performance of the Voluntary Foreign Credit Restraint Program (VFCR) relating to financial
institutions, it is well to bear in mind that it was one component of a comprehensive set of restrictions which affected capital outflow in varying degrees. At the time the VFCR was launched in February 1965, the IET was extended to cover long-term bank loans to foreigners. As mentioned above, a voluntary program to moderate direct foreign investment by nonfinancial corporations (administered by the U.S. Department of Commerce) was part of the same announcement. (It will be recalled that the latter program was made mandatory by Executive Order as of January 1, 1968.) Each part of this set of restraints reinforced the others. None of them would have been effective without the others. Moreover, the administration of the parts (and this is especially true of the VFCR and the direct investment regulations) was coordinated as much as possible. In the rest of this assessment, however, most of the comments are restricted to the VFCR.

The Federal Reserve program remained voluntary, although the Board had authority under the January 1, 1968, Executive Order to make it mandatory. The general structure changed little during the life of the program: it involved an overall ceiling (which was modified several times), based generally on the holding of foreign assets at the end of 1964. Within this ceiling, managers of financial institutions were free to make their own decisions, but they were asked to give priority to credits to finance U.S. exports.
and to meeting the needs of developing countries. In late 1969, these priorities were given more emphasis. The guidelines for 1968 contained a request that financial institutions refrain from making new nonexport term loans to developed countries of Continental Western Europe (and in the case of banks that they reduce their ceilings by the amount of repayment of such loans). The bank guidelines for 1970 established a separate ceiling for export term loans. Finally, on February 28, 1968, Canada was exempted from all the U.S. balance of payments programs and, on its side, undertook to ensure that Canada would not be used as a "pass through" for U.S. funds to flow to third countries. The general structure of the VFCR applied to both the bank and nonbank financial institution programs. However, because of key differences in the foreign investment portfolio of the two types of institutions, a few differences in treatment were necessary. The major difference was that as of the end of 1969, over 90 per cent of the $10.2 billion of the banks' foreign assets were covered by the guidelines, whereas nearly 90 per cent of the $14-1/2 billion of foreign assets of the nonbank financial institutions were exempted. For banks, the exceptions were more related to institutional arrangements than to types of assets. For the nonbank institutions loans to Canada (nearly $10-1/2 billion), bonds of international institutions (about $1 billion), and around $1-1/2 billion in loans with maturities of ten years or longer and equity investments in the developing countries (and initially in Japan)
were not subject to guideline ceilings. Other aspects of the nonbank guidelines - the emphasis on export financing and the desirability of refraining from new nonexport loans or investments in the developed countries of Continental Western Europe - paralleled those for banks.

The guidelines for the banks announced on December 17, 1969, include a major innovation: a separate ceiling for term credits financing exports of U.S. goods and services was added. The banks then had a general ceiling of $10.1 billion - equal to their adjusted ceilings under the 1969 guidelines. This could be used for any purpose, although the banks were requested to continue to observe the priorities in the use of this general ceiling. In addition, they got a ceiling equal to one-half of one percent of total assets as of December 31, 1968, to use for making export loans with maturities of one year or longer and in amounts of $250,000 or more. This provision added about $1.5 billion to existing ceilings, bringing the aggregate to $11.6 billion.

Several troublesome issues (which at times bordered on controversy) surrounded the VFCR almost from its very beginning. Undoubtedly, the most vigorously debated of those (both in and out of Government) was the assertion that the program hampered U.S. exports and thus reduced (if not erased) any benefits it may have yielded for the balance of payments. In fact, when the VFCR guidelines were first drafted, the Federal Reserve was urged to exclude export credits from the ceiling. This argument was
never accepted by the Board. Instead, the Board always tried to allow ample room for necessary financing of an expansion in exports. Throughout the life of the VFGR, the banking system as a whole maintained a substantial leeway under which credits could have been extended to meet the needs of U.S. exporters and their foreign customers. Moreover, no statistical study of the trends in exports since 1964 supports the proposition that additional amounts of bank credit extended to foreigners would have increased exports by a like amount. Yet, such a growth in bank lending abroad certainly would have added some amount to our balance of payments deficit. On the other hand, individual banks from time to time may have had to relinquish this credit business to other banks in easier positions under the guidelines.

Nevertheless, the Board did provide a separate ceiling for export credits when the program was revised in December, 1969. In taking this step, the Board wanted to give renewed emphasis in the program to the importance that was attached to improving our balance of trade. The additional latitude for export financing within an overall ceiling was intended to provide even more assurance that the restraint program would not cost the country export sales. On the other hand, to have exempted export credit entirely would have entailed a risk of capital outflows of unknown dimensions and thus would have made the restraints largely meaningless.

Another troublesome issue arose because of the inequities inherent in a program which rested so heavily on the relative
position of individual banks in international finance
as of December 31, 1964 - the base date for most banks
under the VFCR. Of the 13-1/2 thousand banks in the
United States, about 160 (less than 2 per cent) reported
regularly under the program. The rest did not have even
a token amount of foreign assets. However, given the
relatively small size of the average bank - and the com-
plexities of foreign lending - this situation was not
surprising.

The real problem arose because the launching of the
VFCR caught a number of banks of substantial size in the
midst of starting new or expanding existing but modest
international departments. For the most part, these
institutions were essentially frozen out of participating
in foreign lending because they had virtually no base.
The high degree of concentration of foreign business among
a few banks can be seen in the fact that 20 of the 160
banks reporting consistently accounted for 75 to 80 per
cent of the general ceiling fixed under the VFCR. More-
over, it is known that some of the banks with large ceilings
(because they already had a substantial amount of foreign
assets at the end of 1964) used such ceilings as competitive
levers in seeking the business (including purely domestic
business) of firms that normally would have been accommodated
by their local banks.

The Federal Reserve was always troubled by these com-
petitive inequalities that were directly related to the VFCR.
Consequently, in November, 1967, an alternative method of
computing the ceiling was provided. Under this change, a bank had the option of adopting a ceiling equal to 2 per cent of its total assets as of December 31, 1966. The change was intended to give more flexibility to banks with small- and medium-sized bases. Unfortunately, this newly granted leeway had to be shaved drastically when the deterioration in the balance of payments made it necessary to tighten the various programs on New Year's Day of 1968. But each time the Board had an opportunity, it continued its efforts to reduce the inequities. In the spring of 1969, it modified the VFCR by raising the ceiling by about $400 million, and proportionately more of the increase went to the smaller banks. The same was true of the Export Term loan ceiling established in December, 1969. While the 20 leading banks had about four-fifths of the general ceiling, they got only slightly more than one-half of the special export ceiling. But despite these changes, competitive inequities remained a serious problem.

**Contributions of the VFCR to the Balance of Payments**

There is no need to present here a detailed catalog of the contributions of the VFCR to the balance of payments. (Furthermore, it would be virtually impossible to identify such unique assistance - if any - because of the role played by other programs as well.) However, the broad contours can be sketched.
In 1965, banks' foreign assets subject to the guidelines increased by only $150 million (compared with an increase of $2-1/2 billion in bank lending to foreigners in 1964), whereas the guideline ceilings would have permitted an increase of $500 million. This "swing" of about $2.35 billion was greater than the improvement in that year's balance of payments, as measured on the liquidity basis.

In 1966, when monetary policy became increasingly restrictive as domestic inflationary pressures intensified, the banks reduced their holdings of foreign assets by $150 million. In absolute terms, this represented a balance of payments improvement of $300 million. Nevertheless, the liquidity deficit was maintained at about $1.3 billion for the year. Because of the decrease in covered assets and an increase in the ceiling, the banks ended the year with a leeway under the program of almost $1 billion.

In 1967, monetary policy eased, and banks increased their holdings of covered assets by $370 million, contributing about $500 million to the $2.3 billion deterioration in the liquidity balance for that year. As mentioned above, when it became apparent that the balance of payments situation was worsening, the Administration reconsidered programs it had announced in November and set forth new, more restrictive programs on January 1, 1968.

Although the Federal Reserve program remained voluntary, for the first time the banks and nonbank financial institutions were asked to achieve an actual reduction in foreign claims
during the year - $400 million in the case of the banks, and $100 million for the nonbank financial institutions. The aggregate ceiling for banks was reduced from $11.1 billion to $10.1 billion, and bank leeway from $1.2 billion to about $200 million. Both the banks and the nonbank financial institutions exceeded the requested reductions. Bank holdings of covered foreign assets declined by more than $600 million, and the nonbank financial institutions by $240 million. Largely because of this good performance - and because of other fortuitous developments in the capital accounts - the United States ended the year with a small surplus on the liquidity basis. The trade surplus, however, declined to only $600 million.

In 1969, the banks increased their holdings of foreign assets by about $150 million. This figure includes a large outflow in December of that year. Much of that month's outflow was related to an extremely large volume of transactions which took place near the year-end. Prior to that development, the banks were showing a modest net inflow of funds compared with the level of foreign credits outstanding at the end of 1968.

Stimulation of Foreign Branches

One by-product of the VFCR program was not as helpful to the long-run international position of the United States as it appeared at first glance. This was the enormous expansion of foreign branches of U.S. banks. During the tenure of the program, there was an almost ten-fold rise in number of banks with branches abroad. It may be recalled
that, when the VFCR guidelines were formulated, assets on the books of foreign branches were not counted against the ceilings of parent institutions. Thus, shifting of foreign credits from the head offices to such branches became a convenient way for banks to keep within their ceilings. Before long, a number of banks applied for permission to open branches abroad - usually in London. By the end of September, 1969, the total dollar-denominated assets of foreign branches amounted to $28.9 billion. Just under half of this total had been placed with head offices in the U.S.; just over two-fifths had been lent abroad - including loans to U.S. firms and their foreign affiliates to finance direct investment - and the remaining 10 per cent represented claims on other foreigners. In terms of sources of funds, about two-thirds of the total had been derived from foreign banks - acting primarily as vehicles for mobilizing and redistributing Euro-dollar deposits.

But the really dramatic story of the expansion of foreign branches in partial response to the restrictions imposed by the VFCR is to be found in the so-called "Nassau" branches. These are limited service or "shell" branches established in the Bahamas. At the end of September, 1969, 22 U.S. banks (20 Federal Reserve members and 2 nonmembers) had opened such facilities - and they had no branches in other foreign areas. The Board started approving the creation of Nassau branches in early 1969, and they grew
rapidly in both number and size. By September of that year, the Nassau branches held just over $1 billion in total liabilities, about 80 per cent of which represented Euro-dollar deposits. Almost three-fifths of the funds had been placed with the branches' U.S. parents.

Thus, while the desire to escape the restrictions of the VFCR program was a major factor inducing some banks to open Nassau branches (and about one-third of their assets represented claims on non-U.S. borrowers), many of them came to serve primarily as a means of providing their head offices with Euro-dollars. Because of the low cost of a typical Nassau branch (amounting to only a few thousand dollars and involving few if any full-time employees) compared with a full-scale branch in London or in Continental Western Europe (which ran as high as $400-$500 thousand), these banks found the Bahamas an attractive location. This was so despite the fact that the advantages of more traditional foreign financial centers - particularly proximity to corporate clients - cannot be found in Nassau.

But aside from these considerations, the rapid growth in the number and scale of foreign branches of U.S. banks came to hold serious implications for our balance of payments in the long-run. Undoubtedly, well-established branches of U.S. banks (particularly in Europe) could be expected to expand in any case to accommodate the rising activity of their clients abroad. Yet, the drastic shift in emphasis of the banks' foreign operations toward foreign
branches could lead to a lessening of the incentive for banks in the U.S. to engage in activities that might promote exports. That was one of the considerations underlying the decision to provide more leeway under the VFCR for export financing.

Status of Controls on Foreign Lending at Termination of the VFCR

As indicated above, Government-imposed restraints on foreign lending were ended in early 1974. At that time, the program applied not only to U.S. commercial banks and U.S. nonbank financial institutions but to U.S. agencies and branches of foreign banks as well.

As of November 30, 1973, commercial banks reporting to the Federal Reserve Board under the VFCR Guidelines had aggregate ceilings on foreign lending of $10.3 billion. This level was about $60 million higher than that reported at the end of 1972. The rise is traceable mainly to the adoption of Guideline ceilings by banks launching foreign activities or expanding them beyond some minimum level exempted under the Guidelines. Assets held by the banks for their own account and subject to restraint totaled $9.2 billion at the end of November. Thus, the banks had an aggregate net leeway to expand lending under the Guidelines of $1.1 billion—roughly the same as the leeway available at the end of 1972.

It should be noted, however, that the banks held total foreign assets on the books of their head offices equal to $16.2 billion on November 30, 1973. Over two-fifths of this
amount (or $7.0 billion) were exempt from VFCR restrictions. These exempted assets consisted of $867 million of loans to Canadian borrowers, $5,860 million of export credits (other than to residents of Canada), and $261 million of other foreign assets. Over the preceding two years, the exempted proportion of commercial banks' foreign assets had risen appreciably. This was due primarily to the removal of VFCR ceilings on export credits in November, 1971, as mandated by the Congress. At that time, the banks were holding $2.8 billion of export credits. On the same date, they held for their own account $11.7 billion of total foreign assets, $8.6 billion of which were covered by the VFCR. They also held $218 million of Canadian assets and $104 million of other foreign assets. So, with the exemptions of export credits, the banks' foreign assets not covered by the VFCR amounted to $3.1 billion in November 1971. Two years later, this figure had risen by $3.9 billion to $7.0 billion. Four-fifths of this gain (or $3.1 billion) was accounted for by loans to exporters; one-sixth ($649 million) by Canadian assets, and the remainder ($157 million) by other foreign assets.

Over the years, commercial banks subject to the foreign lending restraints generally operated within the ceilings established under the VFCR Guidelines. However, during the first half of 1973, when international money markets were subjected to extreme pressures, many banks temporarily exceeded their foreign loan ceilings as they responded to unanticipated credit demands by their foreign
customers. This was especially true during February and May. But in most cases, the banks were able to correct the ceiling averages quite rapidly - in some cases at considerable costs, including liquidating assets at a loss or shifting assets to foreign branches to be financed by high-cost Euro-dollars.

U.S. Agencies and Branches of Foreign Banks

During the early 1970's, foreign-owned commercial banks came to play an expanding role in the United States' money and capital markets. For a number of reasons (including State regulations as well as private operating advantages) these institutions were generally organized as agencies and branches under State laws (mainly in New York and California). Agencies could not accept deposits (except those related to international transactions). They were free, however, to engage in a variety of domestic and foreign lending activities. Historically, most of the agencies were of Canadian origin. But, as the 1960's ended, banks in Japan, the United Kingdom, and a number of other countries established agencies in the United States. The number of U.S. branches of foreign banks also expanded substantially. In November, 1971, 49 agencies and branches of foreign banks were reporting to the Federal Reserve Board under the VFCR program. By November, 1973, that number had risen to 71. Unlike U.S. banks, these foreign owned institutions could have offices in several States - so long as they did not have separately incorporated commercial banks located in more than one state.
and thus subject to the prohibitions of the U.S. Bank Holding Company Act.

When the VFCR Guidelines were first issued in early 1965, agencies and branches of foreign banks were asked to observe the spirit of the restraints - but they were not subjected to fixed ceilings on foreign loans as were U.S. commercial banks. Over the next few years, the agencies' and branches' foreign assets expanded significantly. This was especially true of their loans to Japanese borrowers. In response to these developments, in November, 1971 (when a major revision was made in the Guidelines), these institutions were requested informally to keep the expansion of their foreign assets roughly in line with the increase in the funds obtained from their own parent banks and from other non-U.S. sources. The response to this request was positive, but its intent apparently was not fully understood, and its interpretation varied somewhat among Federal Reserve Banks. Moreover, U.S. agencies and branches of foreign banks contributed substantially to the capital outflows which occurred during the early months of 1973. In the light of these developments, the VFCR Guidelines were amended in July, 1973, and made to apply formally to them.

In November, 1971, the foreign assets of the U.S. agencies and branches totaled $2.8 billion. On the same date, foreign assets of U.S. commercial banks amounted to $11.7 billion. Thus, the agencies and branches had about one-fifth of the total foreign assets held by the two
groups combined. They held nearly the same proportion of assets of the type subject to the VFCR and of export credits. They held about one-quarter of the total assets exempt from the VFCR and over half of the Canadian assets. Between November, 1971, and June, 1973, however, the agencies and branches expanded their foreign assets to $7.0 billion, while the assets of U.S. commercial banks rose to $16.3 billion. Moreover, their growth was concentrated in assets of the types that were restricted by the VFCR Guidelines as far as U.S. commercial banks were concerned. For example, agencies and branches accounted for nearly half of the expansion in total foreign assets held by the two groups - but for almost three-quarters of the expansion in the assets subject to the VFCR. In contrast, they accounted for roughly one-third of the growth of the remaining categories of foreign assets. So, by the end of June, 1973, they had about one-third of the total foreign assets and of VFCR-covered assets held by the two groups combined. They also held just over one-quarter of all exempt assets and of export credits.

Against the background of these developments, the U.S. agencies and branches of foreign banks were asked formally on July 19, 1973, to observe quantitative limits in extending credit to foreign borrowers. Specifically, the Guidelines as amended permitted these institutions to increase their claims on non-U.S. residents to the extent that they increased
the amount of funds they borrowed from their own parent banks and from non-U.S. sources. June 30, 1973, was set as the base date for calculating changes in foreign assets of the types subject to restraint and changes in offsetting foreign liabilities. At the time, however, the amendment did not - and was not intended to - change the degree of restraint affecting these institutions.

U.S. agencies and branches began in July, 1973, to report to the Federal Reserve Board under the amended Guidelines described above. As of November 30, 1973, they held for their own account foreign assets subject to restraint in the amount of $5.1 billion, and their foreign liabilities totaled $10.4 billion - leaving them with a net foreign position of minus (-) $5,280 million. This latter figure can be compared with the base net foreign position (as determined on June 30, 1973) which they required at the end of November to be in conformity with the VFCR Guidelines. That requirement was minus (-) $4,605 million. Thus, they had an aggregate leeway of $675 million.

During the first 11 months of 1973, the agencies and branches increased their holdings of assets of the types subject to restraint by almost 80 per cent. However, the rise in their foreign liabilities was even more rapid: in the period July-November, the increase in liabilities outstripped the increase in assets subject to restraint by $675 million. This was the leeway mentioned above that was
available to them at the end of November, 1973, to expand
loans to their foreign customers. These institutions - as
was true of U.S. commercial banks - expanded substantially
their financing of U.S. exports. In the year through
November, their holdings of export credits increased by
62 per cent.

**Nonbank Financial Institutions**

As of September 30, 1973, U.S. nonbank financial
institutions (including nonprofit organizations) held
$17.4 billion of foreign assets for their own account.
Of this amount, $16.2 billion (or 93 per cent of the
total) were exempt from the VFCR Guidelines. Three-
quarters of the exempted assets (or roughly $12.2 billion)
consisted of investments in Canada, other than export
credits. Direct obligations of international institutions
($1.2 billion) and long-term investments in developing
countries ($1.4 billion) accounted for most of the remaining
exempt assets. Export credits amounted to only $140
million.

These institutions had aggregate VFCR ceilings of
$1,703 million at the end of September, 1973. They had
foreign assets subject to the ceiling of $1,150 million
However, they had outstanding foreign borrowing of $206
million which could be used to offset part of their foreign
claims. Thus, they had an aggregate leeway of $759
million. During the course of 1973, their holdings of
assets exempt from restraint were essentially unchanged.
Last VFCR Program Changes

On December 26, 1973, the Federal Reserve Board announced several amendments to the VFCR Guidelines. The amendments represented a relaxation in restraint effective January 1, 1974. The changes were announced simultaneously with the reduction in the rate of the Interest Equalization Tax and the relaxation of the Foreign Direct Investment Regulations - administered by the Treasury Department and the Department of Commerce, respectively.

For the VFCR-participating financial institutions, one element of relaxation was an increase in the minimum ceiling applicable to foreign assets of the types subject to restraint. These minimums were raised from $500 thousand to $10 million for banks; from $1 million to $10 million for U.S. agencies and branches of foreign banks, and from $500 thousand to $2 million for nonbank financial institutions. For institutions with ceilings higher than the new minimum ceilings, the ceilings were raised by 4 per cent for banks, agencies, and branches and by 5 per cent for nonbank financial institutions. For all VFCR-participating financial institutions, subsidiary restraints relating to loans to residents of developed countries of continental Western Europe were abolished.

Concluding Observations

At this point, we can summarize the salient conclusions emerging from this assessment of the Federal Reserve's voluntary foreign credit restraint program over its six-year life:
The major objective of the program, to restrain the growth in foreign lending and investment of U.S. financial institutions, was achieved. In every year, 1965-73, the amount of foreign assets outstanding was less than the amount that would have been permitted under the guidelines - in most years by substantial amounts. Moreover, the total amount of such lending and investment was lower at the termination of the VFCR than the targets set in the early years of the program.

While achieving this main objective, the cooperating banks and other financial institutions were mindful of two other important national goals: Ensuring that sufficient credit was available to finance U.S. exports and to help meet the needs of the developing countries.

The basic design of the program remained essentially unchanged over the years: It remained voluntary, and it established an overall ceiling within which interference with management decisions was minimized. However, during the last few years, the program became somewhat more specific.

The program affected the pattern of U.S. international banking. Competitive inequities among banks developed, and a network of foreign branches was stimulated whose long-run impact could not be seen clearly.

Finally, our balance of payments situation did require some kind of restraint on the outflow of U.S. private capital in the years from 1965 through 1973. The VFCR helped to achieve that goal.
SECTION VI

FOREIGN CENTRAL BANKS AND CREDIT ALLOCATION

The allocation of credit through various selective controls has been pursued by a number of central banks. In the post-World War II era, Western European nations adopted controls to aid in the allotment of credit to certain priority sectors of their economies. Activities by four of these central banking systems (the Bank of England, the Banca d'Italia, the Banque de France, and the Bundesbank of the Federal Republic of Germany) are examined in this section.

In contrast with the Western European history and practice, the resort to credit allocation in other regions is a more recent phenomenon. Within the last two decades, countries in the developing world have devised central bank instruments to influence selective credit flows. Credit practices followed in Latin American and Asian nations and in a number of African countries are evaluated.

Although many credit control tools are authorized by the individual central banks, certain ones seem to be in routine use. These include both direct and selective controls. Direct control of loans and investments has been employed frequently. Some central banking systems require prior authorization of loans above a maximum amount; other systems set loan limits or ceilings for particular sectors of the economy.

Special reserve requirements have also been used. Frequently these reserve funds have been used for housing and
construction. Moreover, where preferential discount policies exist, they are almost always applied to favor export trade and agricultural activities. These discount procedures include low interest rates, exemptions from ceilings, and easier eligibility requirements. Conversely, higher requirements are frequently applied to imports, especially imports of luxury items.

Currently, it seems that credit allocation practices are losing favor among Western European countries. With accelerating inflation and the concern about financial intermediation outside the traditional financial institutions, greater reliance is being placed on market forces and the allocation of resources by the price system. However, the reverse trend appears evident in the other regions of the world. With the continued demands for economic development, countries in Latin America, Asia, and Africa are turning increasingly to a wide range of credit allocation devices which are administered by their central banks.

These central banks have adopted a variety of innovative steps to encourage economic development. The mobilization of domestic savings has been of primary concern. In some countries, measures have been taken (such as lifting low interest rate ceilings) to assure that savers receive a realistic rate of return relative to inflation. The results of these efforts have been generally satisfactory.

In other countries, central banks were authorized to conduct a commercial banking business, and some of them were
given specific development assignments as well. In still other countries, central banks have provided strong support to the formation of separate institutions that provide development finance. Some central banks have supplied capital for agricultural and industrial development banks through credit extensions, purchases of their securities, and assistance in creating a market for their obligations.

Perhaps the most innovative efforts by central banks have concentrated on measures to influence the flow of commercial bank credit away from traditional uses (such as the finance of foreign trade and domestic commerce) and toward development projects. A wide range of instruments has been brought to bear in pursuit of this objective. The most popular of these have included preferential discount rates, differential reserve requirements, guidelines on the composition of loan portfolios, and ceilings on specific kinds of credit.

While experimenting with innovations to promote economic development, central banks in developing countries have not generally neglected the main functions traditionally associated with central banking. In particular, they have tried to maintain domestic price stability and equilibrium in their country's balance of payment.

In general, a few attempts by industrial countries to allocate credit seem to have been particularly successful. But, on the whole, results have been rather mixed. While many developing
country central banks have been fairly successful in pursuing this objective, a number have also found the results of their efforts disappointing.

United Kingdom

The Bank of England maintains informal but forceful influence over key financial institutions of that country. That influence has been exercised traditionally through the Bank's discount rate - which sets a floor for short term interest rates generally. The Bank's credit allocation tools have included differential interest rates, loan ceilings with exemptions for designated credit categories, and regulation of individual credit sectors.

The credit restrictions imposed by the Bank of England have no statutory basis, as is common with most English central bank controls. However, the desire of financial institutions to stay within the good graces of the Bank is generally sufficient to assure compliance with these voluntary arrangements. Nevertheless, the Bank has various sanctions it can invoke if the informal arrangements fail. These include reducing the interest paid on special deposits and revoking the privilege of keeping an account at the central bank.

In the post World War II period, the Bank of England maintained control over short-term credit markets through regulation of short-term interest rates and loan ceilings. Traditionally the Bank employed these credit controls so as to permit the
financing of government borrowing at lower interest rates than would have been determined by competitive market forces. The public finance sectors that benefited from such policies included central and local governments and nationalized industry.

Central banking in England from the Second World War to the mid-1960's focused on indirect credit controls, especially through the setting of interest rates. However, following the Radcliffe Report in 1964, the Bank's activities expanded beyond merely providing interest rate guidance. Between the mid- to late-1960's, two important trends developed in English central banking methodology. First, credit controls became more specific and direct with the imposition of loan expansion ceilings. Second, central bank control was extended to cover a greater variety of financial institutions.

Quantitative loan ceilings were established, but exemptions were made to guarantee credit availability to high priority activities, such as shipbuilding, export financing, and productive investment in manufacturing and agriculture. The exemptions granted these sectors provided for more favorable interest rates. The ceilings on loan expansion were initially set only for the clearing banks, but they were gradually extended to other institutions. By the late 1960's, the Bank of England was sending informational copies of its loan guidelines to associations of insurance companies, pension funds, building societies (equivalent to savings and loan associations), and commercial finance corporations.
Although the general practice of central banking in England was to refrain from interfering with any but the short-term credit market, there are two notable exceptions - shipbuilding and export financing. To encourage medium- and long-term loans for domestic shipbuilding and the financing of exports, the Bank of England offered refinancing of these loans on favorable terms.

The Bank of England's credit policies also indicated categories of credit that were to be discriminated against. These included loans for the financing of imports, and for inventory accumulation. Moreover, some measures were aimed directly at controlling personal consumption. The Central Bank would alter the availability of such credit by making direct requests to the banks to reduce advances to specific classes of persons, as well as by use of controls on terms of hire purchase (consumer's credit) (i.e., fixing minimum down payments and maximum repayment periods).

Throughout most of the 1960's and into the 1970's, British monetary authorities continued to rely on controls over interest rates and credit flows while paying relatively little attention to growth in the money supply. Consequently, the longer credit controls remained in use in the United Kingdom, the more uncontrolled channels of financial intermediation expanded at the expense of controlled channels. In general, firms were able to limit the impact of the Central Bank's restrictions
upon the availability of credit since they were able to tap alternative (i.e. uncontrolled) sources of funds.

The British experience clearly demonstrates the difficulties of attempting to stem the inflationary effects of a too rapid expansion in the money supply by utilizing selective credit controls on financial institutions and markets when the problem that the controls were intended to correct was part of a broader and highly sophisticated financial system. Although credit allocation activities continue to constitute a measurable part of the policy goals of the British Central Bank, the limitations of such tools are fully acknowledged. Consequently, beginning in the mid-1970's, more attention was given to overall control of the money supply.

France

During the early postwar years, French financial institutions faced conditions of extreme scarcity which justified establishing precise priorities and adjusting plans for discrimination among credit users. The various sectors of the economy were classified into several categories, referred to as A, B, C, D, and E, and a credit priority was assigned to each.

Category A included those key industrial and commercial concerns that were to be expanded or maintained. They included producers of semi-finished products and essential foodstuffs
who were granted credit without limitation. At the other end of the priority list was category E. This group included the unessential economic activities (e.g., the sale of luxury consumer goods such as perfume and furs) for which credit was to be progressively reduced.

By the late 1950's, the initial period of postwar scarcity was largely over and the overall economic situation in France improved markedly. In turn, the broad objective of monetary policy shifted to emphasize limits on the overall expansion of liquidity. This action was designed to restrain expansion of demand and, thus, to slow inflation.

During more recent periods, the credit allocation process has been characterized by a policy of selectivity. The total amount of credit extended by the banking system was rationed, and the essential task of a selective policy was to grant preferential treatment to specific sectors. This task was effected primarily through review of bank loans, regulation of loan ceilings, selected exemptions from those ceilings, and development of a rediscounting policy.

The Banque de France has retained direct control over bank lending in the economy. Under a system of credit allocation, the Bank must give prior approval for all loans to borrowers whose total loans, whether from one bank or many, exceeded a specified amount.
Smaller banks are under an obligation to prepare a detailed dossier for each loan request. They are instructed to screen all loan applicants to determine not only whether the loans would be safe and profitable but also whether the funds could be obtained outside the banking system and whether they would be used for officially favored purposes.

Sometimes, entire categories of loans have been determined to be of such social import that the Banque de France has established specific terms for them that were applicable across the board. Consumer loans were one such category. For example, when hire purchase sales became significant in France they were subjected to specific controls that included minimum down payments and maximum repayment periods.

The Banque de France also places quantitative ceilings on loans. This limits total credit available from banking institutions and thereby helps to control aggregate demand. The quantitative ceilings are imposed in a selective manner, allowing loans for favored activities to be either exempted or to exceed the ceilings. Those areas of economic activity exempted in part or whole include short-term export credits, medium-term loans for construction, and loans of the same maturity to finance investment in industrial and agricultural equipment. Loans for stockpiling cereals and eligible mortgage loans are also exempted.
Germany

The Federal Republic of Germany has relied heavily on market-oriented techniques of monetary management. Because most German government officials and businessmen have been enthusiastic supporters of free markets, the principal German experiments with credit controls that began after World War II were quietly scaled back in subsequent years.

Early in 1948 the German central bank (Bundesbank) established a system for short-term export financing facilities. These facilities were based on several monetary devices for credit allocation to the trade sector. Three such features were related to exporthatten or export draft bills. First, the export financing mechanism provided for automatic rediscounting of export drafts regardless of credit ceilings imposed on other commercial paper. Second, the export draft bills could be discounted at a preferential rate. If rates obtainable in the importing country were more favorable than those available in Germany, the former were applied to the German export drafts. Third, the bills provided a cover for exchange risk. The exporter was protected from foreign exchange rate fluctuations by the Bundesbank's acceptance of the export draft for discount at the exchange rate prevailing on the day of deposit rather than on the
day on which the letter of credit was negotiated.

While export draft bills financed preshipment activity, foreign acceptances provided the credit for the postshipment period. Such acceptances could also be discounted at the Bundesbank, and at the same rates whether labeled in Deutsche Marks (DM's) or in a foreign currency.

The system of acceptances in conjunction with the export draft mechanism provided an inexpensive and convenient form of credit. Thus, the foreign trade sector was favored by what amounted to a Bundesbank export subsidy. However, the subsidy was subjected to increasing criticism as the country's balance of payments surplus expanded. As a result of this development, export credit allocation devices have either been discontinued or reduced.

What remains of the system of credit allocation favoring the export sector is the willingness of the Bundesbank to re-discount short-term credits to exporters. The export paper which is eligible for such consideration is the banker's prime acceptance and the exporter's bills which have been endorsed by a commercial bank and by the Export Credit Commission. In the agricultural sector, similar preferential treatment has been provided for storage agency bills and for grain harvest and storage financing activities.

Aside from the special discount facilities maintained by the Bundesbank to support exports and to aid agriculture,
German authorities have abandoned interest in credit allocation mechanisms. It is noteworthy that, even during the few times that credit controls have been applied to any significant extent in postwar Germany, they were not used on a broad basis to allocate credit among types of borrowers or economic uses.

**Italy**

In Italy, the government still actively intervenes in the credit allocation process. Government agencies, special credit institutions, as well as the central bank, pursue policies designed to influence the allocation of credit among different uses. The central bank of Italy, Banca d'Italia, has principal responsibility for the short-term credit markets. Prior authorization of loans, special reserve requirements, and selective discount policies are the major tools utilized by the Banca d'Italia in fulfilling its mandate. Moreover, the central bank influences Italy's longer term capital markets through its function as a capital issues committee.

Despite extensive formal powers, the Italian authorities have not imposed direct quantitative controls on either the overall volume, nor on specific categories of bank credit. However, lines of credit exceeding one-fifth of a commercial bank's capital must receive prior authorization by the central bank. Thus, the Banca d'Italia reviews, in advance, all proposed loans of large size and thereby makes its influence felt on the growth pattern of the national economy. Loan requests,
as a result, are honored partly on a basis of whether the intended use of the funds satisfies a social priority.

Special reserve requirements are another tool utilized by the Banca d'Italia. Banks are required to hold special reserves in the form of certain types of assets. The objective has been not only to restrict deposit and loan growth generally, but also to induce the banks to channel credit into areas having high social priority. The types of assets which satisfy the banks' special reserve requirements have included housing loans and construction credit to government agencies. In 1965, for instance, mortgage bonds were included under the program to boost the depressed construction sector. This was followed in 1967 and 1968 by the inclusion of bonds issued for the construction of schools or by the public workers consortium.

In addition to loan authorizations and special reserve requirements, the Italian monetary authorities maintain selective credit controls through the application of differential eligibility requirements for discounting paper. One type of bill that is automatically eligible for discount or for loan collateral is the agricultural storage agency bill. As a result, most of the farm support bills end up at the central bank. This mechanism means that the Bank effectively finances the Government's agricultural price support system - a liability which the government is normally unable to meet out of its current allocations.
The monetary authorities in Italy also exercise some control over long-term credit markets. As noted above, the central bank serves as the country's principal capital issues committee. Therefore, certain types of securities issues must receive prior authorization from the Banca d'Italia. For example, prior authorization is required for the sale of certain new stock issues, and for increases in equity and bond issues of existing manufacturing and commercial firms, banks, and special credit institutions whenever the amount involved exceeds a set limit.

Since Italian law restricts most classes of banks to short-term lending and to short-term deposit liabilities, special credit institutions are the major source of long-term loans. The entire post-war period has witnessed a rapid growth of these special credit institutions. They can be defined as medium-term banks for development financing. Sometimes special credit institutions serve the development needs of a geographic area, such as the Mezzogiorno.

On other occasions, a certain sector of the economy (e.g., industry, housing, tourism, theater) receives financing. These institutions also promote exports, scientific research, and other important economic activities. Through its control over the issuance of securities by these special credit institutions, the Banca d'Italia can influence the allocation of longer-term credit.
The concept of controlling credit flows to serve national economic interests is fully accepted and has been extensively applied in Italy. Whether through direct intervention in the short-term money markets (e.g., loan authorizations, special reserve requirements or selective discount policies) or indirect influence over longer-term financing (e.g., supervision of the securities issues of the special credit institutions), the Banca d'Italia shapes credit allocation policies in Italy.

Latin America and Asia

In Latin America and Asia, credit allocation policies are implemented by both indirect and direct controls. Numerous countries employ indirect measures such as differential discount rates and selective reserve requirements under varying circumstances. In still other countries, direct control is exercised over loans and investments with the aim of influencing specific economic activities or financing operations.

As a rule, differential discount rate mechanisms provide for a general or basic discount rate and a variety of other rates applicable to different categories of commercial paper, such as agricultural loans or export bills. In a number of cases, a further degree of selectivity is sought through differentials in eligibility requirements intended to favor or discourage various types of credit.
Preferential rates for rediscounting agricultural loans have often been employed by central banks in countries such as India, Mexico, Colombia and Peru. In certain of these countries, nonagricultural sectors also benefit from such rediscounting practices. For example, housing receives preferential consideration in Mexico and Colombia, while special rates are in effect for industrial paper in Colombia and Peru. Furthermore, in nations as industrially different as Mexico and Japan, export trade bills receive the benefit of special discounting treatment.

Another indirect credit control utilized in Latin America and Asia is the selective use of reserve requirements. In some countries, such as Mexico, bank loans for specified preferred purposes are given status as reserve eligible assets, thus encouraging or actually requiring the banks to extend this type of loan. Other countries, including the nation of Israel, have granted exemptions from reserve requirements for special types of loans.

Since World War II, several Latin American and Asian countries have undertaken direct regulation of commercial bank loans and investments. Special loan ceilings or limits have been applied through central bank directives as a selective credit control measure to restrain the growth of individual categories of investments and loans. Among
the countries which have utilized such measures are India, South Korea, Mexico, Colombia, and Chile. Moreover, India has set specific quotas on loans for particular sectors of the economy. The Philippines have given specific, detailed guidance with respect to the desired composition of bank loan portfolios.

The central banks in a number of Latin American and Asian nations have employed a wide range of monetary devices in order to influence credit allocation. The diverse tools reflect the discretionary power of the central banks to establish preferential discount rates, selective reserve requirements, differential liquidity ratios, differential import deposit requirements, and even direct regulation of commercial finance operations.

Africa

In almost all African countries, central banks attempt to influence the allocation of bank credit. This has been accomplished primarily by direct credit controls employed so as to affect the allocation of bank loans and advances among private individuals and firms. These controls include loan ceilings, selective discount mechanisms, and regulations on credit to foreigners.
Among the portfolio-ceiling devices adopted by African monetary authorities is the setting of ceilings on loans to be made for specified purposes or to certain identified sectors. Occasionally, the ceilings are specified in the form of percentages of total loans and advances which must be extended to the various sectors of the economy. The credit guidelines set by Nigeria in the early 1970's constitute one example. At other times, credit limits take the form of incremental ceilings specifying the maximum increases (in percentages or in absolute amounts) allowed for loans for various purposes and within some specified time period. Ghana is an African country which has adopted this type of regulatory regime. In addition to credit guidelines, some nations have required direct approval of bank loans. Beyond this, African central banks have specified liquidity ratios usually based on investments in government securities.

The discount mechanism has also been employed to influence the allocation of credit in certain African countries. According to most African laws, the central bank may follow one of three sets of procedures in the selective use of a discount policy. In one procedure, the central bank may charge preferential discount rates on rediscounting paper originating in the priority sectors in order to provide incentive for the commercial banks to increase lending to these favored activities. Another
method is the use of discretion by the central bank in establishing the eligibility of commercial paper. The third procedure is to specify ceilings on the amount of rediscounted paper from different economic sectors.

These discount policies, mainly in the form of rediscount ceilings, have been employed to a greater extent in the French-speaking African countries than in their English-speaking neighbors. In the former, the commercial and development banks rely to a major extent on central bank rediscount to finance their credit operations. In the latter countries, the commercial banks seldom borrow from the central bank. Consequently, discount policies would have little effect on them.

Some African countries have attempted to impose direct controls on credit made available to foreigners. In Kenya, Nigeria, and Zambia, for example, approval by central banking authorities is required when certain categories of credit are applied for by non-nationals.

African countries, under the continuing pressure for economic development, have sought to utilize credit controls to redistribute their scarce financial resources. The various forms of credit controls will probably become even more diverse over time as African governments grapple with the problems of industrialization.
Summary of Techniques of Credit Controls and Credit Allocation

In closing this section, the principal tools employed by foreign central banks to allocate credit can be summarized.

A. Bank Reserves

Amount of reserves against bank liabilities - high or low reserves required depending on desired liability (e.g., low reserves on time deposits).

Use of reserves against specified assets - reserves may be required for low priority loans or investments (e.g., reserves against loans on "luxury" items).

Investment of reserves - no return on reserves when investments are in low priority categories; reserves can be required to be placed in high priority investments.

(Liquidity ratios can also be used the same as reserves against specified assets and can be targeted for placement in high priority investments.)

B. Lending Activity

Ceilings on Specified Investments (e.g., limits on low priority investments).
Loan and/or asset quotas (e.g., maximum limits on low priority and minimum limits on high priority).

Loan limits - maximum loan amount to a class of borrower.

Credit restraints - maximum loan size, minimum down payment, restrictive terms and conditions.

Prior approval of capital issues - (e.g., channel funds to desirable borrower or desirable purposes).

Exemptions from limits for special classes of loans.

C. Differentials in Interest Rates
   Low rates to favored borrowers or purposes.
   Low central bank rediscount rates on loans for favored purposes.

D. Tax Policies
   Differential tax rates on interest income from various types of investments.

   Yield supplements (subsidies) for favored investments.

   In addition, many countries have controls on foreign trade and foreign exchange which are frequently used in conjunction with other types of credit controls.
This chapter examines the question of whether a restrictive monetary policy imposes a discriminatory burden on small firms. It does not take up the question whether at other times credit availability is insufficient, or whether interest rates are too high for small business.

The concept of "discrimination," as used in this context, needs clarification. It does not signify prejudice or dislike as it does in other contexts. It is hardly plausible that bankers dislike small firms and refuse to make loans to them for that reason. Banks are profit maximizing institutions and generally make loans which help them achieve that objective. Hence, when one speaks of banks being induced by tight money to discriminate against small firms, the suggestion is that restrictive monetary policies necessitate changes in the lending practices upon which bank profits are based. Such changes can adversely affect small firms and in so doing, result in discrimination.

For example, when a change in monetary policy results in a flow of deposits from small banks to larger institutions, the small business borrower is unduly affected. This occurs because small banks typically allocate a larger proportion of their loan portfolio to small firms than to larger banks.

Such a monetary policy can be said to discriminate against small firms, even though no individual lending officer is actually discriminating. The term "discriminating" should therefore be interpreted as applying to the monetary policy rather than to the individual bank or bank officer. Moreover, to get at what is the essential problem for policy, it should be interpreted as shorthand for "imposing an undue burden" rather than in its more precise meaning of the unequal treatment of equals.

When one asks whether a certain policy discriminates against small business, one should have an alternative, i.e., "counter-cyclical," policy in mind. Unfortunately, it is far from clear what countercyclical policy to use. One alternative to a restrictive monetary policy is to let inflation continue. But a higher rate of inflation may itself impose an undue burden on small businesses, especially since larger integrated firms have more control over their costs. A second possibility is the use of fiscal policy instead of monetary policy to curb inflation. Here the impact on small business obviously depends upon the type of fiscal policy used, and this cannot be specified a priori.

A third policy is to impose a system of credit allocation. Here too it is hard to know how small business would be affected. Such a system could require banks to allocate a larger proportion of their business loans to small firms. However, unless the demand for financing among small business borrowers was proportionate to the amount allocated, this would be an inefficient way of distributing bank resources. It is thus not possible accurately to specify a realistic countercyclical alternative to the use of restrictive monetary policy.
As a result it is not possible to analyze the impact of such a policy on small firms relative to large firms in a context that is not arbitrary.

Another problem arises from the time dimension considered. It is conceivable that, during a period of monetary restraint, banks raise interest rates to small firms much more than to large firms, but that small firms, over the longer run, are not unduly burdened. This can occur because business borrowers develop long term "customer relationships" with their banks. In servicing this relationship and in determining the appropriate interest rates to charge, banks presumably look at long run profitability. Therefore, when a small firm wants to obtain a loan in a period of readily available bank reserves, the bank presumably is willing to charge a lower rate than it otherwise would because it expects a higher rate from the small business borrower when money again becomes restricted. The subsequent higher rate does not denote discrimination.\(^1\)

Finally, to ask whether there exists discrimination against small firms is to formulate the question in a way that may imply a judgement favorable to the advocates of credit allocation. One can always find individual cases of discrimination as the term is herein used. The more relevant question is whether discrimination exists on a large enough scale for the government to adopt counteractive measures.

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\(^1\) See Carson and Scott, ibid. (p. 236), who ask whether it is appropriate to speak of banks discriminating in favor of small firms during monetary ease by taking bank treatment of small firms during a period of monetary restraint as the norm.
Such measures can be costly in themselves. For example, a system of credit allocation might channel more funds to small business than that sector can absorb. Such an occurrence would reduce the efficiency with which resources are used in the economy. Therefore, it is necessary to guard against the danger of adopting a program that is too generous. This need is made more real by the fact that, as shown below, it is not possible to estimate with any degree of precision the extent of the discrimination against small business.

The question therefore, should be reformulated to ask whether substantial discrimination against small business rather than whether there is discrimination. This chapter will first deal with this question in general terms before turning to an analysis of the detailed statistical studies that have been undertaken.

Monetary Restraint and Discrimination

One argument supporting the assertion that a restrictive monetary policy discriminates against small firms notes that, when such a monetary policy is in force, many more complaints are heard from small firms than from large firms. But this argument is not wholly persuasive. The numerous complaints from small business borrowers may not indicate discrimination, but instead may be explained by the fact that an equal increase in financing costs is having a much more severe impact on small firms. This is analogous to a tax that imposes the same dollar burden on rich and poor alike, but may well be more burdensome for the poor. The restrictive monetary policy, therefore, is only one of many factors that adversely influence the solvency of small firms.
However, being very visible, the policy readily lends itself to criticism.

A second argument attempting to demonstrate the existence of discrimination against small business borrowers is based upon several related facts. These are: (1) small businesses typically require smaller sized individual loans than do large corporate borrowers; (2) the risks of lending to small borrowers have traditionally proven to be higher than those for larger borrowers; and (3) many state legislatures have historically enacted usury statues that limit the maximum rate of interest that can be charged by banks operating within their jurisdiction. Therefore, it is argued, as interest rates rise to the usury ceilings, and risk distribution remains constant, more small business borrowers are cut off from the bank loan window. It should be pointed out, however, that this is not a situation which necessarily results either from banking policy or national monetary policy. It is instead a more direct result of state regulation. In the most recent period of unusually high interest rates, Congress temporarily suspended these state rules for business loans of $25,000 and above. However, each state retained the option to choose whether to comply with the suspension.

A third argument, that has been advanced to explain how a restrictive monetary policy imposes an undue burden on small business borrowers, has some merit. That argument holds that small business borrowers depend primarily upon banks for outside financing, and a restrictive monetary policy impacts directly on a bank's ability to extend credit.
Conversely, it is argued, large corporate borrowers can escape much of the impact of a restrictive monetary policy and reduced availability of bank credit by raising funds in the short-term commercial paper market or by floating long-term issues in the corporate bond markets.

The empirical evidence cited to support this argument is summarized in Table 9. It compares average monthly prime rates charged by banks with Moody's Aaa corporate bond yields. During the period between July, 1977, and April, 1980 - a period of record post World War II interest rates - bank prime rates rose by 192.9 per cent. Over roughly the same period, the yields on Moody's Aaa corporate bonds increased by a relatively small 63.2 per cent.

The data in Table 9 lend merit to the contention that, since small businesses depend upon bank credit for accommodation, they have suffered relatively more under recent high interest rates. However, it is not correct to conclude that this constitutes discrimination. Commercial bank credit and corporate bonds are not perfect substitutes for each other, and the two segments of the capital markets do attract different classes of borrowers. Due to the relatively small size of loans taken by small businesses, the bond market has never been a real alternative for such small borrowers. Further, not all corporate borrowers receive the high grade (Aaa) credit rating which permits them to borrow at the yields shown in Table 9. Many investor owned public

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Table 9. Recent Changes in Bank Interest Rates and Corporate Bond Yields, Monthly Average July, 1977 - June, 1980

(Per Cent)

<table>
<thead>
<tr>
<th>Year and month</th>
<th>Prime Rate Charged by Banks</th>
<th>Moody's Aaa Corporate Bond Yields</th>
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<tbody>
<tr>
<td>1977</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>6.75</td>
<td>7.94</td>
</tr>
<tr>
<td>August</td>
<td>6.83</td>
<td>7.98</td>
</tr>
<tr>
<td>September</td>
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<td>7.92</td>
</tr>
<tr>
<td>October</td>
<td>7.52</td>
<td>8.04</td>
</tr>
<tr>
<td>November</td>
<td>7.75</td>
<td>8.08</td>
</tr>
<tr>
<td>December</td>
<td>7.75</td>
<td>8.19</td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>7.93</td>
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</tr>
<tr>
<td>February</td>
<td>8.00</td>
<td>8.41</td>
</tr>
<tr>
<td>March</td>
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<td>8.47</td>
</tr>
<tr>
<td>April</td>
<td>8.00</td>
<td>8.56</td>
</tr>
<tr>
<td>May</td>
<td>8.27</td>
<td>8.69</td>
</tr>
<tr>
<td>June</td>
<td>8.63</td>
<td>8.76</td>
</tr>
<tr>
<td>July</td>
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<tr>
<td>September</td>
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<tr>
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<tr>
<td>December</td>
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<td>9.16</td>
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<tr>
<td>1979</td>
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<td></td>
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<tr>
<td>January</td>
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<tr>
<td>March</td>
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<tr>
<td>December</td>
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<td>10.74</td>
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Table 9 (continued)

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<th>Year and Month</th>
<th>Prime Rate Charged by Banks</th>
<th>Moody's Aaa Corporate Bond Yields</th>
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</thead>
<tbody>
<tr>
<td>1980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>15.25</td>
<td>11.09</td>
</tr>
<tr>
<td>February</td>
<td>15.63</td>
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<td>March</td>
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<td>April</td>
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<td>May</td>
<td>16.57</td>
<td>10.99</td>
</tr>
<tr>
<td>June</td>
<td>12.63</td>
<td>10.58</td>
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</table>

Source: Compiled by Brimmer and Company from data supplied by The Board of Governors of the Federal Reserve System and Moody's Investor Service.
utilities, for example, have seen their credit rating progressively downgraded over the last few years. As a result, their cost of capital has increased substantially faster than the national corporate average. The lesson of these developments is that, while generally large borrowers obtain more favorable interest rates, not all large firms enjoy money market advantages over smaller corporate borrowers.

It should also be noted that a significant proportion of business activity is financed with funds generated internally. Whether the effect of a restrictive monetary policy via retained earnings is greater for small or large firms is hard to determine. In part, it depends on how it affects their total earnings. But it also depends on the extent to which firms can lower their pay-out ratios. Small, privately held firms have an advantage here insofar as they can cut back their dividends without having to worry about stockholder complaints and falling stock prices. But, in many cases, owners of a small firm need the dividend to take care of personal living expenses. Hence, they may not be able to retain a larger share of their earnings. On an a priori basis, therefore it is not possible to state with any degree of assurance whether a restrictive monetary policy reduces retained earnings more for large or for small firms.
A different case for discrimination against small firms can be based on credit rationing. Banks set limits on the size of loans they are willing to provide based on the borrower's ability to repay and ration some other customers out of the bank credit altogether. ¹/ Does such credit rationing limit the borrowing of small firms more severely than large firms? One argument that it does points out that two criteria used by banks in rationing credit are the riskiness of the loan and the cost of making it. In this view, credit rationing is due to banks finding it difficult to raise their interest charges immediately when the equilibrium interest rate increases. Hence, they continue to make those loans that have the lowest cost in terms of risk and service cost while eliminating others. And since, the argument continues, loans to small firms are riskier and more expensive to make, the small business borrower gets turned down more often. But this argument, too, is not convincing. The greater riskiness and greater service costs of loans to small firms mean that interest rates on these loans are initially already higher than on loans to large firms. Why then should a bank discriminate against them? A similar weakness invalidates explanations of credit rationing that run in terms of "bargaining power."

¹/ For an excellent survey of the debate about credit rationing see Benjamin Friedman, "Credit Rationing: A Review," Board of Governors, Federal Reserve System, Staff Economic Study #72, 1972.
Why should banks use their bargaining power to deny credit rather than to raise the interest rate?

Another interpretation of credit rationing is that banks have a long-term ongoing customer relationship with firms and that they feel obligated to take care of the "reasonable credit needs" of all of their long-term customers.¹/ This provides a readily understandable reason for arguing that new firms - who, of course, tend to be small firms - are discriminated against. Moreover, the value of the customer relationship to the bank depends on how many ancillary services of the bank (such as the provision of foreign exchange) the customer is using. And large firms probably use more of these services.

Another plausible explanation focuses on the effect of the Federal Reserve's Regulation Q, which limits the interest a bank can pay on time and savings deposits. It has been argued that banks get around the prohibition of interest payments on demand deposits by providing cheaper loans and more ready access to loans to those firms that keep large deposit balances with the institutions.²/ If large firms keep a higher ratio of demand

¹/ For a discussion of the customer relationship see Donald Hodgman, Commercial Bank Loan and Investment Policy, Urbana, Bureau of Business and Economic Research, University of Illinois, 1963.

deposits to loan demand than do small firms, then banks have an incentive to favor their loan requests.\(^1\)

Perhaps the most important reason why banks are more likely to ration out small firms than large firms is that having a loan request turned down, or its amount reduced, gives a borrower an incentive to change banks. The borrower will then likely stay with this new bank when credit conditions ease. Since large firms are more likely to be able to establish a relationship with more than one lender, banks are more reluctant in a period of monetary restraint to turn down the loan request of large firms.

No discussion of the argument which holds that monetary restraint hurts small businesses more would be complete if it ignored Kenneth Galbraith's widely-known article, "Market Structure and Stabilization Policy."\(^2\)

Although he primarily contrasts competitive and oligopolistic firms rather than large and small firms, there is an obvious correlation between these categories, and his argument can be presented in terms of large and small firms. No point of substance is affected by this interpretation.

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1/ Dudley Lucket ("Credit Standards and Tight Money," Journal of Money, Credit and Banking, Vol. 2, November, 1970, pp. 420-34) has suggested another reason for credit rationing. As banks increase their loan/deposit ratio, the riskiness of their portfolio increases, and they try to balance this by reducing the average degree of risk of their loans. However, this effect relates to a rise in the loan/deposit ratio and not to tight money. Lucket defines tight money as "an increase in the demand for the bank's loans while its resources ... remain constant" (pp. 426-27). But this is an ideosyncratic definition of tight money.

Galbraith first established that the prices of oligopolistic firms tend to lag behind in inflation, so that these enterprises have a potential for raising prices subsequently. In contrast, small firms operate in an environment in which prices, being set by market forces, adapt to inflation right away. As a result:1/

The impact effect of monetary policy will be almost diametrically different for competitive firms and nonmaximizing oligopolies. In the case of the first the initial incidence of the increase in interest charges must be on the firm - it cannot advance its prices to offset the advance in cost, no more than the wheat farmer of real life can increase the price of wheat when his interest charges go up. The increased cost will be passed on only after the higher marginal cost of capital has forced a curtailment (which may be relative) of investment and output. In other words the incidence is on the firm until after the policy has accomplished the result that it is supposed to accomplish.

In the case of the non-maximizing oligopoly, by contrast, the higher interest cost can be absorbed or passed on as the firms prefer or circumstances suggest. Within a wide range, investment that was profitable before the rate increase will be, or can be made, profitable after the increase. The impact effect of higher interest rates will not be fully felt in the oligopolistic sector of the economy until it has made itself effective via the competitive sector on demand.

1/ Ibid., pp. 130-37.
While this argument may appear persuasive, it suffers from a serious weakness. We are told how small competitive firms behave; in the short-run they do not pass on higher interest costs as higher prices. What is not explained is how large firms behave. Having rejected the conventional theory of the firm, Galbraith does not replace it with another theory, but says essentially that anything may happen. If anything can happen, it is not possible to conclude that small firms are hurt more than large firms by a restrictive monetary policy. Moreover, Galbraith's argument that large firms have the choice whether to pass on higher interest costs gives the impression that large firms, since they have this choice, are better off than small firms. But this is misleading. Large firms cannot successfully protect themselves from all inflationary pressures. Insofar as a rise in interest rates causes them to raise prices, they merely restore their prices at least part way in real terms, and they do so at the cost of generating greater problems in price coordination. Or, alternatively, if the difficulties of price coordination prevented large firms from raising prices earlier when other prices rose, then these same difficulties should now prevent large firms from raising prices when interest rates rise.
Galbraith then goes on to discuss credit rationing: 1/

Some preference for the large customer is all but inevitable when credit is being rationed. Other things being equal, such firms are more economically served. Their size accords them a greater chance of resorting to nonbank sources, or they may have multiple banking connections.... Rationing must be expected to discriminate against the least competent borrowers.... Obviously the least creditworthy borrowers will be those who are vulnerable to rate advances - who cannot pass them on - and whose prices are vulnerable to any reductions in aggregate demand....

Here too there are some problems. First, as already discussed, the fact that large firms are "more economically served" means that all along the interest rate small firms pay contains a surcharge for higher service costs, but this does not explain why (in the absence of binding usury law ceilings) banks should refuse to lend to small borrowers at a rate that embodies such a surcharge during periods of monetary restraint. The point about the availability of multiple bank sources is, as already discussed, much more valid.

To summarize, a number of assertions about restrictive monetary policy and its effect on small firms have been examined with mixed results. The fact that more complaints about the effects of monetary restraint are heard from small firms than from large firms is hardly persuasive evidence of discrimination. The same is true for the greater dependence of small firms on bank credit, and also

1/ Galbraith, op. cit. p. 131.
for the differential price behavior of competitive vs. oligopolistic firms stressed by Galbraith. On the other hand, it is plausible that small firms are particularly subject to bank credit rationing. In most cases, they cannot borrow in the capital market; they use fewer bank ancillary services, and they often lack the multiple bank connections that allow large firms to switch their credit demand from banks that are short of reserves to those that still have ample lending capacity. Moreover, the existence of a customer relationship in banking makes it hard for newly formed firms to obtain loans when a restrictive policy is in force. Further, state usury laws have tended to reduce the access of small firms to credit when interest rates rise.

It is clear that the qualitative arguments reviewed so far cannot settle the issue. The real question is not just whether it is plausible that there is some discrimination against small firms, but whether this discrimination is wide spread enough to be a substantial problem. This question also can be addressed through empirical evidence, which will now be reviewed.

The Empirical Evidence

As has been shown, it is not a simple and straightforward task to determine whether small firms are discriminated against during periods of monetary restraint. Many studies
of the question have been undertaken with results that are as mixed as the qualitative arguments discussed above. Not all of the professional research in this area has direct applicability to the question at hand. However, each of the studies summarized below is useful in helping to place credit allocation in the broad perspective necessary if one is to appreciate the financing obstacles faced by small businesses.

The 1958 Federal Reserve Study: In 1958, the Federal Reserve Board published the results of a study it undertook of small business financing during the period 1955 to 1957. The study compared bank loans outstanding to both large and small firms. It concluded that differences in financing requirements rather than discrimination accounted for the relative decline in loans to small business borrowers. Although the study was severely criticized on methodological and substantive grounds, its critics - so far - have failed to present conclusive empirical evidence to demonstrate that the study's results were inaccurate.

The Bach-Huizenga Study: One of the most widely quoted examinations of the affects of restrictive monetary policy on small business borrowers was undertaken by G.L. Bach and C.J. Huizenga¹ in 1961. The objective of the research was to determine if the level of bank reserves influenced the availability of credit to small businesses.

The study divided banks into three categories based upon their reserve levels during the period of monetary restraint from October, 1955, through October, 1957. The first category was called "easy banks." These were banks with ample reserves to meet their normal requirements. Institutions in the second group were termed "tight banks" and included those with insufficient reserves. The third group of banks was called "intermediates" due to their reserve levels falling between those of easy and tight banks.

The researchers advanced the hypothesis that the willingness of banks to make loans to small business borrowers during periods of restrictive monetary policy was a function of bank reserve levels. That is, easy banks were postulated as having no incentive

to discriminate because their reserve position was relatively unaffected by the restrictive monetary policy. Conversely, tight banks were expected to manifest clear policies that were unfavorable to the small business borrower since this was postulated as being consistent with an inadequate reserve position. No clear prior expectations about the lending behavior of intermediate banks was advanced. However, it is apparent from the structure of the research methodology that intermediates were expected to behave in accordance with their relative proximity to easy and tight banks.

The finding of the research did not confirm the hypothesis nor prior expectations. Instead, it was determined that each group of banks demonstrated similar treatment of small and large business borrowers. This result was reaffirmed when the researchers examined bank lending by the industry group to which borrowers belonged. When the interest rates charged on loans to small and large business borrowers were examined, it was determined that, during the period under review, interest rates to small firms increased by a lesser percentage than those paid by large firms. This last finding was attributed to usury law ceilings in many states.

The implications of the research were that there is
no evidence that banks discriminate against small borrowers during periods of restrictive monetary policy. This conclusion is consistent with the results of a priori expectations discussed previously in this section. It is also consistent with the finding of the Federal Reserve's 1958 study of the same period examined by Bach and Huizenga.

It should be noted, however, that the Bach-Huizenga findings are disputed on much the same basis as the Federal Reserve's conclusions. The differentiation of banks into easy, tight, and intermediate categories has been described as arbitrary and, therefore, meaningless.\textsuperscript{1} The critics also charged that a finding of no discrimination is only supportable if the entire size range of borrowers is examined simultaneously. However, the critics claim, if analysis is focused on borrowers having assets of less than $1 million, some evidence of discrimination could be found.

Supporters of the Bach-Huizenga report argue that substantiating evidence may have been discovered if the banks analyzed had been categorized not by reserve levels alone, but by a combination of reserve levels and bank asset size. This approach, according to the supporters,


\textsuperscript{2} Measured in 1957 dollars.
would have led to a finding that large banks tend to have inadequate reserves under restrictive monetary policies whereas small banks tend to fall into the easy category. Since large banks tend to have proportionately fewer small business borrowers among their customers than do small banks, the study's supporters conclude that large firms are burdened relatively more by restrictive monetary policies than small firms.

The dispute about the accuracy of the Bach-Huizenga results has persisted over the years and cannot be resolved in this survey. It is sufficient to bear in mind that it began with the premise that discrimination existed, but that premise could not be supported with the data. It is also important, however, to remember that the Bach-Huizenga study examined only one relatively short period between 1955 and 1957. Therefore, its results can only have applicability for that period of restrictive monetary policy.

The Evidence from Surveys: In 1967, the Department of Commerce and the Wharton School undertook a survey of the impact of the 1966 credit restraints on business investment. This was followed in 1971 by a Department of Commerce and Securities and Exchange Commission (SEC) survey of the 1969 monetary restraint experience. Although
the main focus of the two surveys was on the overall effect of restrictive monetary policies, they also contained some information on the relative impact on small and large firms. This information has been processed into convenient tables by Deane Carson and Ira Scott. ¹/ Their results can be summarized briefly. Approximately the same proportion of large and small firms appears to have cut back their investment in response to the restrictive policies. For those firms that did cut back, smaller firms cut back by a larger percentage. Among those firms that reduced investment, the rise in interest rates was a relatively more important reason for large firms. The difficulties of obtaining funds from financial institutions was relatively more important for small firms.

These results show small firms as being unduly burdened by restrictive monetary policies. In particular, the results show that large firms did cut back investments relatively more frequently in response to rising interest rates, while small firms cut back primarily because they were rationed out of credit markets.

This pattern is the one that should be expected in the case where interest rates are slow to rise or do not rise at all, because of usury law ceilings. However, the difference between large and small firms in the extent to which investment was cut back due to the unwillingness of financial institutions to lend was not statistically significant. Moreover, frustrated investment plans due to an inability to attract financing is also a problem for small firms during normal periods. Conclusive evidence of discrimination against small firms due to monetary restraint requires that similar studies be conducted under a variety of monetary conditions.

In any case, the applicability of opinion survey techniques to economic research is open to question. Asking respondents to state why they do something can easily lead to confusion. For example, it is not implausible that large firms are less willing to admit (even to themselves) than small firms that financial institutions will not grant them additional loans. Such a condition reflects more adversely on a large firm than on a small firm since everyone knows that small firms have greater problems in raising capital. More generally, William H. White has raised some very serious questions about such surveys.\footnote{William H. White, "Effects of Tight Money on 1966 Business Investment: The True Findings of the Commerce Department-Wharton Survey," \textit{Journal of Monetary Economics}, Vol. 2, November, 1970, pp. 446-460.} While White is concerned with showing
such surveys greatly understate the overall impact of monetary policy, his work also suggests that the relative impact on large and small firms may be measured badly in these surveys. If there is a serious understate-
ment of the overall impact of a restrictive monetary policy, there is no reason to assume that this bias is distributed equally between large and small firms. While such surveys provide some support for the view that a restrictive monetary policy hurts small firms dispro-
portionately, that evidence is hardly convincing.

For example, a survey of the financing experience of New England firms in 1960 found that small firms had more difficulty in obtaining long-term (a year or more) financing, and that this had some adverse effects on their operations.¹ However, there was no evidence linking these problems with a restrictive monetary policy. That research was also questionable due to the small size of the sample. Admittedly, when measured by the growth rate of the money supply (M-1) or by the Aaa bond rate, it was a year of monetary restraint. But there was no evidence that the financing problems of small firms were less severe compared to those of large firms in years when money was more readily available.

¹/ Deane Carson, The Effects of Tight Money on Small Business Financing, Providence, R.I., Brown Uni-
versity, 1963.
Another survey looked at a sample of firms that tried to borrow from banks in 1955-57 in the Sixth Federal Reserve District. It found that a relatively larger proportion of small firms had loan requests rejected. However, it argued that this was not the result of discrimination, both because many of these rejected firms had bank loans outstanding, and because a check with Dun and Bradstreet showed that many others could have readily obtained bank credit. (But this is unconvincing. First, there can be discrimination even against firms that have some outstanding loans because in the absence of discrimination they would have had more (or larger) loans. Second, it is far from clear that Dun and Bradstreet could take adequate account of the extent to which banks turned down credit worthy small firms.)

Still another survey, undertaken by the stock brokerage firm of Donaldson, Lufkin and Jerrette, showed that a relatively larger percentage of small firms had their loan applications turned down by banks in 1966. However, by applying at other small banks after an initial turndown, small firms had their loan needs met about as frequently as did large firms. It should be


2/ Actually all of the firms covered in this sample were small firms; it therefore compared the loan experience of quite small firms and somewhat larger firms.

noted, however, that this study was based in a very small sample.

Econometric Tests

Other researchers have undertaken econometric tests to determine whether monetary restraint generates bank discrimination against small firms. Their hypothesis was that firms want to shift their debt structure toward short-term debt when interest rates rise. If banks discriminate against small firms, then such firms will not be able to make the shift as well as large firms. Hence, changes in the debt structure of small and large firms should provide a test of the existence of discrimination. Unfortunately, these tests are vitiated by the peculiar measure of monetary restraint they used - namely the loan-deposit ratio. This variable had a strong upward trend during their sample period, and it appeared to be more influenced by this trend than by the tightness or ease of monetary policy measured by the growth rate of the money supply (M-1).


2/ This statement is not based on a multiple regression, but just on "eyeballing" the relevant data. The study also appears to suffer from serial correlation. In addition, it is far from clear why firms should want to shift into short-term debt when interest rates rise. Efficient market theory suggests that there is no reason to assume that they expect long-term interest rates to fall again significantly.
A more elaborate study was undertaken by William Silber and Murray Polakoff.¹ At the outset, they observed that the mere fact that loans to large firms grow faster than loans to small firms cannot be interpreted as evidence of discrimination against small firms. As already discussed, it is possible that demand for loans by small firms grew less, or that their credit-worthiness deteriorated. Silber and Polakoff subsequently developed a much more sophisticated test. They asked what proportion of a dollar of new deposits does a bank want to put into loans to small firms versus loans to large firms, assuming that both types of loans are equally sound. If banks always want to channel a larger proportion of each new dollar of deposits into loans to large firms, this obviously does not signify that monetary restraint leads to discrimination against small firms. But suppose that, in a period of monetary ease, banks want to put, say, 20 cents of each dollar of new deposits into loans to small firms and 50 cents into loans to large firms, whereas in a period of monetary restraint, they want to place only 5 cents into loans to small firms and use 65 cents to make loans to large firms. In such a case, monetary restraint was hypothesized as inducing discrimination.

This sounds like an easy test to apply, but actually it is not. Silber and Polakoff had to estimate the banks' supply functions for loans to large and small firms. In these supply functions they included (apart from the interest rate) the average maturity of loans, the percentage of loans to large and to small firms that were secured, and (since banks invest funds received as demand deposits and as time deposits differently) the ratio of demand to time deposits. This meant that they held constant three characteristics of bank loans - the interest rate, maturity, and collateral - so that any differences in these factors between loans to small and to large firms could not confound their analysis.

To apply this model, they needed detailed data on bank loans. Unfortunately, such data were available only for the 1955-57 period. In fact, they used the same data set as Bach and Huizenga, but they excluded all data not reported by banks in the New York Federal Reserve District. Their findings were unequivocal: banks do discriminate against small firms in periods of monetary restraint. At those times, they place a smaller proportion of their additional deposits into loans to small firms relative to large firms. However, under criticism from other economists, the researchers clarified their analysis.¹/

What they had meant by "discrimination" was not that banks are indulging in prejudice, but rather that there is a differential impact on small firms. Banks still seek to maximize profits by favoring the loan requests of large firms because of the customer relationship as well as because of the collateral or other security offered (such as the general assets of the firm which back up unsecured lines of credit).

Summary of Empirical Evidence

The overall impression left by this empirical evidence is one of confusion. It does not provide strong support for or against the hypothesis that a restrictive monetary policy discriminates against small firms. The three surveys, for reasons that were discussed, provide little useful evidence here, and the Christian-Mazek study appears to be invalid. The Bach-Huizenga study, by contrast, provides useful - though far from conclusive - evidence that banks did not discriminate against small firms in 1955-57. On the other hand, the Silber-Polakoff study which covered the same period provides some weak evidence suggesting the presence of discrimination. All in all, these studies have not succeeded in generating a definitive answer.

However, the a priori discussions reviewed above
do provide some reasons for thinking that a restrictive monetary policy does discriminate against small firms. For example, the existence of usury law ceilings seems to cause lenders to refuse loan requests from small firms more often than from large firms. In addition, some aspects of bank credit rationing - namely, the tendency of banks to pay indirect interest on demand deposits via easier access to credit, and the fact that small firms often cannot credibly threaten to change banks if their loan requests are turned down, suggest that small firms are unduly burdened by monetary restraint. If this is discrimination, it is also likely to result from the fact that many small firms cannot shift to a bank with ample reserves if their own bank is under reserve pressure. Similarly, they also cannot shift out of the bank credit market into the more general capital market.

Hence, it would be rather difficult to argue that a restrictive monetary policy does not impose a greater burden on small firms than on large firms. But is this differential effect large or small? Unfortunately, the available studies do not provide a reliable answer to this question.