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MULTI-NATIONAL BANKS AND THE MANAGEMENT OF MONETARY POLICY IN THE UNITED STATES

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TABLE OF CONTENTS

LIST OF TABLES

APPENDIX

PREFACE

I am grateful to several persons on the Board's staff for assistance in the preparation of this paper. Mr. Frederick M. Struble helped to establish the criteria used to identify and distinguish among multi-national, regional and large local banks. Ms. Jacqueline McDaniel had responsibility for planning and coordinating the computer programming required to obtain the basic statistics needed to analyze sources and uses of bank funds. Mr. Stephen A. Nelick did the programming to obtain data on member bank reserve requirements, borrowing from Federal Reserve Banks, and commercial paper outstanding on a daily average basis. Mr. Thomas A. Orndorff did the programming to retrieve data from the Call Report. Ms. Janet E. Voss did the programming to obtain data from the Weekly Reporting Banks statistics and from the nondeposits sources of funds. Mrs. A. Christine James and Miss Rosanne McKnew provided the statistics on foreign assets held by banks reporting under the Voluntary Foreign Credit Restraint Program and on assets held by foreign branches of U.S. banks. Mr. William E. Rumbarger provided the statistics on deposits at banks' head offices and in their foreign branches. Once these various statistics were in hand, however, they still had to be organized for analytical purposes. Ms. Juliette Bethea, Ms. Barbara A. Lowrey, and Ms. Diane Sower provided this assistance. Mrs. Ruth Robinson and Mr. John Austin, my regular staff assistants, worked on various parts of the project. They were especially helpful in compiling the sources and uses of funds tables and in distributing Euro-dollar flows among the different classes of banks. Mr. Austin was particularly helpful in the resolution of a number of difficult accounting problems where good judgment was required. Mrs. Linda Zuk did the major share of the typing, and Mrs. Tonsa Fuqua also helped in the paper's final preparation.

Finally, while I am grateful for the staff's support in this project, the analysis presented and the conclusions reached in this paper are my own. Nor should the views expressed be attributed to my colleagues on the Board.

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By

Andrew F. Brimmer*

I. Introduction

The experience with monetary policy in the United States since the mid-1960's suggests strongly that the evolution of the commercial banking system has altered flows of funds, changed the distributional impact of monetary policy, and placed strains on the traditional instruments of central banking. The main-springs of this evolution have been a small number of very large multi-national banks constituting the core of the domestic money market but which are also heavily involved in international finance. Because of the activities of these large institutions in mobilizing and rechanneling funds, the financial system in the United States has become much more open to the influence of foreign financial developments than was the case a decade ago. Given these fundamental changes, it would be helpful to provide additional tools to the Federal Reserve's kit with which to moderate the impact of such developments on the domestic economy.

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In my judgment, efforts to rectify this situation should not be delayed much longer. On several occasions in recent years, I have urged such action. I have also outlined the principal elements in an alternative strategy of monetary control--the keystone of which is a much more flexible use of reserve requirements based on bank assets as well as on a broader range of liabilities. Still another alternative approach has been recommended by the Federal Reserve Board--a recommendation in which I joined. This proposal involves the flexible use of the investment tax credit to achieve greater stability in spending by the business sector for machinery and equipment. In a later section of this paper, I will explain why I believe strongly that one of these alternative approaches should be adopted in the foreseeable future.

I am not unaware of the position held by many economists who believe that a central bank should not concern itself with the composition of bank credit--but only with its aggregate level or rate of growth. Still others hold that the behavior of the money supply alone should be the focus of central bank concern. I clearly do not share such a narrow conception of the task of central banking in the United States. Instead, I am convinced that the Federal Reserve cannot be indifferent to the changing composition of commercial bank credit. A posture of indifference would mean that drastic variations in the availability of credit in important sectors could occur--and persist--with serious adverse consequences for the economy as a whole. In my opinion, we need a better way to assure that the overall objectives of monetary policy can be achieved without having some sectors bear a disproportionate share of the burden of adjustment to monetary restraint, while a few other sectors are significantly less affected. Moreover, the time to make such structural improvements is a period of relative quiet in the money and capital markets rather than a period of stress or near financial crisis.

These general observations are supported by the analysis which follows. In Section II, the traditional perception of the task of central banking is summarized. The strategy and impact of monetary policy in recent years are discussed in Section III. A new framework for the assessment of monetary policy is outlined in Section IV. Banks' reactions to monetary policy are analyzed in Section V (sources of funds) and Section VI (uses of funds). In Section VII, the broadened use of supplemental reserve requirements to stabilize bank lending to particular economic sectors is assessed. An alternative instrument to accomplish the same goal (a variable investment tax credit) is weighed in Section VIII. A summary of the findings and concluding observations are presented in Section IX.

II. Traditional Perception of Central Banking

As I indicated above, many economists argue that monetary policy should confine itself to the control of the stock of money in the economy.[1/] This view implies that, in operation, the central bank should supply a given volume of bank reserves and leave it to the private market to decide how the reserves will be used. In this conception of central banking, there is no scope for special concern with the availability of credit in particular sectors--nor with non-deposit sources of bank funds--such as Euro-dollars.

Instead, this traditional prescription for monetary management requires that the central bank vary the volume of bank reserves according to direction of desired changes in the money stock. If a policy of monetary restraint is appropriate, the Federal Reserve should limit the growth of reserves--perhaps even to the point of causing the actual volume of reserves to decline. If an expansionary policy were called for, the volume of reserves should be increased at a faster pace. In either case, however, it is argued that whatever changes do occur in the volume of commercial bank reserves can take place only at the initiative (or concurrence) of the central bank.[2/]

The logic of this argument can be demonstrated readily by an examination of the sources and uses of bank reserves. The main factors affecting such reserves are frequently summarized in the bank

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1/ I have dealt with this basic issue in a number of places. See, for example, "Monetarist Criticism and the Conduct of Flexible Monetary Policy in the United States," Lecture presented at the Institute of Economics and Statistics, Oxford University, Oxford, England, April 14, 1972.

2/ See, for example, "CD's, Euro-dollars, and Monetary Policy," The Morgan Guaranty Survey, February, 1969, pp. 4-9.

reserve equation--or the monetary base. Data in Table 1 show the elements in the equation as of year-end for the five years 1967-71. By definition, the monetary base consists of funds created by the Federal Reserve System or by the U.S. Treasury in its monetary role as issuer of currency and coin and the locus of gold monetization. These reserve supplying factors are listed under Item A in Table 1. In theory, all of the monetary base is available for use as reserves. However, nonreserve uses (Item B) absorb a substantial part of the base, and the residual (Item C) is left as bank reserves available to support commercial bank deposits.

Given the traditional perception of the task of monetary policy, the behavior of the monetary base does enable one to isolate the effects of central bank action on bank reserves. For some observers it may even provide a basis for inferences with respect to the aims of monetary policy. For example, in 1968, the Federal Reserve alternated between a policy of monetary restraint in the first half and one of expansion in the last six months. Over the year as a whole, member bank reserves rose by $1.0 billion. This rise was the net result of an increase of $3.0 billion in the monetary base partially offset by a rise of $2.0 billion in nonreserve uses of the base. The principal sources of the increase in the base were an expansion of $3.7 billion in Federal Reserve holding of U.S. Treasury securities and $867 million in Federal Reserve float. A drop of $1.6 billion in the gold stock

Table 1. Factors in the Bank Reserve Equation, End of Year, 1967-1971
(Millions of Dollars)

Factors Affecting Bank Reserves	1967	1968	1969	1970	1971	Changes 1967-68	1968-69	1969-70	1970-71
A. Factors supplying reserve funds									
Federal Reserve holdings of U.S. Treasury securities, Federal agency securities, and acceptances	49,314	52,995	57,218	62,199	71,065	3,681	4,223	4,981	8,866
Member bank borrowings from Federal Reserve	141	186	183	335	39	45	- 3	152	- 296
Federal Reserve float	2,576	3,443	3,440	4,261	4,343	867	- 3	821	82
Gold stock	11,982	10,367	10,367	10,732	10,132	-1,615	0	365	- 600
Treasury currency outstanding	6,784	6,795	6,852	7,149	7,710	11	57	297	561
Special Drawing Rights	-	-	-	400	400	-	-	400	400
Total monetary base	70,797	73,786	78,060	85,076	93,689	2,989	4,274	7,016	8,613
B. Factors absorbing reserve funds									
Currency in circulation excluding amount held by member banks as reserves	42,595	46,040	48,763	51,670	55,325	3,445	2,723	2,907	3,655
Treasury cash holdings	1,344	695	596	431	460	- 649	- 99	- 165	29
Deposits at Federal Reserve banks owned by Treasury	1,123	703	1,312	1,156	2,020	- 420	609	- 156	864
Deposits at Federal Reserve Banks owned by foreign monetary authorities, international institutions, and nonmember banks	788	963	941	1,381	1,293	175	- 22	440	- 88
Other Federal Reserve accounts (net)	- 773	-1,353	- 824	863	1,063	- 580	529	1,687	200
Total nonreserve use of monetary base	45,077	47,048	50,788	55,501	60,161	1,971	3,740	4,713	4,660
C. Member bank reserves									
Reserves on deposits with Federal Reserve Banks	21,092	21,818	22,085	24,150	27,788	726	267	2,065	3,638
Reserves in the form of currency and coin (estimated)	4,631	4,921	5,187	5,423	5,743	290	266	236	320
Total bank reserves	25,723	26,739	27,272	29,573	33,531	1,016	533	2,301	3,958

Note: The sum of nonreserve use and total bank reserves may not add to the total monetary base due to rounding.
Source: Federal Reserve Board.

erased a sizable share of the funds created by the Federal Reserve. The expansion in nonreserve uses of the monetary base centered mainly in the public's increased holdings of currency ($3.4 billion). However, this drain was eased appreciably by reductions in Treasury cash holdings ($649 million) and in Treasury deposits at Federal Reserve Banks ($420 million). The growth in deposits at Reserve Banks owned by foreign monetary authorities and international institutions absorbed $175 million of the monetary base. Of the $1.0 billion expansion in member bank reserves, nearly $300 million was held as vault cash, and the rest was held as deposits at Federal Reserve Banks.

The policy of severe monetary restraint pursued in 1969 is also reflected in the behavior of the bank reserve equation. For the year as a whole, member bank reserves rose by only $533 million. The monetary base expanded by $4.3 billion (virtually all of which originated in net purchases of U.S. Government securities by the Federal Reserve). However, the funds created by the Federal Reserve were provided primarily to replace the drain arising from nonreserve uses of the monetary base. While $2.7 billion of the drain resulted from an increase in currency in circulation, the Treasury also added over $600 million to its deposits at Federal Reserve Banks.

With the shift of monetary policy from restraint to expansion in 1970--and a further liberalization in 1971--the monetary base responded accordingly. In 1970, the monetary base expanded by $7.0 billion. Of this amount, $6.3 billion was supplied by the Federal

Reserve, and nearly $700 million originated in Treasury operations (including $400 million resulting from the introduction of Special Drawing Rights (SDR's). Nonreserve uses of the monetary base rose by $4.7 billion. A greater volume of currency in circulation ($2.9 billion) was responsible for the major part of this drain, but other Federal Reserve accounts also made a contribution ($1.9 billion). The latter consist mainly of securities held by the Federal Reserve Bank of New York on behalf of foreign central banks--which in turn are a reflection of the deficit in the U.S. balance of payments. Nevertheless, member bank reserves rose by $2.3 billion. In 1971, the expansion in member bank reserves ($4.0 billion) was even more dramatic. Again the growth of Federal Reserve credit ($8.9 billion) was the principal source. These newly created funds were partly offset by declines of $600 million in the gold stock and $300 million in member bank borrowing from Federal Reserve Banks. Treasury currency outstanding and SDR's added $561 million and $400 million, respectively. Nonreserve uses eroded $4.7 billion from the monetary base, leaving an increase of $4.0 billion in member bank reserves.

Of course, most economists would not be satisfied with an assessment of monetary policy based primarily on the insights yielded by an analysis of changes in the monetary base. As a minimum, they would want to ask also about the behavior of the money stock. For the years under review here, the various measures of the money stock show essentially the same pattern as that traceable in the behavior of the bank reserve equation. There is no mystery at work here--since the growth of demand deposits (the principal component of the money stock) depends directly on the availability of bank reserves. In 1968, M_1 (currency plus demand deposits in the hands of the public) rose by 7.8 per cent. But in 1969, under the impact of monetary restraint, the expansion of M_1 amounted to only 3.2 per cent. In 1970 and 1971, as monetary policy sought to counter the effects of recession, the rise in M_1 was 5.4 per cent and 6.2 per cent, respectively. The broader measures of the money stock (M_2, i.e., M_1 plus time deposits at commercial banks other than large CD's, and M_3, i.e., M_2 plus deposits at thrift institutions) traced roughly the same contours as M_1. Bank credit measures (the adjusted bank credit proxy and total loans and investments) show essentially the same profile--except the amplitude of fluctuation is greater.

III. Strategy and Impact of Federal Reserve Monetary Policy in Recent Years

This traditional perception of the tasks of monetary policy has a number of adherents in the Federal Reserve System. In fact, in a few places (especially at the Federal Reserve Bank of St. Louis), the advocacy of a monetary policy geared primarily to the behavior of the money stock is strong indeed.[3/] However, the latter approach to monetary management is not shared by the vast majority of policy-makers in the Federal Reserve. Instead, the System has adopted an essentially eclectic approach: it has employed a variety of instruments to enhance the contribution which monetary policy can make toward the achievement of price stability, high levels of output and employment, and the restoration of equilibrium in the U.S. balance of payments.

During a substantial part of the 6-3/4 years that I have been a Member of the Federal Reserve Board, the System has been troubled by a lingering problem. That problem is the differential impact of changing credit conditions on the availability of credit in particular sectors of the economy. The general features of this problem are widely recognized. During periods of strong credit demands and inflationary pressures (such as 1966 and 1969-70), Federal Reserve monetary policy ordinarily assumes a posture of substantial restraint. However, the impact of this restraint is felt unevenly by various groups of borrowers in the country. Some borrowers (most notably the

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3/ I have traced the progress of monetarism in the Federal Reserve in some detail. See "The Political Economy of Money: Evolution and Impact of Monetarism in the Federal Reserve System," The American Economic Review, May, 1972, pp. 344-352.

largest business concerns) are able to obtain quite readily a large share of the funds they require to continue their activities--particularly investment in plant expansion. In contrast, other borrowers (especially State and local governments and families attempting to purchase homes) are severely rationed in their efforts to obtain credit. The effects on spending and output that result from this disproportionate shift in the distribution of loanable funds are no less apparent. Business spending on plant and equipment and on inventories continues at a pace essentially unchanged from that prevailing prior to the adoption of a restrictive credit policy; and the expansion continues long after spending by State and local governments--and particularly by home buyers--has been severely retarded.

This is a familiar story, and the explanation of the outcome is also widely known: the institutional rigidities of housing finance (derived from the inflexiblity of the mortgage as a debt instrument and the limited ability of savings and loan associations to compete for funds), combined with the reluctance of home buyers to pay market-determined rates of interest, serve to erect formidable obstacles to the continued flow of funds into residential construction during periods of tight credit conditions. Similar rigidities (notably limitations on borrowing costs) inhibit the ability of State and local governments to compete in the capital market. Numerous proposals have been advanced to cope with the situation by lessening barriers and stabilizing the flow of funds into specific sectors. Some of these have been adopted, and a few have resulted in improvements.

Nevertheless, the basic problem remains, and its manifestation in recent years can be traced clearly in the record. In mid-December, 1968, the Federal Reserve took the first of a series of steps designed to tighten monetary and credit conditions in order to combat inflationary pressures generated by an overheated economy. The impact of this and subsequent policy measures coincided with the advent of expansion in credit demands. Commercial banks (which must necessarily be the fulcrum of monetary policy) became progressively under severe monetary restraint. This was especially true of the large institutions at the forefront of the industry. As 1969 unfolded, interest rates on open market securities increased sharply. However, the Federal Reserve did not raise the maximum rates of interest which banks could pay on CD's in denominations of $100,000 and over. As a result, a substantial volume of funds was drawn away from deposit accounts at commercial banks into higher yielding market securities. At the same time, banks were faced with exceptional loan demands from their customers--with the demand for funds by business borrowers being particularly strong.

In the face of the sharp outflow of deposit funds, banks acted to meet the demands of their loan customers by liquidating large blocks of their security holdings. In addition, most comparatively large banks tapped nondeposit sources for a substantial volume of funds, borrowing heavily in the Euro-Dollar market (particularly from foreign branches), in the Federal funds market, and from Federal Reserve Banks. These large banks also sold sizable portions of their loan portfolios, especially to their holding company affiliates, subsidiaries, and foreign branches. Affiliates obtained the funds to purchase these loans primarily by selling commercial paper. Overall, after adjustment for loan sales, bank holdings of earning assets rose only moderately--as a sharp growth in loans was offset in large part by a marked decrease in investment holdings.

During 1970, the course of developments differed markedly. In mid-January of that year, the Federal Reserve, in recognition of the moderating pace of the economy, moved to reduce the degree of tightness in monetary and credit conditions. Subsequently, the System took a number of actions to promote moderate easing of credit conditions. And with the easing of monetary policy and the cooling off of the economy, interest rates on open market securities trended down. A number of other factors also improved the ability of banks to compete for deposit funds.

Ceiling interest rates that banks are allowed to pay on consumer-type time and savings deposits were raised by the Federal Reserve Board early in 1970. At mid-year, several steps were taken to help ease pressures in the money market which resulted from the bankruptcy of the Penn-Central Railroad. Rate ceilings on short-dated CD's were suspended in late June, and member banks were allowed to borrow from Federal Reserve Banks under liberal terms if this were necessary to enable them to accommodate any of their customers who needed to refinance maturing commercial paper. In August of that year, reserve requirements on the commercial paper indebtedness of bank affiliates were imposed; this induced banks to reduce these liabilities. At the same time, investors in this paper were encouraged to shift their funds into deposit accounts. In November, the discount rate at Federal Reserve Banks was cut in two 1/4 point moves from 6 to 5-1/2 per cent.

In addition to these changes in regulations and the down-trend in interest rates, it appears that the public became more cautious in the management of its asset positions. While all of these factors combined to promote exceptionally strong advances in deposit funds, customer loan demands (particularly the demands of business customers) remained relatively weak. This situation became especially evident in the Spring of 1970, when corporations began floating large amounts of long-term issues partly to replace short-term debt.

During 1971, the main thrust of monetary policy was expansionary. The principal aim was to encourage a sizable further increase in bank reserves, money, and bank credit. The growth of these monetary aggregates (which was generally larger than in the year before) was intended to stimulate recovery from the 1969-70 recession. There was considerable variation in interest rates. Among other factors, this wide fluctuation reflected changes in the public's expectations about inflation and large short-term capital flows between the United States and foreign countries. After mid-August, when new economic policies were announced (which included wage and price restraints and far reaching international measures to stem deterioration in the balance of payments), interest rates moved downward. By the end of the year, interest rates--on the average--were down somewhat from the levels at the beginning of 1971. In mid-December, the Federal Reserve discount rate was cut to 4-1/2 per cent in recognition of the lower levels of market rates. The move was also designed to encourage a faster pace of economic expansion. During 1972, monetary policy has continued to encourage fuller utilization of manpower and plant capacity while continuing to avoid the rekindling of inflation.

The impact of monetary policy on credit flows during the last few years can be seen in the behavior of commercial banks. The figures in Table 2 can be used for this purpose. In 1969, commercial banks' liabilities (the key to their lending ability) rose by less than half as much as in the preceding year. The primary reason for the lag was a noticeable loss of time deposits--especially negotiable CD's of $100,000 and over. The latter experience, in turn, was due to the decision of supervisory authorities to hold the maximum rates of interest which could be paid on time deposits below sharply rising market yields. In 1970 (and particularly after mid-year when the ceilings were suspended with respect to CD's with maturities of less than 90 days), interest rates offered by the banks were again competitive with market yields--which were declining sharply--and the banks gained funds. They continued to do so in 1971.

Table 2. Sources and Uses of Funds by Commercial Banks, 1968, 1969, 1970 and 1971
(Amounts in Billions of Dollars)

Source or Use	1968 Amount	1968 Per Cent Of Total	1969 Amount	1969 Per Cent Of Total	1970 Amount	1970 Per Cent Of Total	1971 Amount	1971 Per Cent Of Total
Net acquisition of financial assets	46.6	100.0	22.5	100.0	40.4	100.0	57.6	100.0
Total bank credit	40.3	86.7	17.9	78.9	33.1	81.9	50.5	87.7
Credit market instruments	39.0	83.7	18.9	83.6	31.6	78.2	49.8	86.5
U.S. Government Securities	3.5	7.5	- 9.5	- 42.2	9.4	23.2	6.0	10.4
Direct	2.2	4.7	- 9.2	- 40.9	5.8	14.3	2.3	4.0
Agency issues	1.3	2.8	- 0.3	- 1.3	3.6	8.9	3.6	6.4
State and local govt. obligations	8.6	18.4	0.2	0.9	10.7	26.4	12.7	22.0
Corporate bonds	0.3	0.6	- 0.1	- 0.4	0.8	2.0	1.3	2.3
Home mortgages	3.5	7.5	3.0	13.3	0.9	2.2	5.7	9.9
Other mortgages	3.2	6.8	2.4	10.7	1.6	4.0	4.2	7.3
Consumer credit	4.9	10.5	3.3	14.7	1.9	4.6	4.8	8.3
Bank loans, n.e.c.	16.2	34.8	19.0	84.4	4.4	10.8	14.4	25.0
Open-market paper	- 1.1	- 2.4	0.5	2.2	2.0	5.0	0.8	1.3
Corporate equities	0.1	0.2	*	--	0.1	0.3	*	--
Security credit	1.3	2.8	- 1.1	- 4.9	1.4	3.4	0.8	1.2
Vault cash and member bank reserves	1.9	4.0	0.5	2.3	1.8	4.5	4.1	7.1
Other interbank claims	1.6	3.3	2.3	10.3	2.5	6.2	1.1	1.9
Miscellaneous assets	2.8	6.0	1.9	8.5	3.0	7.4	1.9	3.3
Net increase in liabilities	44.8	95.8	21.5	95.5	38.7	95.7	55.1	95.7
Demand deposits, net	13.4	29.0	5.3	23.6	8.7	21.5	14.0	24.3
U.S. Government	- 0.2	- 0.4	*	--	2.9	7.1	2.2	3.8
Other	13.7	29.4	5.3	23.6	5.8	14.4	11.8	20.5
Time deposits	20.7	44.4	- 9.3	- 41.3	38.0	94.1	41.4	71.8
Large negotiable CD's	3.1	6.7	-12.5	- 55.6	15.2	37.6	7.9	13.7
Other at commercial banks	17.4	37.3	3.0	13.4	22.4	55.5	33.2	57.6
At foreign banking agencies	0.2	0.4	0.2	0.9	0.4	1.0	0.3	0.5
Federal Reserve float	0.9	1.9	*	--	0.8	2.0	0.1	0.2
Borrowing at Federal Reserve Banks	*	--	*	--	0.2	0.5	- 0.3	- 0.5
Other interbank claims	1.6	3.4	2.3	10.2	2.5	6.2	1.1	1.9
Bank security issues	0.2	0.4	0.1	0.4	0.1	0.2	0.6	1.0
Commercial paper issues	--	--	4.2	18.7	- 1.9	- 4.7	- 0.4	- 0.7
Profit tax liabilities	- 0.1	- 0.2	0.1	0.4	0.3	0.7	*	--
Miscellaneous liabilities	8.0	16.9	18.9	83.5	-10.0	- 24.8	- 1.3	- 2.3
Liabilities to foreign affiliates	2.3	4.9	7.9	35.1	- 6.9	- 17.1	- 4.1	- 7.1
Other	5.6	12.0	10.9	48.4	- 3.1	- 7.7	2.8	4.9
Discrepancy	0.6	1.3	0.9	4.0	1.0	2.5	0.3	0.5
Current surplus	3.0	6.4	3.7	16.4	3.8	9.4	3.9	6.8
Plant and equipment	0.6	1.3	1.8	8.0	1.1	2.7	1.1	1.9

NOTE: Data are for chartered commercial banks, their domestic affiliates, Edge Act Corporations, agencies of foreign banks, and banks in U.S. possessions. Edge Corporations and agencies of foreign banks appear together in this table as "foreign banking agencies."

* Less than $0.05 billion.

Source: Flow of Funds Section, Federal Reserve Board.

The figures in Table 2 also show the sharp changes in uses of commercial bank funds in recent years. In 1969, total bank credit expanded by less than half the amount recorded the previous year. However, the rise in bank loans in 1969 was one-sixth larger than that recorded the year before. To meet this private demand for credit, the banks liquidated a sizable amount of U.S. Government securities and switched the funds into loans. In 1970, the growth in bank credit was nearly double that recorded in the preceding year. But the overwhelming proportion of the banks' funds went into investments, and only a modest growth occurred in bank loans. Last year, credit supplied by commercial banks rose by over $17 billion compared with the year before. Moreover, well over half of the growth was in the form of loans--which was broadly distributed among loan categories. Finally in 1969, commercial banks pulled in a record amount of Euro-dollars through their foreign branches in an effort to offset the loss of domestic time deposits. In 1970, they employed a substantial portion of their enlarged resources to repay liabilities to their foreign branches. These repayments continued in 1971.

IV. A New Framework for the Assessment of Monetary Policy

But despite the erosion of tension in money and capital markets during the last year or so, the problem posed by the differential impact of monetary policy remains an urgent one. Moreover, much of the debate over the issue continues to focus on the role of the Federal Reserve. This is not surprising because the reduced availability of funds in the adversely affected sectors becomes most evident as market forces respond to monetary restraint. Of course, one can contend that the objective of monetary policy is to impose general restraints on borrowing. Consequently, the blame for the differential impact of monetary policy would rest on rigidities in housing finance and on State and local borrowing limitations. And there is an element of truth in this position. Nonetheless, if the impact of monetary policy consistently bears heavily on certain sectors of the economy and just as consistently leaves other sectors less affected, then it is also true that whatever its intent, the effect of monetary policy is specific rather than general. It is recognition of this fact that has led many observers to feel that they need to look no farther than Federal Reserve policy for an explanation--and remedy of this problem.

When the Federal Reserve is called upon to devise a solution, it is really being asked to "do something"[4/] to insure greater stability in the allocation of commercial bank credit over the cycle. This focus on the commercial banks is by no means misplaced. While other institutions may play a larger overall role (in terms of total lending) in certain markets than commercial banks, changes in the volume of funds

4/ I interpret this to mean that they really want the Congress to "do something," since the Federal Reserve's authority rests on legislation enacted by Congress.

supplied by the latter over a fairly short period of time can have a disproportionate impact on the level of spending in particular sectors. And the principal beneficiary of such shifts in the availability of funds is the corporate business sector.

But, as I emphasized above, this is not a new situation--and taken alone it would not justify a renewed discussion at this time. However, there are forces at work behind the familiar facade which are less readily recognized but whose potential effects on the nation's financial system could be considerable; and the lending behavior of commercial banks is the fulcrum of the situation. In fact, the situation is roughly analogous to that of an iceberg: the proportion below the surface greatly exceeds that which is visible at first glance. What can be seen readily is the changing availability of funds in particular sectors as commercial banks generally respond to monetary restraint. What is less visible is the strategic behavior of a small number of multi-national banks which virtually guarantees that the availability (although not the cost) of loans by them to their preferred business customers will be substantially insulated from monetary restraint.

Over the last two and one-half years, I have devoted a considerable amount of effort to studies designed to illuminate the role of these multi-national banks in the nation's financial system.[5/]

5/ See "The Banking Structure and Monetary Management" presented before the San Francisco Bond Club, April 1, 1970, and "Commercial Bank Lending and Monetary Management," Journal of Commercial Bank Lending, January, 1972, pp. 2-19.

The framework of analysis was constructed by recasting data for about 330 large banks which report to the Federal Reserve on a weekly basis. Depending on the character of their business, the banks were classified as follows: multi-national banks (20); regional banks (60), and local banks (250). However, it should be recalled that the Weekly Reporting Banks (WRB) all have total deposits of $100,000,000 and over. At the end of June, 1972, they constituted 2.4 per cent of the 13,669 insured commercial banks in the country; yet they held 57 per cent of the total assets and 55 per cent of the deposits.

The multi-national bank category is comprised of exceptionally large commercial banks. Indeed, at the time of original selection in 1970--and this is still true at the present time--all but one of the multi-national banks were drawn from the 20 largest banks in the United States, and the remaining bank was the 21st largest bank in the country. These banks are identified in Table 3, along with several classes of assets and deposits. A second major distinguishing characteristic of these banks is the substantial role played by virtually all of them in international finance. All 20 multi-national banks had one or more branch offices in foreign countries. Deposits in these branches varied from 12 per cent up to 47 per cent of the combined deposits of domestic offices and foreign branches for 19 of the 20 multi-national banks. Each bank had a relatively large volume of loans to foreign borrowers on the books of the head office. In

Table 3. Assets and Deposits of Selected Large Banks
in the United States, June 30, 1972
(millions of dollars)

Name of Bank	Total domestic assets	Deposits: Total deposits	Deposits: At Domestic Offices	Deposits: At Foreign offices	Deposits: Foreign as per cent of total	Head Office Claims on Foreigners: Total	Head Office Claims on Foreigners: Own Account	Head Office Claims on Foreigners: Customers Account	Assets of Foreign Branches: Total	Assets of Foreign Branches: Claims on Head Office	Assets of Foreign Branches: Claims on others
Multi-National Banks (20)											
1 Bank of America, S.F.	26,086	32,393	21,667	10,726	33.1						
2 Chase Manhattan, N.Y.	19,919	22,823	14,985	7,838	34.3						
3 First National City, N.Y.	17,847	25,035	13,471	11,564	46.2						
4 Manufacturers Hanover, N.Y	10,972	11,964	9,024	2,941	24.6						
5 Chemical Bank, N.Y.	10,971	10,787	8,520	2,267	21.0						
Sub-Total	85,795	103,002	67,667	35,336	--	5,871	5,059	812	34,453	1,341	33,111
Share of Multi-National total (%)	49.28	53.16	49.82	60.99	--	55.33	57.57	44.59	60.78	92.74	59.94
Share of Grand total (%)	22.72	NA	22.51	NA	--	40.40	41.30	35.58	53.60	89.77	52.79
6 Morgan Guaranty, N.Y.	9,724	10,717	6,646	4,071	38.0						
7 Security Pacific, L.A.	9,162	9,132	7,721	1,411	15.5						
8 Bankers Trust, N.Y.	8,152	9,521	6,550	2,971	31.2						
9 Continental Illinois, Chicago	7,932	8,176	5,978	2,199	26.9						
10 First National Bank, Chicago	7,405	7,400	5,195	2,206	29.8						
Sub-Total	42,375	44,946	32,090	12,858	--	2,552	1,938	610	13,245	93	13,152
Share of Multi-National total (%)	24.34	23.19	23.62	22.19	--	24.05	22.05	33.50	23.37	6.43	23.81
Share of Grand total	11.22	NA	10.68	NA	--	17.56	15.82	26.73	20.60	6.22	20.96
11 Wells Fargo, S.F.	7,016	6,711	5,589	1,122	16.7						
12 Crocker Citizens, S.F.	6,095	5,862	4,911	951	16.2						
13 United California, L.A.	5,761	5,083	4,468	615	12.1						
14 National Bank of Detroit	5,110	4,802	4,222	580	12.1						
15 Mellon National Bk, Pittsburgh	4,736	4,963	3,548	1,415	28.5						
Sub-Total	28,718	27,421	22,738	4,683	--	1,160	1,105	57	4,458	2	4,457
Share of Multi-National total (%)	16.49	14.15	16.74	8.08	--	10.93	12.57	3.13	7.86	0.14	8.07
Share of Grand total	7.61	NA	7.56	NA	--	7.98	9.02	2.50	6.93	0.13	7.10
16 Irving Trust, N.Y.	4,043	4,164	3,165	999	24.0						
17 First National Bank, Boston	3,765	3,974	2,646	1,328	33.4						
18 First Penn., Bala Cynwyd, Pa.	3,501	2,946	2,566	380	12.9						
19 Marine Midland, N.Y.	3,136	4,962	2,610	2,352	47.4						
20 Cleveland Trust, Cleveland	2,774	2,361	2,358	3							
Sub-Total	17,214	18,407	13,345	5,062	--	1,028	686	342	4,526	10	4,516
Share of Multi-National total (%)	9.89	9.50	9.82	8.74	--	9.69	7.81	18.78	7.98	0.69	8.18
Share of Grand total	4.56	NA	4.44	NA	--	7.07	5.60	14.99	7.04	0.67	7.20
MULTI-NATIONAL TOTAL	174,107	193,776	135,840	57,939	--	10,611	8,788	1,821	56,682	1,446	55,236
Share of Grand total (%)	46.11	NA	45.19	NA	--	73.01	71.74	79.80	88.17	96.79	88.05
Regional Banks (60)	92,116	NA	71,180	NA	--	2,034	1,859	176	5,302	29	5,273
Share of Grand total (%)	24.40	NA	23.68	NA	--	14.00	15.18	7.71	8.25	1.94	8.40
Local Banks	111,360	NA	93,563	NA	--	1,887	1,602	285	2,302	19	2,228
Share of Grand total (%)	29.49	NA	31.13	NA	--	12.99	13.08	12.49	3.58	1.27	3.55
GRAND TOTAL	377,583	NA	300,583	NA	--	14,532	12,249	2,282	64,286	1,494	62,737
Memorandum:											
All insured commercial banks (Number: 13,669)	661,838		549,985								
Weekly Reporting Banks (as per cent of all ins. banks)	57.1		54.6								
Multi-National Banks	26.4		24.6								
Regional Banks	13.9		12.8								
Local Banks	16.8		17.2								

Note: Head office claims on foreigners and assets of foreign branches are not shown for individual banks to prevent disclosure of confidential data. However, these data are shown for the multi-national banks grouped by size into four classes of five banks.

Sources: Federal Reserve Board. Total Assets: Call Report, June 30, 1972. Deposits: Consolidated Call Report, June 30, 1972. Head office claims on foreigners, Voluntary Foreign Credit Restraint reports. Assets of branches, monthly reports to Federal Reserve Board.

NA Not Applicable.

fact, these 20 banks had nearly three-quarters of all head office claims on foreigners reported under the Voluntary Foreign Credit Restraint Program. Also at the time of their selection, 75 per cent of the banks obtained funds by borrowing in the Euro-dollar market. Another important characteristic which applied to a large segment (18 of 20) of the multi-national banks was that the issuing rates on their large CD's were generally the lowest offered by commercial banks.

In addition to these characteristics, a number of other criteria were considered in the selection of the panel. Thus, for example, more than half of the multi-national banks had business loan holdings which amounted to more than 60 per cent of their total loans. Moreover, a large number of these banks were extremely important in the correspondent banking field. This was indicated by the fact that 10 of these banks received more than 10 per cent of their total deposits from other domestic commercial banks. Finally, a large segment of the multi-national banks are major borrowers in the Federal funds market. At the time of selection, for example, nearly half of the banks had a net indebtedness position in that market which equaled about 5 per cent of their total deposits.

Using similar criteria but stressing domestic activities and relative importance in one area of the country, the 60 regional banks were classified. However, it should be recalled that some of these regional banks are also capable of registering their presence in the national money and capital markets. The remaining 250 banks were designated large local banks.

As of June 30, 1972, the 20 multi-national banks represented only 0.15 per cent of all insured commercial banks, but they held one-quarter of the total assets and domestic deposits. The 60 regional banks constituted 0.44 per cent of the insured banks, and they held one-seventh of the total assets and domestic deposits. For the 230 local banks, the figures were: 1.83 per cent of insured banks and 17 per cent of total assets and domestic deposits. This classification of banks according to the scope and character of business is used in several of the sections which follow.

Having developed a framework for identifying the multi-national banks, it was also necessary to fashion a scheme which would make it possible to trace their impact on the U.S. money and capital markets. For this purpose, a modified sources and uses of funds accounting system was developed. The aim was to answer the questions: (1) how did the banks obtain funds and (2) what did they do with their funds? During a given period, the banks could obtain funds from external sources (an increase in capital, deposits, borrowing, or other non-deposit liabilities). Alternatively, they could rely on internal sources--such as the liquidation of existing financial assets. In the same vein, the banks could use their funds for external purposes such as the acquisition of financial assets or the repayment of borrowings or the reduction of other nondeposit liabilities. On the other hand, the banks could use their funds for internal purposes--such as deposit withdrawals. Of course, during a specific period of time, banks may rely on a combination of internal and external sources of funds, and they may employ their resources to meet a variety of internal and external demands: so, the task is to explain why a particular source or use may be predominant at a given juncture.

A basic question being raised here concerns the varying supply of bank credit to different sectors of the economy under the changing impact of monetary policy. In this regard, this type of concern is frequently expressed in terms of the availability of bank credit for sectors such as "housing" and "business." The statistics showing changes in banks' holdings of "residential mortgages" or "business loans" are frequently taken as proxies for the banks' supply of funds to these sectors. Actually, a much clearer picture can be developed by a fuller definition of economic sectors. In this paper, three sectors have been identified: (1) the household sector; (2) the business sector, and (3) the government sector. The business sector is subdivided into farm, nonfarm, and banks. The government sector is divided between the Federal Government and State and local governments.

In terms of the statistics, bank credit to the household sector can be identified in three types of loans: (1) consumer credit; (2) real estate loans on 1-4 family properties, and (3) loans to individuals to purchase or carry securities. Bank loans to the business sector can be traced in (1) loans to farmers and real estate loans secured by farmland; (2) business loans (i.e., commercial and industrial loans), commercial mortgages, real estate loans on multi-family residential properties,and loans to financial institions and brokers and dealers, and (3) loans to banks (Federal funds sold). Bank credit to the government sector can be identified in their holdings of Federal Government securities and obligations of State and local governments.

The statistics used to trace the banking sources and uses of funds had to be gathered from a variety of sources. The principal sources of data were the WRB series for 330 large banks and the June and December Call Reports submitted to the Federal Deposit Insurance Corporation (FDIC) by all insured commercial banks. From the WRB series, it was possible to obtain data on (1) deposits--distinguishing between(a) demand deposits and (b) time and savings deposits (with a further breakout for large CD's); (2) total borrowing (from Federal Reserve Banks and other sources); (3) holdings of U.S. Government securities (Treasury and Agency issues); State and local government obligations, and other securities; and (4) business loans, real estate loans and consumer loans. A second source provided statistics on (1) outstanding commercial paper issued by bank affiliates, (2) member banks' required reserves, and (3) borrowing from the Federal Reserve Banks. These data are provided in the Short-Run Banking System Reports (SBR) Series which are available on a daily basis for about 5,800 member banks. A third series--nondeposit sources of bank funds--provided data on (1) sales of business loans by commercial banks to their affiliates and (2) Euro-dollar borrowings--directly from foreign branches and through brokers and dealers. From the Call Reports, it was possible to obtain a considerable amount of detailed information on the types of deposits and earning assets held by banks. While the Call Report is submitted to the FDIC four times each year, only the June and December reports are readily available for computer-based analytical work.

For the purpose of this paper, the 330 Weekly Reporting Banks were selected for study. Since the interest here focused on the general pattern of response of these banks (divided into the three sub-groups discussed above) to changes in monetary policy, quarterly averages were calculated from the weekly statistics. Quarter-to-quarter changes in these average levels were then used to construct sources and uses of funds tables for the period 1968-1972 (first and second quarters)--a period covering 18 quarters. Using data from the Call Reports, sources and uses of funds tables were calculated for half-year periods--also covering the period 1968-72, or for 9 six-month segments of time. The quarterly tables are shown in Appendix Table I and the half-year tables in Appendix Table II (attached). These data are drawn on rather extensively in the following sections.

V. Banks' Reactions to Monetary Policy: Sources of Funds

The ways in which commercial banks adjusted their behavior to changes in monetary policy over the last few years can be traced in considerable detail in the sources and uses of funds statistics presented in the Appendix Tables. The quarterly changes data in Table I are particularly useful because they allow one to identify the numerous sources of funds to which different classes of banks had access. Data in Table II showing half-year changes enable one to identify in some detail the sectors--and parts of sectors--to which bank credit was channeled. Only the highlights of the banks' behavior can be summarized here.

As mentioned above, a basic element in the policy of monetary restraint followed by the Federal Reserve in 1969 and early 1970 was the maintenance of interest rate ceilings on time deposits in member banks below market yields. A major consequence of that policy was a massive attrition in the banks' time deposits. This run-off was especially marked in the case of large denomination certificates of deposit (CD's). In fact, to a considerable extent, the story of commercial bank behavior since the end of 1967 is the story of their adjustment to the ebb and flow of funds raised through this instrument. The other principal element in the pattern of adjustment--the ebb and flow of Euro-dollar borrowings primarily by multi-national banks--is virtually a mirror image of the gains and losses in CD's.

To help focus the analysis of the changing sources of bank funds, several types of statistical information have been presented in Tables 4-7. Table 4 shows the average level outstanding and quarterly changes in CD's at weekly reporting banks for the period 1968-1972. Table 5 shows the average level of Euro-dollar borrowings by major source (from foreign branches, direct from other foreign banks, or through brokers and dealers) for the same period. In Table 6 are shown quarterly changes in the average of selected assets and liabilities (CD's, Euro-dollar borrowings, U.S. Treasury securities, and total borrowing--excluding Euro-dollars). Table 7 presents the same data as shown in Table 6--but expressed as a percentage of the banks' total sources of funds.

Attrition of CD's

Several significant features stand out in these data. The dramatic attrition in the volume of CD's outstanding is clearly evident in Table 4. For all weekly reporting banks, CD's outstanding reached a peak in the fourth quarter of 1968, averaging $23.1 billion. Within the year, CD's declined by $1.2 billion between the first and second quarters. This shrinkage resulted as yields on alternative market instruments attractive to investors rose above bank interest rate ceilings. With the easing of monetary policy in the last half of 1968, banks were able to raise net nearly $4 billion through the issuance of CD's. Most of the variation (gains as well as losses) centered in multi-national banks. In fact, these institutions lost CD's in both the first and second quarters of 1968.

Table 4: Outstanding Certificates of Deposits of $100,000 and over, By Class of Bank, By Quarters, 1967-1972 (Billions of Dollars)

Year & Quarter	Total: All Weekly Reporting Banks			Multi-National Banks			Regional Banks			Local Banks		
	Amount Outstanding	Change during period: Amount	Change during period: Per cent	Amount Outstanding	Change during period: Amount	Change during period: Per cent	Amount Outstanding	Change during period: Amount	Change during period: Per cent	Amount Outstanding	Change during period: Amount	Change during period: Per cent
1967 - 4	20.3	--	--	11.7	--	--	5.1	--	--	3.5	--	--
1968 - 1	20.5	0.207	1.0	11.5	-0.279	- 2.4	5.4	0.316	6.2	3.6	0.171	4.9
2	19.3	-1.171	- 5.7	10.3	-1.166	-10.1	5.3	-0.080	- 1.5	3.7	0.075	2.1
3	21.2	1.904	9.9	11.3	0.980	9.5	5.9	-0.614	11.6	4.0	0.309	8.3
4	23.1	1,905	9.0	12.3	1.007	8.9	6.5	0.553	9.4	4.4	0.346	8.6
1969 - 1	20.2	-2.911	-12.6	10.0	-2.284	-18.6	5.9	-0.576	- 8.9	4.3	-0.051	- [illegible]
2	17.0	-3.259	-16.1	7.5	-2.528	-25.3	5.2	-0.701	-11.9	4.3	-0.030	- 7.0
3	12.9	-4.030	-23.7	5.2	-2.312	-30.8	4.0	-1.218	-23.4	3.8	-0.500	-11.6
4	11.3	-1.667	-12.9	4.9	-0.254	- 4.9	3.2	-0.780	-19.5	3.2	-0.633	-16.7
1970 - 1	10.9	-0.374	- 3.3	5.2	0.259	5.3	2.8	-0.380	-11.9	2.9	-0.253	- 7.9
2	13.0	2.084	19.1	6.1	0.936	18.0	3.4	0.553	19.7	3.5	0.596	20.5
3	19.2	6.216	47.8	9.3	3.176	52.1	5.1	1.748	51.4	4.8	1.291	36.9
4	24.5	5.291	27.6	12.1	2.848	30.6	6.4	1.336	26.2	5.9	1.107	23.1
1971 - 1	27.2	2.733	11.2	13.9	1.822	15.1	6.9	0.465	7.3	6.3	0.445	7.5
2	27.5	0.251	1.0	15.0	1.030	7.4	6.3	-0.614	-8.9	6.2	-0.164	- 2.6
3	30.6	3.190	11.6	17.2	2.191	14.6	7.0	0.683	10.8	6.5	0.316	5.1
4	33.3	2.642	8.6	18.6	1.479	8.6	7.6	0.571	8.2	7.1	0.592	9.1
1972 - 1	33.0	-0.266	- 0.8	17.9	-0.741	- 4.0	7.5	-0.076	- 1.0	7.6	0.552	7.8
2	34.2	1.196	3.6	18.9	1.031	5.8	7.3	-0.165	- 2.2	8.0	0.329	4.3

Note: Amounts are quarterly averages of weekly figures. Components may not add to totals because of rounding.

However, as already indicated, the most striking changes in CD's occurred during the period of severe monetary restraint in 1969 and early 1970. For all weekly reporting banks, between the fourth quarter of 1968 and the first quarter of 1970, outstanding CD's dropped by $12.2 billion--from $23.1 billion to $10.9 billion. This was a decrease of 53 per cent. The shrinkage of $7.1 billion in CD's outstanding at multi-national banks accounted for nearly three-fifths of the decline--although they had just over half of the CD volume in the fourth quarter of 1968. Actually, among multi-national banks, the attrition in CD's ended in the last three months of 1969; and they gained funds through this source in the first quarter of 1970--while other weekly reporting banks continued to experience a net CD outflow. So, from peak to trough, the decline in CD's at the multi-national banks was $7.4 billion, representing 60 per cent of the amount outstanding in the last quarter of 1968.

Among regional banks, the decline in CD's was slightly less marked than at multi-national banks--but it was still substantial. During the five quarters of attrition, the regional banks on a net basis lost 57 per cent of the volume outstanding in the fourth quarter of 1968. While they accounted for 28 per cent of the amount outstanding on the eve of severe monetary restraint, they absorbed 30 per cent of the attrition. In contrast, local banks experienced a decline of about one-third in CD's outstanding. This was less than their proportionate share of CD volume at the beginning of the period. In the final quarter of 1968, they had one-fifth of the CD's outstanding, but they absorbed only one-eighth of the shrinkage.

In late June, 1970, the Federal Reserve Board suspended the interest rate ceiling on member bank time deposits of $100,000 and over with maturities of 30 to 89 days. This action was taken to ease money market pressures associated with the bankruptcy of the Penn-Central Railroad. In response, banks bid aggressively for CD funds. The amount outstanding rose by $2.1 billion in the second quarter--with nearly half of the growth occurring at multi-national banks. With the lessening of monetary restraint as the year progressed, the volume of CD's outstanding at weekly reporting banks accelerated, and by the fourth quarter it had surpassed the peak established two years earlier. By the last quarter of 1971, the level of CD's outstanding was more than $9 billion above that recorded in the same period of 1970--and more than $22 billion above the low point set in the first quarter of the latter year. Approximately three-fifths of this rise ($13.4 billion) occurred at multi-national banks. The rise in CD's during the first half of 1972 was fairly moderate at weekly reporting banks.

Euro-Dollar Inflow

The extent to which weekly reporting banks turned to Euro-dollars as CD's ran off can be traced in Table 5. In fact, even before the attrition in CD's got seriously underway, the inflow of Euro-dollars rose appreciably. Between the fourth quarter of 1967 and the same period of 1968, the average level of Euro-dollar borrowings rose by $2.7 billion. Virtually all of this inflow came through the foreign branches of the multi-national banks. During the first three quarters of 1969, the volume of borrowing more than doubled--climbing from $7.1 billion in the final quarter of 1968 to $15.5 billion in the third quarter of 1969. Over 90 per cent of the rise ($7.7 billion out of $8.4 billion) was accounted for by multi-national banks.

As discussed more fully below, the imposition of marginal reserve requirements on Euro-dollar borrowings by U.S. banks in the third quarter of 1969 halted the expansion of this source of bank funds. Again, the impact fell mainly on the multi-national banks. In fact, the other weekly reporting banks continued to expand their Euro-dollar borrowing into the first quarter of 1970. The regional and local banks also used their foreign branches (especially "shell" branches located in the Bahamas) as the principal means of attracting Euro-dollars. However, they also made relatively greater use of direct borrowing from foreign commercial banks and Euro-dollar funds raised through brokers and dealers.

Table 5: Average Level of Euro-dollar Borrowings, By Class of Bank and Source of Funds, by Quarters, 1967-1972
(Millions of Dollars)

Year and Quarter	Total: All Weekly Reporting Banks				Multi-National Banks				Regional Banks				Local Banks			
	Total	Foreign Branches	Direct	Brokers & Dealers	Total	Foreign Branches	Direct	Brokers & Dealers	Total	Foreign Branches	Direct	Brokers & Dealers	Total	Foreign Branches	Direct	Brokers & Dealers
1967 - 4	4,399	4,399	--	--	4,399	4,399	--	--	--	--	--	--	--	--	--	--
1968 - 1	4,484	4,484	--	--	4,484	4,484	--	--	--	--	--	--	--	--	--	--
2	5,468	5,468	--	--	5,448	5,448	--	--	20	20	--	--	--	--	--	--
3	6,879	6,879	--	--	6,790	6,790	--	--	88	88	--	--	--	--	--	--
4	7,110	7,110	--	--	7,013	7,013	--	--	92	92	--	--	5	5	--	--
1969 - 1	8,542	8,542	--	--	8,372	8,372	--	--	166	166	--	--	4	4	--	--
2	10,897	10,897	--	--	10,610	10,610	--	--	276	276	--	--	11	11	--	--
3	15,537	14,797	366	374	14,684	14,201	179	304	727	529	144	54	126	67	43	16
4	15,461	14,963	232	536	14,290	13,770	99	421	945	747	94	104	224	176	38	10
1970 - 1	13,929	13,158	237	534	12,632	12,139	46	447	996	762	157	77	302	257	35	10
2	12,525	12,075	143	307	11,530	11,261	42	227	840	687	76	77	154	127	24	3
3	10,983	10,813	67	103	10,157	10,085	26	46	567	485	28	54	258	242	13	3
4	9,101	9,014	43	44	8,497	8,466	31	--	340	294	4	42	264	254	8	2
1971 - 1	5,982	5,952	22	8	5,611	5,644	17	--	211	202	2	7	110	105	4	1
2	2,139	2,129	6	4	1,996	1,991	5	--	96	94	1	1	48	45	--	3
3	1,694	1,684	8	2	1,596	1,588	8	--	59	59	--	--	40	38	--	2
4	2,366	2,362	3	1	2,232	2,229	3	--	82	82	--	--	52	51	--	1
1972 - 1	1,280	1,278	2	--	1,178	1,176	2	--	35	35	--	--	66	66	--	--
2	1,378	1,376	2	--	1,297	1,295	2	--	30	30	--	--	51	51	--	--

Note: Amounts are quarterly averages of weekly figures. Components may not add to totals because of rounding.

The repayment of Euro-dollar borrowings by multi-national banks started in the closing months of 1969, and the pace accelerated as the new year progressed. Through the third quarter, they had repaid $4.5 billion--or nearly one-third of the volume outstanding at the peak. The regional and local banks followed in train. As domestic funds became more available (and less espensive to borrow), all weekly reporting banks accelerated the repayment of Euro-dollar indebtedness. The magnitude and rapidity of the repayment (as also discussed below) led the Federal Reserve Board in November, 1970, to modify its Euro-dollar regulation in an attempt to moderate the reflow of funds abroad. However, it appears that the move checked the outflow only temporarily and to only a slight extent. By the third quarter of 1971, the volume of Euro-dollar borrowings outstanding had dropped to $1.7 billion--of which $1.6 billion was accounted for by multi-national banks. Since then, this level has lingered in that neighborhood.

Offset of CD Attrition By Euro-Dollar Inflow and Other Sources

As I indicated above, I have been especially interested in the extent to which Euro-dollars were used by commercial banks to replace funds lost through CD attrition. The figures in Table 6 cast some light on this question. For example, for all weekly reporting banks, the rise in Euro-dollar borrowing represented about four-fifths of the attrition in CD's between the final quarter of 1968 and the

Table 6. Changes in Average Level of Selected Assets and Liabilities, by Class of Bank, by Quarter, 1968-1972
(Millions of dollars)

Year and Quarter	Certificates of Deposit ($100,000 and over): All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks	Euro-dollar Borrowings: All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks	U.S. Treasury Securities: All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks	Total Borrowing (Excluding Euro-Dollars): All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks
1968 - 1	207	- 279	316	171	85	85	--	--	- 425	- 605	- 43	- 223	- 83	57	- 139	- 1
2	-1,171	-1,166	80	75	984	964	20	--	-1,457	- 481	- 579	- 397	2,349	1,354	717	277
3	1,904	980	614	309	1,412	1,343	- 69	--	983	1,248	- 21	- 244	1,402	1,124	318	- 39
4	1,905	1,007	553	346	231	222	4	5	1,707	879	472	356	1,307	399	668	240
1969 - 1	-2,911	-2,284	- 576	- 51	1,432	1,359	74	- 1	-2,568	-2,174	- 353	- 41	108	- 449	161	397
2	-3,259	-[illegible],528	- 701	- 30	2,355	2,238	110	7	-2,425	- 904	718	- 803	3,074	1,999	767	307
3	-4,030	-2,312	-1,218	- 500	3,901	3,592	253	56	-1,092	38	- 529	- 600	2,790	676	1,168	946
4	-1,667	- 254	- 780	- 633	- 79	- 395	218	98	194	196	40	- 42	1,808	1,016	587	205
1970 - 1	- 374	259	- 380	- 253	-1,528	-1,657	50	79	- 710	- 267	- 188	- 255	1,295	529	558	208
2	2,084	936	553	596	-1,407	-1,102	- 156	- 149	272	431	- 53	- 107	536	481	83	- 28
3	6,216	3,176	1,748	1,291	-1,541	-1,373	- 273	105	1,423	857	317	249	-2,202	-1,555	- 548	- 99
4	5,291	2,848	1,336	1,107	-1,881	-1,660	- 227	6	2,497	1,416	537	545	1,172	1,030	233	- 91
1971 - 1	2,733	1,822	465	445	-3,118	-2,836	- 129	- 153	1,547	526	281	738	- 120	- 100	- 10	- 11
2	251	1,030	- 614	- 614	-3,844	-3,666	- 115	- 63	-1,688	-1,014	- 455	- 218	2,866	1,719	676	472
3	3,190	2,191	683	316	- 443	- 400	- 35	- 8	- 922	- 598	- 186	- 138	584	255	139	190
4	2,642	1,479	571	592	672	637	24	11	1,416	1,046	271	99	2,635	1,121	963	551
1972 - 1	- 266	- 741	- 76	552	-1,087	-1,055	- 47	15	[illegible]93	492	27	375	539	364	40	135
2	1,196	1,031	- 165	329	99	120	- 5	- 1[illegible]	- 741	- 557	- 81	- 103	2,694	1,199	911	584

Note: Amounts are quarterly averages of weekly figures. Components may not add to totals because of rounding.

third quarter of 1969. For multi-national banks during the same period, the proportion was 108 per cent of the CD run off. For regional and local banks, it was one-quarter and one-fifth, respectively. Because CD's outstanding at multi-national banks continued to decline through the fourth quarter of 1969 while their volume of Euro-dollar borrowing shrank somewhat after the third quarter, the latter source offset about 99 per cent of their CD attrition during 1969 as a whole.

An even sharper insight into the behavior of commercial banks' sources of funds is provided by the data in Tables 6 and 7. The absolute changes in the average level of banks' CD's, Euro-dollar borrowings, U.S. Treasury securities, and total borrowing shown in Table 6 are expressed in Table 7 as percentages of the banks' total sources of funds. These figures suggest that the relative impact of CD attrition at multi-national and regional banks in the first three quarters of 1969 was rather similar. In both instances, it was substantially greater than in the case of local banks.

However, the ways in which the different groups of banks compensated for the loss in CD varied markedly. For the multi-national banks, Euro-dollar borrowings were the principal source--accounting for about two-fifths of their total sources during the periods of most severe CD run off. The proportion averaged about 6 per cent for regional banks and about 2 per cent for local banks. On the other hand, both the regional and local banks relied much more heavily on the liquidation of U.S. Treasury securities and borrowing from domestic sources--including Federal Reserve Banks.

Table 7: Selected Sources of Funds, by Class of Bank, by Quarter, 1968-1972
(Percentage of Total Sources)

	Certificates of Deposit ($100,000 and over)				Euro-Dollar Borrowings				Liquidation of U.S. Treasury Securities				Total Borrowing (Excluding Euro-Dollars)			
Year & Quarter	All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks	All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks	All Weekly Reporting Banks	Multi-National Banks	Regional Banks	Local Banks	All Reporting Reporting Banks	Multi-National Banks	Regional Banks	Local Banks
1968 - 1	14.4	-11.2	32.2	13.8	1.8	3.4	--	--	- 9.0	-24.3	4.4	18.0	- 1.8	2.2	-14.2	0.1
2	-16.2	-31.7	- 4.2	4.5	13.6	26.2	1.1	--	-20.1	-13.1	-30.7	-23.7	32.5	36.8	38.0	16.6
3	23.1	21.1	35.3	16.7	17.1	28.9	4.0	--	11.9	26.8	- 1.2	-13.2	17.0	24.2	18.3	- 2.1
4	18.8	23.6	18.4	12.2	2.3	5.2	0.1	0.2	17.0	20.6	15.7	12.5	12.9	9.3	22.2	8.5
1969 - 1	-31.3	-35.7	-35.3	- 4.1	15.4	21.2	4.5	- 0.1	-27.6	-34.0	-21.6	- 3.3	1.2	- 7.0	9.9	31.6
2	-34.2	-44.1	-35.7	- 1.6	24.7	39.1	5.6	0.4	-25.4	-15.8	-36.6	-43.4	32.2	34.9	39.1	16.6
3	-26.6	-28.1	-31.3	-16.5	25.7	43.7	6.5	1.8	- 7.2	0.5	-13.6	-19.8	18.4	8.2	30.0	31.2
4	-17.7	- 5.3	-32.7	27.7	- 0.8	- 8.3	9.1	4.3	2.1	4.1	1.7	- 1.8	19.2	21.3	24.6	9.0
1970 - 1	- 6.9	7.4	-37.8	-28.8	-28.3	-47.2	5.0	9.0	-13.2	- 7.6	-18.7	-29.0	24.0	15.1	55.5	[illegible]
2	30.0	24.2	45.6	35.5	-20.8	-28.5	-12.9	- 8.9	4.0	11.2	- 4.4	- 6.4	7.9	12.5	6.8	[illegible]
3	49.3	46.4	61.0	44.4	-12.2	-20.1	- 9.5	3.6	11.3	12.5	11.1	8.6	-17.5	-22.7	-19.1	- 3.4
4	32.8	30.8	43.1	29.5	-11.7	-17.9	- 7.3	0.2	15.5	15.3	17.3	14.5	7.3	11.1	7.5	- 2.4
1971 - 1	21.8	25.5	19.0	15.2	-24.9	-39.7	- 5.3	- 5.2	12.4	7.4	11.5	25.2	- 1.0	- 1.4	- 0.4	- 0.4
2	1.6	11.3	-22.8	- 4.6	-25.1	-40.4	- 4.3	- 1.8	11.0	-11.2	-16.9	- 6.2	18.7	18.9	25.1	13.3
3	32.9	39.6	34.8	14.4	- 4.6	- 7.2	- 1.8	- 0.4	- 9.5	-10.8	- 9.5	- 6.3	6.0	4.6	7.1	8.7
4	26.6	30.4	26.2	20.6	6.8	13.1	1.1	0.4	14.3	21.5	12.4	3.4	26.5	23.1	44.1	19.1
1972 - 1	- 2.4	-12.2	- 5.1	16.5	-10.0	-17.4	- 3.1	0.4	8.2	8.1	1.8	11.2	5.0	6.0	2.7	4.0
2	11.8	20.3	- 8.8	10.3	1.0	2.4	- 0.3	- 0.5	- 7.3	-11.0	- 4.3	- 3.2	26.6	23.6	48.9	18.3

Source: Table 6.

From the foregoing analysis, I reach the following conclusion: the multi-national banks (through the cushioning benefits of Euro-dollar inflows) were able to avoid--at least for a while--some of the even more costly means of obtaining funds to meet the credit demands of their customers in the face of severe attrition in deposits. Banks less well situated had to adjust their lending behavior more quickly, and they had to rely more heavily on the liquidation of U.S. Treasury issues and borrowing from domestic sources. Because of the ready access to Euro-dollars (although admittedly at a high and rising cost), the multi-national banks found it less urgent to adopt more restrictive current lending standards or to limit their new commitments to lend to the business sector in the future. Of course, under the conditions of substantial monetary restraint maintained through 1969 and into early 1970, even the largest banks with access to Euro-dollars eventually had to reduce the expansion of credit to the private sector. But, for quite a while, they postponed adopting that course through reliance on Euro-dollars.

The sectors which benefited most from the banks' access to Euro-dollars can be examined next.

VI. Banks Reactions to Monetary Policy: Uses of Funds

The supply of funds by commercial banks to the principal sectors of the economy can be traced in the behavior of their loans and investments. In Table 8 is shown the volume of these financial assets outstanding on December 31, 1967 and 1971 and on June 30, 1972. Several features of these data should be noted, since they provide a rough indication of the distribution of bank credit during periods when the money and capital markets were relatively free of stresses resulting from monetary policy. The ways in which the banks reacted as monetary policy became increasingly restrictive can then be charted.

On all three dates, the household sector had received about the same proportion (just under one-fifth) of total bank credit outstanding at weekly reporting banks. (As indicated, bank credit to this sector consists of consumer loans, 1-4 family real estate loans, and loans to purchase or carry securities.) The household share of total bank credit supplied by the different classes of banks was also essentially the same on these dates. However, the three groups of banks vary markedly in the extent to which they lend to households. For example, about one-sixth of the funds supplied by multi-national banks went to households, among regional banks, the proportion was just under one-fifth, and it was around one-quarter among local banks.

The business sector had received about half of the credit outstanding at weekly reporting banks on each of the three dates.

Table 8. Loans and Investments of Weekly Reporting Banks, By Class of Bank, December 31, 1967 and 1971 and June 30, 1972
(Amounts in Millions of Dollars)

Principal Sector	December 31, 1967 Total	December 31, 1967 Multi-National Banks	December 31, 1967 Regional Banks	December 31, 1967 Local Banks	December 31, 1971 Total	December 31, 1971 Multi-National Banks	December 31, 1971 Regional Banks	December 31, 1971 Local Banks	June 30, 1972 Total	June 30, 1972 Multi-National Banks	June 30, 1972 Regional Banks	June 30, 1972 Local Banks
Household Sector												
Consumer loans	16,159	4,880	4,394	6,885	23,876	6,777	6,254	10,845	25,129	7,055	6,544	11,530
Real estate loans (1-4 family)	18,712	8,183	4,106	6,423	22,209	9,300	4,753	8,156	23,903	9,868	5,230	8,805
Loans to purchase or carry sec.	2,555	1,156	614	785	2,604	981	785	838	2,823	1,064	862	897
Sub-Total	37,426	14,219	9,114	14,093	48,689	17,058	11,792	19,839	51,855	17,987	12,636	21,232
Share of total (%)	18.63	14.92	18.90	24.55	17.82	14.00	17.51	23.60	18.36	14.18	18.28	24.56
Business Sector												
Farm												
Loans to farmers	1,889	743	420	726	2,322	931	495	896	2,579	1,052	549	978
Real estate loans, farmland	467	187	68	212	404	140	49	215	442	139	65	238
Sub-Total	2,356	930	488	938	2,726	1,071	544	1,111	3,021	1,191	614	1,216
Share of total (%)	1.17	0.98	1.01	1.63	1.00	0.88	0.81	1.32	1.07	0.94	0.89	1.41
Nonfarm												
Business loans	66,364	38,504	14,687	13,173	83,756	44,752	19,769	19,235	85,106	44,700	20,392	20,014
Real est. loans, nonfarm, nonres.	9,132	3,010	2,207	3,915	12,688	4,061	3,041	5,586	13,741	4,579	~~3,200~~	5,962
Real est. loans, multi-fam.	NA	NA	NA	NA	2,540	1,078	690	772	3,107	1,215	1,004	888
Loans to fin. inst. & brokers & dealers	17,678	10,384	4,155	3,139	25,057	15,299	5,813	3,945	28,205	18,056	6,259	3,890
Sub-Total	93,174	51,898	21,049	20,227	124,041	65,190	29,313	29,538	130,159	68,550	30,855	30,754
Share of total (%)	46.37	54.44	43.65	35.25	45.38	53.48	43.54	35.15	46.08	54.05	44.63	35.57
Banks: Federal funds sold	2,354	864	753	737	10,439	3,080	4,018	3,341	11,175	4,270	3,758	3,147
Share of total (%)	1.17	0.91	1.56	1.28	3.82	2.53	5.97	3.97	3.96	3.37	5.44	3.64
All Business: sub-total	97,884	53,692	22,290	21,902	137,206	69,341	33,875	33,990	144,355	74,011	35,227	35,117
Share of total (%)	48.71	56.33	46.23	38.16	50.20	56.89	50.32	40.44	51.11	58.36	50.96	40.62
Government Sector												
Federal Government												
U.S. Treasury securities	28,360	11,170	7,331	9,859	29,425	12,765	6,897	9,763	26,499	11,573	5,934	8,992
Federal agency securities	2,549	959	602	988	5,493	1,737	1,387	2,369	5,611	1,500	1,518	2,593
Sub-total	30,909	12,129	7,933	10,847	34,918	14,502	8,284	12,132	32,110	13,073	7,452	11,585
Share of total (%)	15.38	12.73	16.45	18.90	12.78	11.90	12.30	14.43	11.37	10.31	10.78	13.40
State and Local Government												
State & local gov't. sec.	28,972	12,386	7,539	9,047	44,378	16,994	11,384	16,000	45,095	17,384	11,497	16,214
Share of total (%)	14.42	12.99	15.64	15.76	16.24	13.94	16.91	19.03	15.97	13.70	16.63	18.76
All Government: sub-total	59,881	24,515	15,472	19,894	79,296	31,496	19,668	28,132	77,205	30,457	18,949	27,799
Share of total (%)	29.80	25.72	32.09	34.66	29.02	25.84	29.21	33.46	27.34	24.01	27.41	32.16
Other Loans	4,263	2,031	1,097	1,135	6,025	3,095	1,525	1,405	6,536	3,367	1,694	1,475
Other Securities	1,474	858	244	372	2,056	889	469	698	2,465	1,015	622	828
Sub-total	5,737	2,889	1,341	1,507	8,081	3,984	1,994	2,103	9,001	4,382	2,316	2,303
Share of total (%)	2.86	3.03	2.78	2.63	2.96	3.27	2.96	2.50	3.19	3.45	3.35	2.66
Total Loans & Investments	200,928	95,315	48,217	57,396	273,272	121,879	67,329	84,064	282,416	126,837	69,128	86,451

Source: Call Reports. NA Not Available.

Here also the proportions differed considerably among the classes of banks. Credit to the business sector represented just under three-fifths of the total outstanding at multi-national banks; about one-half at regional banks, and roughly two-fifths at local banks. Within the business sector, loans to the farm segment represented about 1 per cent of total bank credit at each class of bank on each of the three dates. Loans to other banks (defined as Federal funds sold) showed a major change between 1967 and 1971. On the earlier date, such loans represented only 1 per cent of total bank credit at weekly reporting banks; the share was slightly lower at multi-national banks, slightly higher at local banks and still somewhat higher at regional banks. By 1971, however, the proportion had climbed to almost 4 per cent for all weekly reporting banks. It was nearly 6 per cent at regional banks; 2-1/2 per cent at multi-national banks, and it was around 4 per cent for local banks. Roughly the same profile was evident on June 30 of this year. This growth of the Federal funds market is basically a structural change which resulted from the efforts of banks to obtain funds during the period of severe monetary restraint in 1969 and early 1970. Bank lending to the nonfarm business sector, as mentioned above, was of special interest to the Federal Reserve System in those years. (As defined in this paper, bank credit to this sector consists of commercial and industrial loans, loans secured by nonfarm nonresidential real estate, multi-family mortgages, and loans to financial institutions and brokers and dealers.) As shown in Table 8, bank credit to the nonfarm sector represented about 46 per cent of the total outstanding on all three dates. The share was approximately 54 per cent at multi-national banks; 44 per cent at regional banks, and 35 per cent at local banks. The proportion of bank credit to business represented by commercial and industrial loans varied somewhat by class of bank. For all weekly reporting banks and for regional banks, the fraction was about two-thirds; for multi-national banks it was around three-fourths, and for local banks it was roughly three-fifths.

Bank credit supplied to the government sector declined slightly--from 30 per cent of the total in 1967 to 27 per cent on June 30 this year. The division between the Federal Government and State and local governments changed somewhat. The former's share declined from 15 per cent at the end of 1967 to 11 per cent at the end of last June, the latter's share rose slightly from 14 per cent to 16 per cent.

Monetary Restraint and the Sectoral Supply of Bank Credit

An analysis of the strategy of portfolio adjustment by commercial banks under the influence of changing monetary policy during recent years yields an inescapable conclusion: as policy became increasingly restrictive, the banks shifted credit progressively away from the household and government sectors in order to meet the needs of business borrowers. The details of this shift can be traced in the statistics presented in Table 9, showing changes in loans and investments of weekly reporting banks during half-year periods for the years 1968-72.

Table 9. Changes in Loans and Investments of Weekly Reporting Banks, By Class of Bank, Half-Years, 1968-1972 (millions of dollars)

Principal Sector	Change: First Half, 1968 Total	Multi-National Banks	Regional Banks	Local Banks	Change: Second Half, 1968 Total	Multi-National Banks	Regional Banks	Local Banks
Household Sector								
Consumer loans	942	162	283	497	1,296	308	412	576
Real estate loans (1-4 family)	678	119	290	269	1,085	428	351	306
Loans to purchase or carry securities	27	27	--	--	240	153	--	87
Sub-total	1,647	308	573	766	2,621	889	763	969
Share of total (%)	24.98	11.41	35.99	33.26	11.05	6.94	12.40	20.43
Business Sector								
Farm								
Loans to farmers	139	92	38	9	--	--	--	--
Real estate loans, farmland	66	10	12	44	--	--	--	--
Sub-total	205	102	50	53	--	--	--	--
Share of total (%)	3.11	3.78	3.14	2.30	--	--	--	--
Nonfarm								
Business loans	2,442	1,330	498	614	5,012	2,643	1,516	853
Real estate loans, nonfarm, nonres.	558	216	113	229	725	186	183	356
Real estate loans, multi-family	NA	NA	NA	NA	NA	NA	NA	NA
Loans to fin. inst. & brokers & dealers	--	--	--	--	3,115	1,822	791	502
Sub-total	3,000	1,546	611	843	8,852	4,651	2,490	1,711
Share of total (%)	45.50	57.28	38.38	36.61	37.34	36.30	40.45	36.07
Banks: Federal funds sold	384	374	10	--	3,603	2,740	624	239
Per cent of total	5.82	13.86	0.63	--	15.19	21.38	10.14	5.04
All Business: sub-total	3,589	2,022	671	896	12,455	7,391	3,114	1,950
Share of total (%)	54.43	74.92	42.15	38.91	52.53	57.68	50.59	41.11
Government Sector								
Federal Government								
U.S. Treasury securities	--	--	--	--	3,571	1,721	1,093	757
Federal agency securities	--	--	--	--	93	--	45	48
Sub-total	--	--	--	--	3,664	1,721	1,138	805
Share of total (%)	--	--	--	--	15.45	13.43	18.49	16.97
State and Local Government								
State and local government securities	1,030	292	170	568	4,055	2,168	961	926
Share of total (%)	15.62	10.82	10.68	24.66	17.10	16.92	15.61	19.53
All Government: sub-total	1,030	292	170	568	7,719	3,889	2,099	1,731
Share of total (%)	15.62	10.82	10.68	24.66	32.55	30.35	34.10	36.50
Other Loans	229	--	170	59	762	542	135	85
Other Securities	99	77	8	14	155	103	44	8
Sub-total	328	77	178	73	917	645	179	93
Share of total (%)	4.97	2.85	11.18	3.17	3.87	5.03	2.91	1.96
Total Loans & Investments	6,594	2,699	1,592	2,303	23,712	12,814	6,155	4,743

Table 9 (continued)

Principal Sector	Change: First Half, 1969 Total	Multi-National Banks	Regional Banks	Local Banks	Change, Second Half, 1969 Total	Multi-National Banks	Regional Banks	Local Banks
Household Sector								
Consumer loans	1,104	345	264	495	920	--	251	669
Real estate loans (1-4 family)	--	--	--	--	296	--	81	215
Loans to purchase or carry securities	123	--	92	31	24	--	24	--
Sub-total	1,227	345	356	526	1,240	--	356	884
Share of total (%)	10.92	7.81	15.31	11.71	12.46	--	15.90	24.68
Business Sector								
Farm								
Loans to farmers	168	95	59	14	--	--	--	--
Real estate loans, farmland	97	4	90	3	--	--	--	--
Sub-total	265	99	149	17	--	--	--	--
Share of total (%)	2.36	2.24	6.41	0.38	--	--	--	--
Nonfarm								
Business loans	4,436	2,185	1,162	1,089	3,022	2,013	343	606
Real estate loans, nonfarm, nonres.	567	323	172	72	313	82	--	231
Real estate loans, multi-family	1,982	948	441	593	245	--	245	--
Loans to fin. inst. & brokers & dealers	78	78	--	--	1,410	908	184	318
Sub-total	7,063	3,534	1,775	1,754	4,990	3,003	772	1,215
Share of total (%)	62.88	80.04	76.30	39.06	50.12	72.66	34.48	33.92
Banks: Federal funds sold	300	300	--	--	1,871	--	544	1,327
Per cent of total	2.67	6.79	--	--	18.80	--	24.30	37.04
All Business: sub-total	7,628	3,933	1,924	1,771	6,861	3,003	1,316	2,542
Share of total (%)	67.91	89.07	82.71	39.44	68.92	72.66	58.78	70.96
Government Sector								
Federal Government								
U.S. Treasury securities	1,763	--	--	1,763	941	768	143	30
Federal agency securities	--	--	--	--	183	57	26	100
Sub-total	1,763	--	--	1,763	1,124	825	169	130
Share of total (%)	15.70	--	--	39.27	11.29	19.96	7.55	3.63
State and Local Government								
State and local government securities	373	--	--	373	398	--	398	--
Share of total (%)	3.32	--	--	8.31	4.00	--	17.78	--
All Government: sub-total	2,136	--	--	2,136	1,522	825	567	130
Share of total (%)	19.02	--	--	47.58	15.29	19.96	25.32	3.63
Other Loans	241	138	46	57	305	305	--	--
Other Securities	--	--	--	--	26	--	--	26
Sub-total	241	138	46	57	331	305	--	26
Share of total (%)	2.15	3.12	1.98	1.27	3.33	7.38	--	0.73
Total Loans & Investments	11,232	4,416	2,326	4,490	9,954	4,133	2,239	3,582

Table 9 (continued)

Principal Sector	Change, First Half, 1970: Total	Multi-National Banks	Regional Banks	Local Banks	Change: Second Half, 1970: Total	Multi-National Banks	Regional Banks	Local Banks
Household Sector								
Consumer loans	400	111	--	1,289	1,093	402	313	378
Real estate loans (1-4 family)	80	47	--	33	309	135	--	174
Loans to purchase or carry securities	--	--	--	--	215	--	138	77
Sub-total	480	158	--	322	1,617	537	451	629
Share of total (%)	10.25	9.15	--	14.20	6.66	5.66	6.54	7.97
Business Sector								
Farm								
Loans to farmers	128	72	31	25	15	--	--	15
Real estate loans, farmland	15	--	--	15	241	--	--	241
Sub-total	143	72	31	40	256	--	--	256
Share of total (%)	3.05	4.17	4.51	1.76	1.05	--	--	3.24
Nonfarm								
Business loans	798	--	160	638	2,271	700	528	1,043
Real estate loans, nonfarm, nonres.	46	--	--	46	400	22	132	246
Real estate loans, multi-family	99	--	--	99	--	--	--	--
Loans to fin. inst. & brokers & dealers	--	--	--	--	3,367	1,914	967	486
Sub-total	943	--	160	783	6,038	2,636	1,627	1,775
Share of total (%)	20.14	--	23.25	34.53	24.89	27.80	23.60	22.49
Banks: Federal funds sold	683	11	77	595	3,098	473	1,456	1,169
Per cent of total	14.59	0.64	11.19	26.23	12.77	4.99	21.12	14.81
All Business: sub-total	1,769	83	268	1,418	9,392	3,109	3,083	3,200
Share of total (%)	37.78	4.81	38.95	62.52	38.71	32.79	44.72	40.54
Government Sector								
Federal Government								
U.S. Treasury securities	--	--	--	--	6,382	3,442	1,362	1,578
Federal agency securities	272	170	47	55	1,774	686	513	575
Sub-total	272	170	47	55	8,156	4,128	1,875	2,153
Share of total (%)	5.81	9.85	6.83	2.43	33.61	43.54	27.20	27.28
State and Local Government								
State and local government securities	2,009	1,247	327	435	4,476	1,291	1,423	1,762
Share of total (%)	42.91	72.25	47.53	19.17	18.44	13.62	20.64	22.33
All Government: sub-total	2,281	1,417	374	490	12,632	5,419	3,298	3,915
Share of total (%)	48.72	82.10	54.36	21.60	52.05	57.16	47.84	49.61
Other Loans	24	--	24	--	344	260	--	84
Other Securities	128	68	22	38	282	156	62	64
Sub-total	152	68	46	38	626	416	62	148
Share of total (%)	3.25	3.94	6.69	1.68	2.58	4.39	0.90	1.88
Total Loans & Investments	4,682	1,726	688	2,268	24,267	9,481	6,894	7,892

Table 9 (continued)

Principal Sector	Change: First Half, 1971 Total	Multi-National Banks	Regional Banks	Local Banks	Change: Second Half, 1971 Total	Multi-National Banks	Regional Banks	Local Banks
Household Sector								
Consumer loans	585	123	98	364	1,479	461	326	692
Real estate loans (1-4 family)	773	377	79	317	1,721	686	402	633
Loans to purchase or carry securities	39	16	23	--	78	17	2	59
Sub-total	1,397	516	200	681	3,278	1,164	730	1,384
Share of total (%)	13.96	15.03	10.54	14.56	18.81	17.76	14.05	24.37
Business Sector								
Farm								
Loans to farmers	267	139	43	85	71	3	--	68
Real estate loans, farmland	--	--	--	--	24	5	--	19
Sub-total	267	139	43	85	95	8	--	87
Share of total (%)	2.67	4.05	2.27	1.82	0.55	0.12	--	1.53
Nonfarm								
Business loans	525	--	--	525	1,777	142	1,001	634
Real estate loans, nonfarm, nonres.	451	76	159	216	698	214	209	275
Real estate loans, multi-family	293	175	57	61	134	26	8	100
Loans to fin. inst. & brokers & dealers	664	547	--	117	2,933	1,852	745	336
Sub-total	1,933	798	216	919	5,542	2,234	1,963	1,345
Share of total (%)	19.32	23.26	11.38	19.65	31.79	34.09	37.78	23.68
Banks: Federal funds sold	660	169	--	491	2,675	773	1,234	668
Per cent of total	6.59	4.92	--	10.50	15.35	11.80	23.74	11.76
All Business: sub-total	2,860	1,106	259	1,495	8,312	3,015	3,197	2,100
Share of total (%)	28.58	32.23	13.65	31.97	47.69	46.01	61.52	36.97
Government Sector								
Federal Government								
U.S. Treasury securities	899	899	--	--	2,458	1,149	694	615
Federal agency securities	720	88	42	590	501	--	207	294
Sub-total	1,619	987	42	590	2,959	1,149	901	909
Share of total (%)	16.18	28.76	2.21	12.62	16.97	17.53	17.33	16.00
State and Local Government								
State and local government securities	3,943	823	1,325	1,795	2,260	878	230	1,152
Share of total (%)	39.41	23.98	69.81	38.39	12.97	13.40	4.43	20.28
All Government: sub-total	5,562	1,810	1,367	2,385	5,219	2,027	1,131	2,061
Share of total (%)	55.59	52.74	72.02	51.01	29.94	30.93	21.76	36.28
Other Loans	--	--	--	--	410	271	84	55
Other Securities	187	--	72	115	211	76	55	80
Sub-total	187	--	72	115	621	347	139	135
Share of total (%)	1.87	--	3.79	2.46	3.56	5.30	2.67	2.38
Total Loans & Investments	10,006	3,432	1,898	4,676	17,430	6,553	5,197	5,680

Table 9 (continued)

Principal Sector	Change: First Half, 1972 Total	Multi-National Banks	Regional Banks	Local Banks
Household Sector				
Consumer loans	1,253	278	290	685
Real estate loans (1-4 family)	1,694	568	477	649
Loans to purchase or carry securities	219	83	77	59
Sub-total	3,166	929	844	1,393
Share of total (%)	23.21	14.43	27.93	33.34
Business Sector				
Farm				
Loans to farmers	257	121	54	82
Real estate loans, farmland	39	--	16	23
Sub-total	296	121	70	105
Share of total (%)	2.17	1.88	2.32	2.51
Nonfarm				
Business loans	1,402	--	623	779
Real estate loans, nonfarm, nonres.	1,053	518	159	376
Real estate loans, multi-family	567	137	314	116
Loans to fin. inst. & brokers & dealers	3,203	2,757	446	--
Sub-total	6,225	3,412	1,542	1,271
Share of total (%)	45.64	52.98	51.02	30.42
Banks: Federal funds sold	1,190	1,190	--	--
Per cent of total	8.72	18.48	--	--
All Business: sub-total	7,711	4,723	1,612	1,376
Share of total (%)	56.53	73.34	53.34	32.93
Government Sector				
Federal Government				
U.S. Treasury securities	771	--	--	771
Federal agency securities	355	--	131	224
Sub-total	1,126	--	131	995
Share of total (%)	8.26	--	4.33	23.82
State and Local Government				
State and local government securities	717	390	113	214
Share of total (%)	5.26	6.05	3.74	5.12
All Government: sub-total	1,843	390	244	1,209
Share of total (%)	13.52	6.05	8.07	28.94
Other Loans	511	272	169	70
Other Securities	409	126	153	130
Sub-total	920	398	322	200
Share of total (%)	6.74	6.18	10.66	4.79
Total Loans & Investments	13,640	6,440	3,022	4,178

The figures shown in Table 10 cast the situation in even more dramatic relief. These data show the share of major sectors in the total volume of additional credit supplied by the different classes of banks during each of these periods.

In the first half of 1968, monetary policy was generally more restrictive than it had been in the previous six months, but the degree of restraint was much less than that achieved a year later. Nevertheless, the impact of restraint was greater for multi-national banks (which experienced some CD attrition in the first half of 1968) than for other weekly reporting banks. The pattern of bank credit flows reflected these circumstances. For example, households got about one-fourth of the net credit extended by all weekly reporting banks; businesses got 54 per cent, and the government sector got 15 per cent. However, the major share of credit supplied by multi-national banks (three-fourths of the total) went to the business sector. It will be recalled that loans to the business sector represented about 56 per cent of total credit outstanding at these banks at the end of 1967. Households and governments each received about 11 per cent in the first half of 1968. At the end of the previous year, households had 15 per cent of the total credit outstanding at these banks, and the government sector had 26 per cent. In contrast, both regional and local banks channel around one-third of their new lending to the household sector in the first six months of 1968, and the business sector got

Table 10. Share of Major Sectors in the Net Credit Extended
By Weekly Reporting Banks, By Class of Bank, 1968-1972
(Half-Years; Percentage of Total Uses of Funds) 1/

Year & Quarter	All Weekly Reporting Banks			Multi-National Banks			Regional Banks			Local Banks		
	Household	Business	Government	Household	Business	Government	Household	Business	Government	Household	Business	Government
1968												
I	25	54	15	11	75	11	36	42	11	33	39	25
II	11	52	33	7	58	30	12	51	34	20	41	37
1969												
I	11	67	19	8	89	0	15	83	0	12	39	48
II	13	69	15	0	73	20	16	59	25	25	71	4
1970												
I	10	38	49	9	5	82	0	39	54	14	63	22
II	7	38	52	6	33	57	7	45	48	8	41	50
1971												
I	14	29	56	15	32	53	11	14	72	15	32	51
II	19	48	30	18	46	31	14	62	22	24	37	36
1972												
I	23	57	14	14	73	6	28	53	8	33	33	29

1/ Figures will not add to 100 per cent because residual amounts of other loans and other securities are not shown here. (See Table 9 for details.)

roughly two-fifths. The government sector got one-eighth of the credit supplied by regional banks and one-quarter of that supplied by local banks. As monetary policy eased somewhat in the last half of 1968, the sectoral distribution of bank credit flows moved closer to the long-run contours sketched above.

In 1969, however, under the impact of severe monetary restraint, the pattern of bank credit flows was altered markedly In the first half of that year, the share of total bank credit received by the household sector shrank drastically while that received by the business sector rose well above its long-run proportion. For all weekly reporting banks, business got over two-thirds of the credit supplied in both halves of the year, and households got about around one-eighth. Governments got one-fifth in the first six months and one-sixth in the last half of the year.

The shift of credit supplied away from households and governments and to the business sector was most marked at multi-national banks. In the first half of the year, they channeled 8 per cent of the credit extended to households. However, in the last half, the volume of loans outstanding to consumers actually shrank. Thus, the multi-national banks, in effect, liquidated loans to households and re-employed the funds elsewhere. The same thing had occurred with respect to the government sector in the first six months of the year.

Loans to the business sector absorbed nearly nine-tenths of the total bank credit supplied by multi-national banks in the first six months of 1969, and the share was almost three-quarters during the July-December months. Moreover, within the business sector, the multi-national banks also expanded their commercial and industrial loans (relative to other forms of lending to businesses) as credit conditions became more restrictive. Thus, in both the first half of 1968 and the last half of 1969, these loans accounted for two-thirds of the credit which these banks supplied to the business sector. In the last half of 1968, the proportion was just over one-third, but it climbed to almost three fifths in the first six months of 1969.

The regional banks also greatly expanded the proportion of total credit which they supplied to the business sector in 1969. They did so primarily by reducing the proportion of their funds which went to finance the government sector; yet, they also cut back somewhat on the share supplied to households. Thus, in the first half of 1969, the regional banks channeled four-fifths of their credit extensions to business firms compared with two-fifths in the same period of the previous year. In the second half of 1969, the business sector got three-fifths of the total vs. one-half in the July-December months of 1968. The share of credit supplied by regional banks received by the household sector amounted to 15 per cent in the first half of 1969 vs. 36 per cent in the same period a year earlier. In the second half of both years, the share received by the household sector was not appreciably greater--12 per cent compared with 16 per cent in 1969. The regional banks had a net liquidation of government securities in the first half of 1969, and this sector received one-quarter of the total credit extended by regional banks in the last half of 1969.

In the case of local banks, the business sector received roughly the same share (two-fifths) of the credit supplied in the full year 1968 and in the first half of 1969. However, in the last six months of 1969, the proportion rose to 71 per cent. These figures reinforce the general impression one got at the time as officials of large corporations moved progressively down the size scale of banks in search of loans. Nevertheless, of the three classes of banks, the local institutions proved a more reliable source of credit for households throughout the period. The same was true in the case of the government sector.

The impact of business borrowing at the smaller banks continued to be evident as 1970 unfolded. Throughout that year, both the regional and local banks channeled to the business sector a larger share of the credit they supplied than was true in the case of multi-national banks. In contrast, the latter institutions experienced a substantial diminution in the demand for credit by business firms in the first half of 1970, and only moderate recovery occurred during the following 12 months. To some extent, this slower pace of business credit demands at multi-national banks reflected the impact of the 1969-70 recession. But it also partly reflected the attempt of large corporations to restructure their balance sheets and restore liquidity through the issuance of long-term debt in the capital market. At the same time, the demand for credit by households (again partly reflecting the impact of the recession) also remained rather moderate. Consequently, the multi-national banks ended up channeling to the government sector a much higher proportion of the total credit they supplied than they normally do in the long-run. In contrast, both the regional and local banks maintained through the first half of 1971 the volume of business lending--compared with alternative outlets for their funds--at levels much closer to the long-run proportion.

Beginning in the last half of 1971, multi-national banks began to expand business loans again--relative to other uses of funds--and the pace accelerated in the first half of 1972. The regional banks also saw a relative spurt in business lending in the July-December months of last year. And while the pace slackened somewhat in the first half of this year, business lending remained close to the long-run share. Moreover, lending to business by local banks continued close to the long-run ratio.

The foregoing analysis, in my judgment, clearly supports the conclusion stated succinctly above: during periods of severe monetary restraint in 1969 and early 1970, all of the weekly reporting banks channeled proportionately more of their funds into the business sector and away from the household and government sectors. As monetary conditions became easier, the pattern was reversed--but with the government sector serving more as a cushion than was true of the household sector. Among the three classes of banks, the sectoral supply of funds by the multi-national banks was the most volatile. In fact, the degree of variation in the share of funds which they supplied to particular sectors was much greater than is indicated when one looks at the traditional categories (such as business loans, home mortgages, etc.) of commercial bank lending. Sectoral problems arising from the differential impact of monetary policy have been of continuing concern to the Federal Reserve Board, and the latter has taken a number of steps in efforts to cope with the situation.

VII. Reserve Requirements and Monetary Management

Among the measures adopted by the Federal Reserve Board to moderate the differential effects of monetary policy is the imposition of reserve requirements against Euro-dollars which became effective in late 1969. The Board has also suggested to Congress that a major adaptation of the investment tax credit be made with the same objective in mind.

I have shared this concern, and I have supported the measures adopted. In fact, I have gone even further and have advocated an extension of the reserve requirement instrument to achieve an even broader range of objectives with respect to monetary policy. In March, 1969, I suggested that the Board impose some form of reserve requirements against Euro-dollar borrowings by American banks.[6/] Subsequently, I discussed the possibility of substituting reserve requirements against foreign assets held by U.S. banks for the Voluntary Foreign Credit Restraint Program (VFCR) administered by the Federal Reserve Board.[7/] Over two years ago, I suggested that the latter approach be broadened to include differential reserve requirements against specified types of domestic assets.[8/] This latter proposal ultimately got a

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6/ See Andrew F. Brimmer, "Euro-Dollar Flows and the Efficiency of U.S. Monetary Policy," presented at the New School for Social Research, New York, New York, March 8, 1969. (A modified version was published in The Banker, April, 1969, pp. 352-355.

7/ "Capital Outflows and the U.S. Balance of Payments: Review and Outlook," presented before the Board of Directors of the Federal Reserve Bank of Dallas, Dallas, Texas, February 11, 1970.

8/ "The Banking Structure and Monetary Management," presented before the San Francisco Bond Club, April 1, 1970.

hearing before a Congressional Committee in the Spring of 1971.[9/] These proposals have had a mixed reception, but I still believe they have merit. Moreover, they are essentially another stage in the long-run evolution of reserve requirements in the United States.

Reserve Requirements in Historical Perspective

At this juncture, it might be helpful to digress briefly to stress a few points that are frequently overlooked in discussions of the appropriate role of required reserves in the banking system. Unfortunately, even today the fact that such reserves are useful purely as instruments of monetary management is not fully understood by the public at large--and the possibility of extending this function further is even less appreciated.

In the United States, several historical experiences with required reserves are quite instructive. It will be recalled that the National Banking Act of 1863 for the first time established legal reserve requirements for Federally-chartered banks. The basic assumption was that required reserves would provide liquidity for both bank notes and deposits. National banks in central reserve and reserve cities had to maintain reserves equal to 25 per cent of outstanding notes and deposits, and for banks in other cities (country banks) the ratio was 15 per cent.

9/ Statement before the Subcommittee on Financial Institutions of the Committee on Banking, Housing and Urban Affairs, U.S. Senate, April 7, 1971. Reprinted in the Federal Reserve Bulletin, April, 1971, pp. 307-319.

The requirement for notes was dropped in 1874. The notion that reserves were assumed to provide liquidity for individual banks was evidenced by the form in which required reserves could be held: for banks, in central reserve cities, vault cash; for reserve city banks, half in vault cash and half in deposits in central reserve or reserve city banks; for country banks, two-fifths in vault cash and three-fifths in deposits in reserve city or central reserve city banks. The record of American economic history shows quite clearly that the system of required reserves established under the National Banking Act failed to meet the liquidity goal each time it was tested. The reason for the failure (the impossibility of an individual bank being able to liquidate enough assets to meet withdrawals during periods of crisis) was understood by only a few observers.

Perhaps that fact explains why the concept of "pooling" reserves was carried over into the Federal Reserve Act of 1913. While a few innovations were made in the administration of required reserves, the idea that they were needed as a source of liquidity persisted until the mid-1930's. By an amendment to the Federal Reserve Act in May, 1933 (referred to as the Thomas Amendment), authority was given for the first time to vary reserve requirements for member banks. However, the authority was subject to the proclamation of an emergency by the President (which was never done in this connection), and the authority was never used. In the Banking Act of 1935, the discretionary authority was given to the Federal Reserve Board directly. This step represented a clear recognition of the role of required reserves as a tool of monetary control--which could be used to influence directly the rate of expansion of aggregate bank credit. The Board has made considerable use of this authority since it was first employed in August, 1936.

In my opinion, the next step in the evolution of the reserve requirement tool should be to make it more useful in cushioning the impact of shifts in bank credit flows on particular sectors of the economy. The suggestion that the Board have authority to set supplemental reserve requirements on bank assets represents such an innovation.

Evolution of Reserve Requirements in Recent Years

The suggestion that one of the traditional instruments of monetary policy be reordered to influence the cost and availability of credit in particular economic sectors is not especially startling. As a matter of fact, the Federal Reserve Board has shown considerable flexibility in the use of reserve requirements in the last few years. For the most part, this involved tailoring changes in such requirements to differentiate the impact by size of bank--as implied by deposit size. Moreover, in November of this year, the Board scrapped the geographic element in reserve requirements and instituted a graduated structure based on size of bank.

In July, 1966, the reserve requirement on time deposits over $5 million was raised from 4 per cent to 5 per cent--and kept at 4 per cent on deposits below that amount. In September of the same year, the percentage was raised further to 6 per cent on the $5 million and over category; again no change was made for amounts below that figure. In March, 1967, in two 1/2 percentage point steps, reserve requirements were cut from 4 per cent to 3 per cent on savings deposits under $5 million. The requirement was left at 6 per cent on time deposits over $5 million.

In January, 1968, the Federal Reserve Board also began to differentiate reserve requirements on demand deposits. At that time, the requirement was raised from 16-1/2 per cent to 17 per cent on deposits over $5 million at reserve city banks, while the requirement on amounts below this figure was left unchanged. At country banks, the corresponding increase was from 12 per cent to 12-1/2 per cent for demand deposits over $5 million, while it remained at 12 per cent on amounts below that cutoff. In April, 1969, a 1/2 percentage point increase was made effective at all member banks and on all demand deposits while maintaining the 1/2 percentage point differential on demand deposits above and below $5 million.

Reserve Requirements and Euro-Dollar Borrowing by Multi-National Banks

Undoubtedly, the most imaginative use of reserve requirements in recent years occurred in 1969-70. Several measures adopted in that period altered greatly the behavior of U.S. banks in the Euro-dollar market. The effects of two of these measures (i.e., the imposition of marginal reserve requirements on Euro-dollar borrowings by American banks and restrictions on the use of mainly overnight deposits to reduce required reserves) can be traced reasonably well. In addition, other moves aimed primarily at moderating banks' access to domestic sources of funds also had indirect effects in the Euro-dollar market.

American banks increased their use of Euro-dollar funds by about $7.2 billion between January 1 and June 25, 1969. This competition for funds exerted extreme pressure on Euro-dollar deposit rates. For example, the 3-month deposit rate--which was 7 per cent at the end of 1968--climbed sharply during January and February and again during May and June, reaching a record 12-1/2 per cent on June 10. During June, U.S. banks' borrowing of Euro-dollar funds through their overseas branches accelerated sharply and increased about $3 billion during the first three weeks of that month alone.

Marginal Reserve Requirements: Against this background of enormous expansion in Euro-dollar borrowing by American banks, the Federal Reserve Board proposed amendments to its regulations at the end of June to moderate the flow of Euro-dollars between U.S. banks and their foreign branches and also between U.S. and foreign banks. These amendments focused on the three major channels through which Euro-dollar funds may affect credit availability in the United States:

--The flow of Euro-dollar funds between U.S. bank head offices and their overseas branches.

--The flow of credit between U.S. overseas branches--which draw on Euro-dollar funds--and U.S. residents.

--The flow of Euro-dollar funds between U.S. banks and foreign banks which are not branches.

Briefly, a 10 per cent marginal reserve requirement was proposed on U.S. bank liabilities to overseas branches and on assets acquired by overseas branches from their U.S. head offices in excess of outstandings during a base period, defined as the four weeks ending May 28, 1969. The reserve-free base was made subject to automatic reduction--unless waived by the Board--when, in any period used to calculate a reserve requirement, outstanding amounts subject to reserve requirements fall--and are below--the original base. A 10 per cent marginal reserve requirement was proposed for U.S. branch loans to U.S. residents in excess of outstandings during a given base period, which could be calculated in one of two optional ways. Finally, the Board proposed to define deposits against which required reserves are calculated to include any non-deposit borrowing by a member bank from a foreign bank. A 10 per cent reserve requirement was proposed for deposits of this class.

These proposals were adopted by the Board with an effective date of September 4, 1969--when the first four-week "reserve computation period" began. The average liabilities of a bank to its overseas branches during the reserve computation period was compared with its base--the average of such liabilities during the four week period ending

May 28--to establish the amount of additional reserves it must hold. The first four-week "reserve maintenance period" began October 16. During the maintenance period, a bank must hold on the average the additional reserves required on the basis of its excess Euro-dollar holdings from its overseas branches during the previous computation period.

The impact of these measures on the behavior of multinational banks can be assessed fairly accurately. For purposes of this analysis, three time periods were identified: (1) from June 25 to September 3, the period during which the Board's marginal reserve proposals were pending; (2) from September 4 to October 1, the first reserve computation period; and (3) from October 16 to November 5, covering most of the first reserve maintenance period.

American banks continued to increase their borrowings of Euro-dollar funds during July and August--raising liabilities to overseas branches $1.3 billion during those two months to a new peak level of $14.8 billion. As shown in Table 11, most of the increase, however ($1.1 billion), occurred during July.

The Euro-dollar market was able to accommodate the continuing demand for funds from U.S. banks without any further increase in interest rates. Rates had dropped sharply in late June as the immediate pressure on U.S. banks eased with the passing of corporate borrowing for tax

Table 11

Liabilities of U.S. Banks to Their Foreign Branches 1/
(Millions U.S. Dollars)

Date	Outstandings	Change from previous date
December 30, 1964	1,183	---
December 29, 1965	1,345	+ 162
December 28, 1966	4,036	+2,691
December 27, 1967	4,241	+ 205
January 1, 1969	6,039	+1,798
1969		
May 26	9,621	+3,582
June 25	13,228	+3,607
July 30	14,324	+1,096
September 3	14,571	+ 247
October 1	14,111	- 460
October 8	14,609	+ 598
15	14,970	+ 361
22	14,306	- 664
29	13,631	- 675
November 5	14,358	+ 727

1/ Exclusive of branch participations in head office loans to U.S. residents.

payments, and the banks in turn put less pressure on the Euro-dollar market. By the end of June, the 3-month rate was down to about 10-1/2 per cent. It ranged between 10-1/2 and 11-1/4 per cent during July and August.

In September--the first reserve computation period--U.S. banks decreased their Euro-dollar borrowings by nearly $1/2 billion. In fact, during the six weeks from August 20 to October 1, borrowings decreased in all but one weekly period and outstandings fell from $14.8 billion to $14.1 billion. Reduced demand pressures from U.S. banks no doubt were an important factor in the general--albeit very moderate--decline in Euro-dollar rates up to the last few days of September when typical quarter-end pressures in international money centers put some upward pressure on rates.

Taking the third quarter of 1969 as a whole, demand pressures on the Euro-dollar market from U.S. banks were much more moderate than they were during the first half of the year. American banks increased their Euro-dollar borrowings by only $900 million between June 25 and October 1, compared with average quarterly increases of about $3-1/2 billion during the January-June period. To some extent, this reduced demand for Euro-dollars may have reflected the innovative skill of U.S. banks in developing domestic sources of non-deposit funds.

Because of a number of cross-currents in the Euro-dollar market in October and November, 1969, it is difficult to estimate quantitatively the effects of the marginal reserve requirements on the borrowing behavior of U.S. commercial banks in that particular market. Although Euro-dollar rates declined during most of October, these banks sharply increased their borrowings of Euro-dollar funds in the first half of that month and subsequently repaid more than the previous rise. At the end of October, U.S. bank liabilities to their overseas branches were $13.6 billion, only slightly higher than the $13.2 billion outstanding at the end of June. Other cross-currents in the market after the beginning of October included a rather short-lived expectation of significantly lower interest rates in the United States and a large flow of funds out of German marks following the initiation of the transitional floating arrangement for the mark (and its subsequent appreciation)--which was reflected in a considerable decrease in official dollar holdings of the German central bank.

As I mentioned above, September was the first reserve computation period for the Board's marginal reserve requirement against Euro-dollar borrowings. Using weekly data (the banks compute their borrowings on a daily average basis), it was estimated roughly that bank borrowings of Euro-dollars were roughly $4 billion more on the average during September than during May--the base period. Thus, during the four-week period beginning October 16, U.S. banks needed to maintain on the average slightly over $400 million of additional reserves.

In passing, it might be observed that this additional amount of required reserves is not drastically different from the increase which would have resulted earlier in 1969 if a slightly different approach had been adopted then. As already indicated, in March of that year, I suggested that the Board consider applying average reserve requirements, at a 6 per cent rate, to the volume of Euro-dollar borrowings by U.S. banks. At the end of February, the total of such borrowings was just over $9.0 billion; thus, the rise in required reserves at that time would have been about $540 million.[10/]

Another development related to the behavior of multi-national banks in the Euro-dollar scene (and one which can be traced directly to the imposition of the marginal reserve requirement) was the sharp increase between mid-September and the end of October in U.S. bank time liabilities to foreign official institutions. After falling rather consistently through July, foreign official time deposits in U.S. banks rose by $212 million in August and by more than $1.0 billion from September 10 to October 29, 1969. It would appear that some of the increase reflected a shift of official funds from the Euro-dollar market (including overseas branches of U.S. banks) to time deposits held directly with U.S. head offices. Part of the drop in U.S. bank Euro-dollar borrowings in late September and after mid-October may have reflected such a shift of funds by foreign official institutions.

10/ However, it should be noted that a marginal reserve requirement provides a greater deterrent to additional future borrowing than does an average reserve requirement that involves the same increase in total required reserves.

It may be that U.S. banks attempted to induce shifts of foreign official funds from branch to head office books to take advantage of the relatively lower reserve requirement associated with balances on head office books. For example, a shift of $1 million from the branch to head office (assuming that the funds were made available for head office use in either case and that the U.S. bank in question had Euro-dollar borrowings outstanding in excess of its base) would have released $100,000 from required reserves against Euro-dollar borrowings (where the marginal reserve requirement is 10 per cent) and absorb $60,000 into required reserves against time deposits with the head office--a net saving of $40,000 of reserves. The value of this saving of reserves would depend on the interest cost of reserves to the bank. If official funds could have been obtained for 10 per cent per annum through branches--Euro-dollars-the head office may have been willing to pay up to 10.4 per cent per annum for the same funds directly--and could have done so because of the exemption of official funds from Requlation Q ceilings.

Table 12 compares the cost of raising funds in these two alternative ways, from the point of view of the U.S. banks, after adjusting market quotations to reflect the additional cost associated with holding reserves in each case. As may be seen, once the Euro-dollar

Table 12

Comparison of Three-month Euro-dollar Deposit
Bid Rates with Rates Offered by Prime Banks in
New York for Three-month Foreign Official Time Deposits

Period	(1) Three-month Euro-$ Deposit 1/ Quoted	(2) Three-month Euro-$ Deposit 1/ Adjusted 3/	(3) Offer Rate for Foreign Official Time Deposits in New York 2/ Quoted	(4) Offer Rate for Foreign Official Time Deposits in New York 2/ Adjusted 4/	(5)=(2)-(4) Differential: Adjusted Euro-dollar Over Adjusted Time Deposit Offer Rate	
1969 - Mar.	8.48	*	7.00 - 7.75	7.45 - 8.24	+1.03	+0.24
June	11.11	*	8.75 - 9.62	9.31 - 10.23	+1.80	+0.88
July	10.57	*	9.00 - 10.00	9.57 - 10.63	+1.00	-0.06
Aug.	10.91	*	9.50 - 10.50	10.11 - 11.17	+0.80	-0.26
Sept. 3	11.25	*	9.50 - 10.88	10.11 - 11.57	+1.14	-0.32
10	11.34	12.60	9.50 - 10.88	10.11 - 11.57	+2.49	+1.63
17	11.14	12.38	9.88 - 10.88	10.51 - 11.57	+1.87	+0.81
24	10.68	11.87	10.12 - 10.88	10.76 - 11.57	+1.11	+0.30
Oct. 1	11.08	12.31	10.25 - 10.88	10.90 - 11.57	+1.41	+0.74
8	10.65	11.83	10.25 - 10.88	10.90 - 11.57	+0.93	+0.26
15	10.43	11.59	9.88 - 10.62	10.51 - 11.30	+1.06	+0.29
22	9.63	10.70	9.38 - 10.50	9.98 - 11.17	+0.72	-0.47
29	9.10	10.11	8.38 - 10.00	8.91 - 10.63	+1.20	-0.52

1/ Average of daily figures for the last week (ending Wednesday) of the period.
2/ Range of rates offered for 90-179 day funds at prime New York City banks.
3/ To reflect the 10% marginal reserve requirement on U.S. bank liabilities to foreign branches.
4/ To reflect the 6% reserve requirement on head office time liabilities.
*/ Same as quoted rate; reserve requirement computation began in week ending September 10.

marginal reserve requirement went into effect, Euro-dollar funds became considerably more expensive than funds attracted through official time deposits. From September 10 to late October, 1969, however, this advantage for the official time deposit source was gradually reduced as the official time deposit rate increased and Euro-dollar rates declined.

In November, 1970, following significant reductions by some banks in outstanding Euro-dollar borrowings--and in reserve-free bases, the Board increased from 10 per cent to 20 per cent the rate of reserve requirement on borrowings in excess of reserve-free bases, thereby giving the banks an added inducement to preserve their reserve-free bases against a time of future need. At that time, the Board also applied the automatic downward adjustment to banks that operated under a minimum base equal to 3 per cent of deposits.

On January 15, 1971, the Board amended its regulations to permit banks to count toward maintenance of their reserve-free bases any funds invested by foreign branches in Export-Import Bank securities offered under a program announced by that institution. At that time, the Board postponed for banks using a minimum base the application of the automatic downward adjustment of their bases. In April, 1971, a further amendment was made to the Board's regulations which extended to direct Treasury securities the same privilege previously accorded the Export-Import Bank issues.

On September 7 of this year, the Board proposed to eliminate the reserve-free bases and to reduce reserve requirements on Euro-dollar borrowings from 20 per cent to 10 per cent. The proposal was intended to simplify the Euro-dollar regulations and to equalize treatment among banks by unwinding the historical advantages enjoyed by some banks because of the situations prevailing at the time the Euro-dollar measures were adopted in 1969. On July 30 of that year, liabilities of U.S. banks to their foreign branches amounted to $14.3 billion. However, as already mentioned, as monetary conditions in the United States became less stringent in early 1970, U.S. banks paid down their Euro-dollar indebtedness. The pace of repayment accelerated. By the end of August, 1972, liabilities of U.S. banks to their foreign branches totaled $1-1/4 billion. Thus, it appeared that elimination of the reserve-free base would have little practical impact on most banks--since only a few banks have continued to borrow in the Euro-dollar market in 1972.

On the other hand, while proposing to reduce the requirement from 20 per cent to 10 per cent, the Board indicated that it intended to keep in place the regulation imposing such requirements on Euro-dollar borrowings. Since the Board allowed 90 days for public comment on the proposals, no decision had been made as this paper was being completed. Yet, on the record to date, it seems reasonable to conclude that the Board still looks upon the marginal reserve requirements on Euro-dollar borrowings by U.S. banks as a useful tool in its monetary management kit.

Reserve Requirements and Sales of Commercial Paper

On October 29, 1969, the Federal Reserve Board announced it was considering amending its rules governing the payment of interest on deposits to apply to funds received by member banks from the issuance of commercial paper or similar obligations by bank affiliates. This was the last of the major domestic sources of funds to which U.S. commercial banks had resorted and which had remained beyond the reach of the Federal Reserve's interest rate ceilings or reserve requirements. (In addition to Euro-dollar borrowings, other sources with respect to which the Federal Reserve Board finalized and proposed regulatory changes in the Summer of 1969 included sales of participations in individual loans or pools of loans and the conversion of demand deposits into "Federal funds borrowings," which a few banks were attempting.)

At the time of this announcement relating to commercial paper, about 58 banks had outstanding around $3.6 billion of such liabilities issued through their subsidiaries or related one-bank holding companies. All of this paper had been sold at yields far above the maximum interest rates payable on CD's. Between the end of July and the end of October, the number of banks offering commercial paper in some manner rose by 50 per cent, and the amount outstanding climbed by $1.8 billion (or 100 per cent). Of the total outstanding on October 29, roughly $0.4 billion had been issued by banks subsidiaries.

As matters developed, the Board did not subject commercial paper to the interest rate ceilings. Instead, in late October, 1969, the Board published for comment a proposal to apply reserve requirements to commercial paper when offered by a bank related corporation and when the proceeds are used to supply funds to the member bank. The Board put this issue aside for a time in early 1970, because of a desire to avoid exerting additional restraint on money and credit markets. However, the question was opened again in the summer of that year, and reserve requirements were applied to bank-related commercial paper effective in September, 1970. Demand deposit requirement percentages were applied to paper with initial maturities of less than 30 days, and time deposit requirements were applied to paper with longer maturities. This action was announced a month in advance of the effective date, and banks were able to shift most of their commercial paper funds into the time deposit requirement category. In this action, the Board lowered reserve requirements on time deposits over $5 million one percentage point to 5 per cent and established the new commercial paper requirement at the same time.

Extending the Range of Reserve Requirements

Against this widening use of reserve requirements, I again suggested that consideration be given to the application of a supplemental reserve requirement on loans extended by U.S. banks to both domestic and foreign borrowers. The arguments which can be advanced to support this proposition are essentially the same as those which I put forward in the Spring of 1970. The objective of the measure 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 Board thought was necessary for general stabilization purposes, the regular reserve requirements applicable to deposits of Federal Reserve member banks (and hopefully to nonmember banks as well) could be reduced.

In making this suggestion, I began with 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, I am keenly aware of the desirability of assuring that the instrument used would 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.

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. The approach 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.

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 domestic stabilization or balance of payments 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 any set of priorities that Congress might establish from time to time. For example: if the objective of public policy were to give priority to loans to meet the credit needs of State and local governments, it could be achieved through a lower reserve ratio against State and local security holdings than the ratio applied to other assets. Loans to acquire homes could be encouraged--if public policy calls for giving housing a high priority--by setting the requirement very low, or perhaps at zero. In contrast, if policy called for substantial 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.

Under ordinary circumstances, however, if there were no need to pursue a policy of monetary restraint--and consequently no need to be concerned about the side-effects of such a policy course--less differentiation among types of assets would be necessary. In fact, if there were no need to counteract any adverse by-products of monetary restraint, no supplemental reserve requirements would need to be established. If already employed, they would not have to be changed.

Such a supplemental reserve requirement system sketched above would have the effect of cushioning the impact of monetary policy on particular sectors of the economy.

As already indicated, the reactions to the proposal to introduce supplemental reserve requirements against bank assets got a mixed reception. In general, economists and bankers who believe that the central bank should not be concerned with the sectoral effects of monetary policy opposed the suggestion. On the other hand, even among those who share my uneasiness about the differential impact of monetary policy, several reservations were expressed. The Federal Reserve Board itself was in the latter category. In testimony presented in the Spring of 1971,[11/] the Board as a whole agreed that the proposal as embodied in a bill then before Congress should not be enacted at that time. The majority of the Board objected to a number of specific features of the draft legislation. I share some of these specific objections. However, the majority of the Board also voiced some more fundamental reservations which I did not share. Subsequently, at least one other Board Member, while not subscribing to the idea of supplemental reserve requirements, did express support for some variety of charge (perhaps a tax or reduced tax deductions) against bank loans to those sectors in which public policy sought to reduce the availability of credit during periods of monetary restraint.[12/]

11/ See Statement of Arthur F. Burns on behalf of the Board before the Subcommittee on Financial Institutions of the Committee on Banking, Housing and Urban Affairs, U.S. Senate, March 31, 1971. Reprinted in the Federal Reserve Bulletin, April, 1971, pp. 303-306.

12/ Sherman J. Maisel, "Credit Allocation and the Federal Reserve" presented before the Banking Research Center, Northwestern University, April 22, 1971.

I can see the merit in the position taken by those who have reservations about the reserve requirements approach. Yet, my studies of the U.S. commercial banking system--including the analysis presented in this paper--have convinced me that the impact of monetary policy is by no means neutral with respect to particular sectors of the economy. Since the effects of monetary policy have their initial and major impact on the commercial banking system, the ways in which that system allocates credit must be taken into account in the conduct of monetary policy. One of the inescapable facts relating to the lending behavior of commercial banks--particularly the large multi-national institutions--is the extent to which they give priority to satisfying their corporate business customers over the credit demands of other sectors of the economy. Because of this strong network of customer relationships, the banks--in fact--set priorities that are not necessarily consistent with the overall objectives of public policy. For this reason, I believe Congress should legislate some means of coping with this problem. Supplemental reserve requirements seem to me to be one approach. In fashioning the tool to be used, Congress should indicate the priorities to be followed and the degree to which particular sectors are to be favored.

VIII. Alternative Approach to the Stabilization of Sectoral Credit Flows

As I have stressed throughout, my main objective is to smooth the differential sectoral impact of monetary policy. Whether this is done through supplemental reserve requirements or through another instrument is unimportant to me. One such alternative has been recommended by the Federal Reserve Board, and I joined my colleagues in the proposal.

The core of the suggestion is the adoption of a variable investment tax credit. The proposal resulted from the Board's quest for means to improve the stability of credit flows to the housing sector.[13/] However, the benefits which would accrue from the implementation of the proposal would extend far beyond this sector. The Board recommended a number of steps to improve the ability of thrift institutions to attract and retain consumer savings in the face of interest rate competition posed by market securities. These moves would lessen the disparity between the intermediaries assets (composed mainly of long-term, fixed-yield loans) and their liabilities (composed mainly of short-term, interest-sensitive deposits). If these institutions were less vulnerable to deposit attrition, they would have available

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13/ See "Ways to Moderate Fluctuations in the Construction of Housing," Report of the Board of Governors of the Federal Reserve System, March 3, 1972. Reprinted in the Federal Reserve Bulletin, March, 1972, pp. 215-225.

a more assured inflow of funds which they could rechannel to finance housing. Another recommendation included the removal of a number of regulatory and legislative limitations which dampen the flow of mortgage credit during periods of monetary restraint. The Board also asked that consideration be given to allowing all depositary institutions to write variable interest rate mortgages--in addition to instruments carrying fixed rates.

But, among the several proposals advanced, the Board urged Congress to give first priority to the institution of a flexible investment tax credit as a means of reaching a leading sector of the economy which is more resistent to effective policy control. The result would be an assurance that the corporate business sector would bear a meaningful share of the burden of monetary restraint during periods of excess demand for goods and services. The Board concluded that a new instrument is needed which would influence directly expenditures by businesses for equipment and machinery. As is widely recognized, these outlays are large in absolute terms; they represent a high proportion of total business spending, and they are subject to considerable cyclical variation. More fundamentally, while substantial share of business capital investment is financed with funds borrowed from banks or raised in other parts of the credit market, such outlays are sometimes slow to respond to monetary policy. Consequently, during periods of credit stringency, business firms have repeatedly attracted funds to pay for machinery and equipment which otherwise would have flowed into housing and other sectors.

The Board recommended that--to assure that the investment tax credit have the necessary flexibility--the President be authorized to vary the tax rate within a specified range. The latter might be from zero to 10 per cent or 15 per cent. To set a limit on using this authority, the Board suggested that, before a rate change could be put into effect, Congress should retain the right to consider the proposed change for 60 days during which it could be disapproved by either the Senate or the House. This provision would make the administration of the investment tax credit parallel to the procedure used in the case of governmental reorganization plans.

In operation, the investment tax credit would be liberalized during periods when the economy required stimulation, and it would become less generous when the task was to restrict aggregate demand. Again, the tax rate could be varied from zero up to 15 per cent. Several benefits would be expected to result from the flexible use of the instrument. In the first place, business demands for external financing should become much more stable. This in turn should produce greater stability in market interest rates and in the flow of funds to savings intermediaries. Since the latter are the principal sources of mortgage funds, the availability of housing finance would be more assured. But beyond the effects on housing, the stabilization of business demands for funds would also contribute to stability in the flow of funds to other sectors--such as State and local governments and consumers in addition to home buyers.

The benefits resulting from greater stability of credit flows, in my judgment, are clearly worthwhile. I am convinced personally that they outweigh the costs (in terms of interference with private decisions) which would have to be incurred to bring them about. In my view, it does not matter whether the instrument employed is a flexible investment tax credit or a supplemental reserve requirement against bank assets. It is mainly a question of the locus of the burden. The reserve requirement would rest on commercial banks, and the investment tax credit would rest on nonfinancial corporations. Both would represent the use of a market mechanism: the reserve requirement would be set by the Federal Government, and the banks would decide how much to lend to particular categories of borrowers. The investment tax would also be set by the Federal Government, and business firms would decide how much to spend on particular types of capital equipment.

I hope personally that, as a nation, we adopt one of these courses (or still another if it is equally promising) while we still have time to act. If we delay indefinitely, we may again find ourselves facing a need to rely too much on monetary restraint--with its clearly recognized differential effects on particular sectors of the economy.

IX. Summary and Concluding Observations

The main conclusions reached in this paper have been already stated along the way. However, it might be helpful to summarize them here:

--In recent years, especially during periods of monetary restraint, significant shifts have occurred in the availability of credit in key sectors of the American economy. To a considerable extent, these variations in credit flows have reflected structural deficiencies in the prevailing arrangements through which credit is supplied. This is especially true of home financing because of its dependence on mortgage loans and the flow of funds to savings and loan associations.

--But the mainspring of the wide fluctuations in the availability of credit in leading economic sectors is the behavior of commercial banks as they react to the changing requirements of monetary policy. The comprehensive analysis undertaken here clearly demonstrates that a disproportionate share of the instability in bank credit flowing to particular sectors can be traced to the activity of roughly 20 multi-national banks (which are an integral part of the Euro-dollar market) and around 60 other large banks which are dominant in their regions.

--As monetary conditions swung from ease to restraint and back to ease in the last several years, commercial banks generally shifted the supply of credit away from households and governments and into the business sector. Again, the multi-national banks were the fulcrum on which the pattern rested. Relying heavily on Euro-dollar inflows, they were able to maintain a high volume of lending to business in the face of severe attrition in time deposits--especially in large denomination certificates of deposit. Other banks had to rely more substantially on liquidation of government securities and borrowing from domestic sources to obtain funds.

--But, in general, all classes of commercial banks demonstrated a strong and persistent preference for business borrowers over others seeking credit accommodation. The reasons for this are understandable: a network of frequently longstanding customer relationships and the propensity of banks to commit themselves to make future business loans give to business firms a high standing in the parade of would-be borrowers at commercial banks. In contrast, while consumer loans are clearly quite profitable for banks, the household sector generally has a somewhat lower standing. The results are a rising share of bank credit for businesses and a shrinking share for households and governments during periods of monetary restraint.

In the light of this experience, the Federal Reserve System has taken a number of steps to ameliorate the differential impact of monetary policy on particular sectors of the economy. To a considerable extent, the maintenance of ceilings on the maximum rates of interest which member banks can pay on time deposits rests on the desire to cushion the effects of market rate competition on savings and loan associations--and through them on housing. Moreover, the imposition of marginal reserve requirements on Euro-dollar borrowing in 1969 was intended to moderate the access of multi-national banks to additional funds--which they in turn channeled to the business sector.

Yet, these and other measures still left essentially untouched the key element underlying the marked instability in the availability of credit in leading economic sectors. That key element is the demand for funds by major corporations to finance expenditures on machinery and equipment. To cope with this situation, the Board has recommended the adoption of a flexible investment tax credit which could be varied on a contra-cyclical basis. While the proposal was advanced initially in connection with recommendations aimed at improving housing finance, it would also yield benefits for all those sectors dependent on raising funds in the money and capital markets.

Another approach designed to overcome the same problems resulting from the differential impact of monetary policy involves the use of supplemental reserve requirements based on bank assets. I personally favor this approach, but the majority of the Federal Reserve Board has a number of reservations about it. I believe these reservations have considerable merit, but I also believe that--on balance--the idea is worth pursuing.

But, in the final analysis, which particular approach is adopted is unimportant to me. What is important is a decision by the Congress to put in place some kind of instrument to assure that some sectors of the economy do not carry a disproportionate burden from monetary policy while others are affected much less severely.

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Appendix Table I. Sources and Uses of Funds, By Class of Bank, By Quarter, 1968-1972
(millions of dollars)

	1968 (1st quarter)				1968 (2nd quarter)				1968 (3rd quarter)				1968 (4th quarter)			
Sources of Funds	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
External Sources	3,630	1,532	927	1,171	5,036	2,756	1,079	1,201	7,736	4,452	1,720	1,564	10,090	4,241	3,013	2,836
Total deposits	2,933	1,014	839	1,080	1,237	237	227	773	4,271	1,564	1,176	1,531	7,410	2,840	2,191	2,379
Demand deposits	989	538	119	332	--	--	--	--	1,141	158	336	647	3,365	933	1,133	1,299
Time & savings deposits	1,944	476	720	748	1,237	237	227	773	3,130	1,406	840	884	4,045	1,907	1,058	1,080
Large CD's	502	16	315	171	178	--	83	95	1,903	981	614	308	1,905	1,006	553	346
IPC	342	--	202	140	--	--	--	--	1,510	832	422	256	1,438	804	369	265
Other	160	16	113	31	178	--	83	95	393	149	192	52	467	202	184	81
Other time & savings	1,442	460	405	577	1,059	237	144	678	1,227	425	226	576	2,140	901	505	734
Total borrowing	297	160	46	91	2,371	1,377	717	277	1,459	1,124	323	12	1,381	437	677	267
Federal Reserve Banks	297	160	46	91	95	--	13	82	30	30	--	--	--	--	--	--
Other borrowing	--	--	--	--	2,276	1,377	704	195	1,429	1,094	323	12	1,381	437	677	267
Euro-dollars	85	85	--	--	984	964	20	--	1,412	1,343	69	--	231	222	4	5
Commercial paper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other liabilities	315	273	42	--	444	178	115	151	594	421	152	21	1,068	742	141	185
Internal Sources	1,073	954	54	65	1,731	605	678	448	312	--	21	291	33	32	--	1
U.S. Treasury securities	648	605	43	--	1,457	481	579	397	265	--	21	244	--	--	--	--
Federal agency securities	144	144	--	--	69	9	41	19	11	--	--	11	33	32	--	1
State and local gov't. sec.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other securities	11	--	--	11	205	115	58	32	36	--	--	36	--	--	--	--
Business loans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Real estate loans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Consumer loans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other loans	270	205	11	54	--	--	--	--	--	--	--	--	--	--	--	--
Other Sources	--	--	--	--	471	317	131	23	199	199	--	--	--	--	--	--
TOTAL SOURCES	4,703	2,486	981	1,236	7,238	3,678	1,888	1,672	8,247	4,651	1,741	1,855	10,123	4,273	3,013	2,837

Appendix Table I (continued)

	1968 (1st quarter)				1968 (2nd quarter)				1968 (3rd quarter)				1968 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds																
Internal Uses	295	295	--	--	2,084	1,455	520	109	--	--	--	--	--	--	--	--
Deposit withdrawals	295	295	--	--	2,084	1,455	520	109	--	--	--	--	--	--	--	--
Demand deposits	--	--	--	--	736	289	358	89	--	--	--	--	--	--	--	--
Time & savings deposits	295	295	--	--	1,348	1,166	162	20	--	--	--	--	--	--	--	--
Large CD's	295	295	--	--	1,348	1,166	162	20	--	--	--	---	--	--	--	--
IPC	295	295	--	--	1,146	964	162	20	--	--	--	--	--	--	--	--
Other	--	--	--	--	202	202	--	--	--	--	--	--	--	--	--	--
Other time & savings	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
External Uses	3,700	1,649	963	1,088	5,154	2,223	1,368	1,563	7,961	4,651	1,512	1,798	9,371	4,077	2,855	2,439
Repayment borrowing	380	103	185	92	23	23	--	--	56	--	5	51	74	38	9	27
Federal Reserve Banks	--	--	--	--	23	23	--	--	56	--	5	51	74	38	9	27
Other borrowing	380	103	185	92	--	--	--	--	--	--	--	--	--	--	--	--
Repayment of Euro-dollars	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commercial paper run-off	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other liabilities	31	--	--	31	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Treasury securities	223	--	--	223	--	--	--	--	1,248	1,248	--	--	1,707	879	472	356
Federal agency securities	60	--	11	49	--	--	--	--	57	45	12	--	34	--	34	--
State & local gov't. sec.	666	219	223	224	966	409	179	378	1,063	721	109	233	2,062	1,023	516	523
Other securities	348	298	51	--	--	--	--	--	181	153	28	--	168	28	62	78
Busines loans	1,367	935	199	233	2,262	1,227	506	529	1,366	743	274	349	2,067	997	614	456
Real estate loans	467	68	231	168	697	184	205	308	958	317	312	329	868	314	264	290
Consumer loans	157	26	63	68	535	73	136	326	799	171	239	389	622	114	234	274
Other loans	--	--	--	--	671	307	342	22	2,233	1,253	533	447	1,769	684	650	435
Other Uses	708	542	18	148	--	--	--	--	286	--	229	57	752	196	158	398
TOTAL USES	4,703	2,486	981	1,236	7,238	3,678	1,888	1,672	8,247	4,651	1,741	1,855	10,123	4,273	3,013	2,837

Appendix Table 1 (continued)

	1969 (1st quarter)				1969 (2nd quarter)				1969 (3rd quarter)				1969 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds																
External Sources	6,052	3,829	1,109	1,114	6,424	4,555	1,017	852	7,325	4,468	1,661	1,196	9,089	3,918	2,056	2,115
Total deposits	3,536	2,045	774	717	365	--	19	346	--	--	--	--	5,218	2,902	846	1,470
Demand deposits	2,009	1,376	337	296	--	--	--	--	--	--	--	--	4,513	2,301	846	1,366
Time & savings deposits	1,527	669	437	421	365	--	19	346	--	--	--	--	705	601	--	104
Large CD's	--	--	--	--	20	--	--	20	--	--	--	--	601	601	--	--
IPC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other	--	--	--	--	20	--	--	20	--	--	--	--	601	601	--	--
Other time & savings	1,527	669	437	421	345	--	19	326	--	--	--	--	104	--	--	104
Total borrowing	558	--	161	397	3,073	1,999	767	307	2,927	737	1,222	968	1,888	1,016	605	267
Federal Reserve Banks	191	--	78	113	274	58	122	94	--	--	--	--	38	38	--	--
Other borrowing	367	--	83	284	2,799	1,941	645	213	2,927	737	1,222	968	1,850	978	605	267
Euro-dollars	1,433	1,359	74	--	2,355	2,238	110	7	3,901	3,592	253	56	316	--	218	98
Commercial paper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other liabilities	525	425	100	--	631	318	121	192	497	139	186	172	667	--	387	280
Internal Sources	3,208	2,570	525	113	2,901	1,174	842	885	7,829	3,759	2,233	1,837	1,076	576	329	171
U.S. Treasury securities	2,568	2,174	353	41	2,425	904	718	803	1,129	--	529	600	42	--	--	42
Federal agency securities	30	20	10	--	77	15	32	30	194	17	103	74	34	9	--	25
State & local gov't. sec.	269	269	--	--	346	255	91	--	1,012	1,005	7	--	708	436	229	43
Other securities	125	107	18	--	53	--	1	52	336	280	56	--	53	45	--	8
Business loans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Real estate loans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Consumer loans	--	--	--	--	--	--	--	--	--	--	--	--	86	86	--	--
Other loans	216	--	144	72	--	--	--	--	5,158	2,457	1,538	1,163	153	--	100	53
Other Sources	30	--	--	30	214	--	102	112	--	--	--	--	271	271	--	--
TOTAL SOURCES	9,290	6,399	1,634	1,257	9,539	5,729	1,961	1,849	15,154	8,227	3,894	3,033	9,436	4,765	2,385	2,286

Appendix Table I (continued)

	1969 (1st quarter)				1969 (2nd quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	2,910	2,283	576	51	4,767	3,651	871	245
Deposit withdrawals	2,910	2,283	576	51	4,767	3,651	871	245
Demand deposits	--	--	--	--	1,156	790	170	196
Time & savings deposits	2,910	2,283	576	51	3,611	2,861	701	49
Large CD's	2,910	2,283	576	51	3,279	2,529	701	49
IPC	2,272	1,802	448	22	2,398	1,906	443	49
Other	638	481	128	29	881	623	258	--
Other time & savings	--	--	--	--	332	332	--	--
External Uses	5,581	3,445	930	1,206	4,445	1,751	1,090	1,604
Repayment of borrowing	449	449	--	--	--	--	--	--
Federal Reserve Banks	22	22	--	--	--	--	--	--
Other borrowing	427	427	--	--	--	--	--	--
Repayment of Euro-dollars	1	--	--	1	--	--	--	--
Commercial paper run-off	NA	NA	NA	NA	NA	NA	NA	NA
Other liabilities	9	--	--	9	--	--	--	--
U.S. Treasury securities	--	--	--	--	--	--	--	--
Federal agency securities	29	--	--	29	--	--	--	--
State & local gov't. sec.	479	--	111	368	213	--	--	213
Other securities	19	--	--	19	45	45	--	--
Business loans	3,058	2,042	640	376	2,802	1,245	832	725
Real estate loans	663	277	151	235	622	295	117	210
Consumer loans	414	217	28	169	568	126	122	320
Other loans	460	460	--	--	195	40	19	136
Other Uses	799	671	128	--	327	327	--	--
TOTAL USES	9,290	6,399	1,634	1,257	9,539	5,729	1,961	1,849

	1969 (3rd quarter)				1969 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	7,200	3,966	2,218	1,016	3,469	1,804	1,032	633
Deposit withdrawals	7,200	3,966	2,218	1,016	3,469	1,804	1,032	633
Demand deposits	956	29	594	333	--	--	--	--
Time & savings deposits	6,244	3,937	1,624	683	3,469	1,804	1,032	633
Large CD's	4,031	2,312	1,218	501	2,268	855	780	633
IPC	2,821	1,782	732	307	1,728	855	475	398
Other	1,210	530	486	194	540	--	305	235
Other time & savings	2,213	1,625	406	182	1,201	949	252	--
External Uses	2,284	866	528	890	4,065	2,646	422	997
Repayment of borrowing	137	61	54	22	80	--	18	62
Federal Reserve Banks	137	61	54	22	80	--	18	62
Other borrowing	--	--	--	--	--	--	--	--
Repayment of Euro-dollars	--	--	--	--	395	395	--	--
Commercial paper run-off	NA	NA	NA	NA	NA	NA	NA	NA
Other liabilities	--	--	--	--	979	979	--	--
U.S. Treasury securities	38	38	--	--	236	196	40	--
Federal agency securities	--	--	--	--	16	--	16	--
State & local gov't. sec.	4	--	--	4	--	--	--	--
Other securities	12	--	--	12	30	--	30	--
Business loans	843	447	140	256	1,275	989	33	253
Real estate loans	588	222	114	252	813	303	143	367
Consumer loans	662	98	220	344	396	--	92	304
Other loans	--	--	--	--	99	99	--	--
Other Uses	5,670	3,395	1,148	1,127	1,648	--	981	667
TOTAL USES	15,154	8,227	3,894	3,033	9,436	4,765	2,385	2,286

Appendix Table I (continued)

	1970 (1st quarter)				1970 (2nd quarter)				1970 (3rd quarter)				1970 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds																
External Sources	2,392	1,177	650	565	4,563	2,105	1,008	1,450	11,456	5,706	2,864	2,886	15,302	8,447	3,102	3,753
Total deposits	861	631	--	230	3,629	1,624	717	1,288	10,519	5,003	2,778	2,738	12,045	5,679	2,777	3,589
Demand deposits	135	52	--	83	45	--	--	45	1,011	295	403	313	4,016	1,868	827	1,321
Time & savings deposits	726	579	--	147	3,584	1,624	717	1,243	9,508	4,708	2,375	2,425	8,029	3,811	1,950	2,268
Large CD's	579	579	--	--	2,085	936	553	596	6,214	3,175	1,748	1,291	5,446	3,002	1,337	1,107
IPC	--	--	--	--	985	533	221	231	4,773	2,810	1,114	849	4,895	3,002	1,086	807
Other	579	579	--	--	1,100	403	332	365	1,441	365	634	442	551	--	251	300
Other time & savings	147	--	--	147	1,499	688	164	647	3,294	1,533	627	1,134	2,583	809	613	1,161
Total borrowing	1,304	529	558	217	622	481	83	58	172	172	--	--	1,293	1,193	100	--
Federal Reserve Banks	56	37	19	--	14	10	4	--	172	172	--	--	--	--	--	--
Other borrowing	1,248	492	539	217	608	471	79	58	--	--	--	--	1,293	1,193	100	--
Euro-dollars	129	--	50	79	--	--	--	--	105	--	--	105	6	--	--	6
Commercial paper	70	17	42	11	1	--	--	1	647	531	86	30	1,958	1,575	225	158
Other liabilities	28	--	--	28	311	--	208	103	13	--	--	13	--	--	--	--
Internal Sources	1,933	1,263	355	315	1,174	750	194	230	153	134	--	19	--	--	--	--
U.S. Treasury securities	710	267	188	255	160	--	53	107	--	--	--	--	--	--	--	--
Federal agency securities	55	8	--	47	36	6	--	30	33	14	--	19	--	--	--	--
State & local gov't. sec.	71	71	--	--	--	--	--	--	120	120	--	--	--	--	--	--
Other securities	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Business loans	453	453	--	--	455	455	--	--	--	--	--	--	--	--	--	--
Real estate loans	484	371	113	--	131	--	131	--	--	--	--	--	--	--	--	--
Consumer loans	24	--	24	--	29	19	10	--	--	--	--	--	--	--	--	--
Other loans	136	93	30	13	363	270	--	93	--	--	--	--	--	--	--	--
Other Sources	1,070	1,070	--	--	1,020	1,008	12	--	999	999	--	--	805	805	--	--
TOTAL SOURCES	5,395	3,510	1,005	880	6,757	3,863	1,214	1,680	12,608	6,839	2,864	2,905	16,107	9,252	3,102	3,753

	1970 (1st quarter)				1970 (2nd quarter)				1970 (3rd quarter)				1970 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds																
Internal Uses	1,648	692	703	253	945	636	309	--	--	--	--	--	153	153	--	--
Deposit withdrawals	1,648	692	703	253	945	636	309	--	--	--	--	--	153	153	--	--
Demand deposits	166	--	166	--	945	636	309	--	--	--	--	--	--	--	--	--
Time & savings deposits	1,482	692	537	253	--	--	--	--	--	--	--	--	153	153	--	--
Large CD's	953	320	380	253	--	--	--	--	--	--	--	--	153	153	--	--
IPC	812	320	307	185	--	--	--	--	--	--	--	--	--	--	--	--
Other	141	--	73	68	--	--	--	--	--	--	--	--	153	153	--	--
Other time & savings	529	372	157	--	--	--	--	--	--	--	--	--	--	--	--	--
External Uses	3,604	2,818	296	490	5,594	3,227	905	1,462	11,706	6,839	2,705	2,360	14,446	9,099	2,612	2,735
Repayment of borrowing	9	--	--	9	86	--	--	86	2,375	1,728	548	99	387	163	133	91
Federal Reserve Banks	9	--	--	9	86	--	--	86	99	--	62	37	380	163	133	84
Other borrowing	--	--	--	--	--	--	--	--	2,276	1,728	486	62	7	--	--	7
Repayment of Euro-dollars	1,657	1,657	--	--	1,407	1,102	156	149	1,646	1,373	273	--	1,887	1,660	227	--
Commercial paper run-off	--	--	--	--	43	--	43	--	--	--	--	--	--	--	--	--
Other liabilities	1,077	1,022	55	--	208	208	--	--	1,419	1,310	109	--	3,548	3,207	294	47
U.S. Treasury securities	--	--	--	--	431	431	--	--	1,423	857	317	249	2,498	1,416	537	545
Federal agency securities	22	--	22	--	27	--	27	--	11	--	11	--	113	5	43	65
State & local gov't. sec.	58	--	29	29	1,932	1,338	232	362	669	--	223	446	2,568	962	702	904
Other securities	270	71	113	86	323	147	86	90	226	145	21	60	851	415	212	224
Business loans	256	--	77	179	796	--	296	500	1,264	350	369	545	775	277	143	355
Real estate loans	46	--	--	46	62	1	--	61	307	5	41	261	421	105	126	190
Consumer loans	209	68	--	141	214	--	--	214	682	245	120	317	446	189	89	168
Other loans	--	--	--	--	65	--	65	--	1,684	826	475	383	952	700	106	146
Other Uses	143	--	--	137	218	--	--	218	902	--	357	545	1,508	--	490	1,018
TOTAL USES	5,395	3,510	1,005	880	6,757	3,863	1,274	1,680	12,608	6,839	2,864	2,905	16,107	9,252	3,102	3,753

Appendix Table I (continued)

	1971 (1st quarter)				1971 (2nd quarter)				1971 (3rd quarter)				1971 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds																
External Sources	9,968	4,781	2,323	2,864	9,950	4,394	2,234	3,322	8,142	4,414	1,706	2,022	9,927	4,841	2,206	2,880
Total deposits	9,806	4,716	2,229	2,861	6,967	2,636	1,551	2,780	7,448	4,159	1,538	1,751	5,736	2,647	995	2,094
Demand deposits	1,481	534	405	542	1,041	133	323	585	3,759	1,969	856	934	1,629	746	157	726
Time & savings deposits	8,325	4,182	1,824	2,319	5,926	2,503	1,228	2,195	3,689	2,190	682	817	4,107	1,901	838	1,368
Large CD's	2,733	1,823	464	446	1,255	1,029	--	226	3,188	2,190	682	316	2,644	1,480	571	593
IPC	2,119	1,715	246	158	286	286	--	--	1,719	1,154	408	157	2,126	1,213	496	417
Other	614	108	218	288	969	743	--	226	1,469	1,036	274	159	518	267	75	176
Other time & savings	5,592	2,359	1,360	1,873	4,671	1,474	1,228	1,969	501	--	--	501	1,463	421	267	775
Total borrowing	85	65	17	3	2,913	1,758	683	472	584	255	139	190	2,780	1,121	1,050	609
Federal Reserve Banks	85	65	17	3	30	--	--	30	248	55	119	74	96	96	--	--
Other borrowing	--	--	--	--	2,883	1,758	683	442	336	200	20	116	2,684	1,025	1,050	609
Euro-dollars	--	--	--	--	--	--	--	--	--	--	--	--	672	637	24	11
Commercial paper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other liabilities	77	--	77	--	70	--	--	70	110	--	29	81	739	436	137	166
Internal Sources	782	596	119	67	1,914	1,241	455	218	1,548	1,124	259	16	22	22	--	--
U.S. Treasury securities	--	--	--	--	1,687	1,014	455	218	922	598	186	138	--	--	--	--
Federal agency securities	.2	--	2	--	27	27	--	--	18	--	18	--	--	--	--	--
State & local gov't. sec.	--	--	--	--	--	--	--	--	237	237	--	--	--	--	--	--
Other securities	--	--	--	--	--	--	--	--	371	289	55	27	22	22	--	--
Business loans	321	321	--	--	200	200	--	--	--	--	--	--	--	--	--	--
Real estate loans	74	--	74	--	--	--	--	--	--	--	--	--	--	--	--	--
Consumer loans	67	--	--	67	--	--	--	--	--	--	--	--	--	--	--	--
Other loans	318	275	43	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Sources	1,770	1,770	--	--	3,446	3,446	--	--	--	--	--	--	--	--	--	--
TOTAL SOURCES	12,520	7,147	2,442	2,931	15,310	9,081	2,689	3,540	9,690	5,338	1,965	2,167	9,949	4,863	2,206	2,880

	1971 (1st quarter)				1971 (2nd quarter)				1971 (3rd quarter)				1971 (4th quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds																
Internal Uses	--	--	--	--	1,004	--	613	391	362	319	43	--	--	--	--	--
Deposit withdrawal	--	--	--	--	1,004	--	613	391	362	319	--	--	--	--	--	--
Demand deposits	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Time & savings deposits	--	--	--	--	1,004	--	613	391	362	319	43	--	--	--	--	--
Large CD's	--	--	--	--	1,004	--	613	391	--	--	--	--	--	--	--	--
IPC	--	--	--	--	902	--	511	391	--	--	--	--	--	--	--	--
Other	--	--	--	---	102	--	102	--	--	--	--	--	--	--	--	--
Other time & savings	--	--	--	--	--	--	--	--	362	319	43	--	--	--	--	--
External Uses	11,944	7,147	2,043	2,754	14,150	9,081	1,947	3,122	7,166	3,781	1,475	1,910	7,209	3,796	1,324	2,089
Repayment of borrowing	206	165	27	14	46	39	7	--	--	--	--	--	145	--	87	58
Federal Reserve Banks	--	--	--	--	46	39	7	--	--	--	--	--	145	--	87	58
Other borrowing	206	165	27	14	--	--	--	--	--	--	--	--	--	--	--	--
Repayment of Euro-dollars	3,118	2,836	129	153	3,844	3,666	115	63	443	400	35	8	--	--	--	--
Commercial paper run-off	1,470	1,096	303	71	367	243	81	43	138	126	1	11	130	114	14	2
Other liabilities	1,232	1,188	--	44	3,006	2,923	83	--	881	881	--	--	--	--	--	--
U.S. Treasury securities	1,545	526	281	736	--	--	--	--	--	--	--	--	1,416	1,046	271	99
Federal agency securities	60	4	--	56	16	--	--	16	169	9	--	160	120	21	20	79
State & local gov't. sec.	2,812	1,063	809	940	2,513	522	787	1,204	703	--	287	416	1,310	907	42	361
Other securities	919	198	351	370	701	393	48	260	--	--	--	--	282	--	145	137
Business loans	398	--	113	285	886	--	128	758	864	565	229	70	543	87	224	232
Real estate loans	90	21	--	69	655	233	107	315	1,536	745	287	504	1,269	502	285	482
Consumer loans	80	50	30	--	426	51	94	281	967	215	239	513	[illegible]90	129	135	326
Other loans	14	--	--	14	1,690	1,011	497	182	1,465	840	397	228	1,404	990	101	313
Other Uses	576	--	399	177	156	--	129	27	2,162	1,438	447	277	2,740	1,067	882	791
TOTAL USES	12,520	7,147	2,442	2,931	15,310	9,081	2,689	3,540	9,690	5,538	1,965	2,187	9,949	4,863	2,206	2,880

	1972 (1st quarter)				1972 (2nd quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds								
External Sources	9,426	5,007	1,081	3,338	8,887	4,500	1,431	2,956
Total deposits	8,285	4,371	966	2,948	5,711	3,181	355	2,175
Demand deposits	2,933	2,224	68	641	1,229	773	35	421
Time & savings deposits	4,542	2,147	898	2,307	4,482	2,408	320	1,754
Large CD's	621	2	68	551	1,360	1,031	--	329
IPC	184	--	--	184	956	928	--	28
Other	437	2	68	367	404	103	--	301
Other time & savings	4,731	2,145	830	1,756	3,122	1,377	320	1,425
Total borrowing	930	614	112	204	2,694	1,199	911	584
Federal Reserve Banks	--	--	--	--	204	110	41	53
Other borrowing	930	614	112	204	2,490	1,089	870	531
Euro-dollars	15	--	--	15	120	120	--	--
Commercial paper	193	22	--	171	9	--	--	9
Other liabilities	3	--	3	--	353	--	165	188
Internal Sources	1,455	1,043	412	--	772	588	81	103
U.S. Treasury securities	--	--	--	--	741	557	81	103
Federal agency securities	9	9	--	--	31	31	--	--
State & local gov't. sec.	--	--	--	--	--	--	--	--
Other securities	183	183	--	--	--	--	--	--
Business loans	1,258	851	407	--	--	--	--	--
Real estate loans	--	--	--	--	--	--	--	--
Consumer loans	5	--	5	--	--	--	--	--
Other loans	--	--	--	--	--	--	--	--
Other Sources	--	--	--	--	478	--	352	126
TOTAL SOURCES	10,881	6,050	1,493	3,338	10,137	5,088	1,864	3,185

Appendix Table I (continued)

	1972 (1st quarter)				1972 (2nd quarter)			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	886	743	143	--	166	--	166	--
Deposit withdrawal	886	743	143	--	166	--	166	--
Demand deposits	--	--	--	--	--	--	--	--
Time & savings deposits	886	743	143	--	166	--	166	--
Large CD's	886	743	143	--	166	--	166	--
IPC	886	743	143	--	101	--	101	--
Other	--	--	--	--	65	--	65	--
Other time & savings	--	--	--	--	--	--	--	--
External Uses	8,148	4,507	903	2,738	8,847	3,964	1,698	3,185
Repayment of borrowing	391	250	72	69	--	--	--	--
Federal Reserve Banks	391	250	72	69	--	--	--	--
Other borrowing	--	--	--	--	--	--	--	--
Repayment of Euro-dollars	1,102	1,055	47	--	21	--	5	16
Commercial paper run-off	22	--	22	--	180	160	20	--
Other liabilities	890	844	--	46	22	22	--	--
U.S. Treasury securities	894	492	27	375	--	--	--	--
Federal agency securities	114	--	28	86	60	--	13	47
State & local gov't. sec.	872	148	39	685	970	414	114	442
Other securities	377	--	128	249	212	45	51	116
Business loans	206	--	--	206	1,950	458	372	1,120
Real estate loans	1,100	309	275	516	1,667	578	472	617
Consumer loans	361	151	--	210	761	174	154	433
Other loans	1,819	1,258	265	296	3,004	2,113	497	394
Other Uses	1,847	800	447	600	1,124	1,124	--	--
TOTAL USES	10,881	6,050	1,493	3,338	10,137	5,088	1,864	3,185

Appendix Table II. Sources and Uses of Funds, By Class of Bank, By Half Years, 1968-1972 (Millions of Dollars)

	First Half, 1968				Second Half, 1968			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds								
External Sources	9,917	5,857	1,684	2,376	25,217	11,177	7,669	6,371
Total deposits	2,200	--	633	1,567	22,187	9,572	6,717	5,898
Demand deposits	--	--	--	--	14,305	5,917	4,578	3,810
Time and savings deposits	2,200	--	633	1,567	7,882	3,655	2,139	2,088
Capital Accounts	798	386	156	256	654	276	170	208
Federal funds purchased	1,367	424	594	349	1,031	442	513	76
Borrowings	709	483	120	106	6	6	--	--
Euro-dollars	1,961	1,931	30	--	61	--	61	--
Other liabilities	2,882	2,633	151	98	1,278	881	208	189
Internal Sources	5,822	2,480	1,751	1,591	847	725	80	42
U.S. Treasury securities	2,835	1,316	898	621	--	--	--	--
Federal agency securities	149	75	33	41	12	12	--	--
State & local gov't. securities	--	--	--	--	--	--	--	--
Other securities	--	--	--	--	--	--	--	--
Consumer loans	--	--	--	--	--	--	--	--
Real estate loans (1-4 family)	--	--	--	--	--	--	--	--
Loans to purchase or carry securities	47	--	4	43	47	--	47	--
Loans to farmers	--	--	--	--	89	57	30	2
Real estate loans - farmland	--	--	--	--	56	13	3	40
Business loans	--	--	--	--	--	--	--	--
Real estate loans - nonfarm, nonres.	--	--	--	--	--	--	--	--
Real estate loans - multi-family	--	NA	NA	NA	NA	NA	NA	NA
Loans to fin. inst. and brokers & dealers	1,309	753	316	240	--	--	--	--
Reserves with Federal Reserve Banks	189	--	189	--	541	541	--	--
Balances with banks in United States	706	62	190	454	102	102	--	--
Foreign bank balances	51	35	14	2	--	--	--	--
Currency and coin	414	190	107	117	--	--	--	--
Other loans	49	49	--	--	--	--	--	--
Federal funds sold	73	--	--	73	--	--	--	--
Other assets	--	--	--	--	--	--	--	--
Other Sources	71	--	23	48	2,558	2,558	--	--
TOTAL SOURCES	15,810	8,337	3,458	4,015	28,622	14,460	7,749	6,413

	First Half, 1968 Total	Multi-National Banks	Regional Banks	Local Banks	Second Half, 1968 Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	6,134	3,181	1,735	1,218	--	--	--	--
Deposit withdrawals	6,124	3,181	1,735	1,218	--	--	--	--
Demand deposits	5,178	2,225	1,735	1,218	--	--	--	--
Time and savings deposits	956	956	--	--	--	--	--	--
Capital Accounts	--	--	--	--	--	--	--	--
External Uses	7,677	3,157	1,723	2,797	28,120	14,460	7,423	6,237
Repayment of borrowings	--	--	--	--	67	--	64	3
Repayment of Euro-dollars	--	--	--	--	224	224	--	--
Repayment of Federal funds purchased	--	--	--	--	--	--	--	--
Other liabilities	--	--	--	--	--	--	--	--
Household Sector	1,647	308	573	766	2,621	889	763	969
Consumer loans	942	162	283	497	1,296	308	412	576
Real estate loans (1-4 family)	678	119	290	269	1,085	428	351	306
Loans to purchase or carry sec.	27	27	--	--	240	153	--	87
Business Sector	3,589	2,022	671	896	12,455	7,391	3,114	1,950
Farm	205	102	50	53	--	--	--	--
Loans to farmers	139	92	38	9	--	--	--	--
Real estate loans - farmland	66	10	12	44	--	--	--	--
Nonfarm	3,000	1,546	611	843	8,852	4,651	2,490	1,711
Business loans	2,442	1,330	498	614	5,012	2,643	1,516	853
Real estate loans - nonfarm, nonres.	558	216	113	229	725	186	183	356
Real estate loans, multi-family	NA	NA	NA	NA	NA	NA	NA	NA
Loans to fin. inst. & brokers & dealers	--	--	--	--	3,115	1,822	791	502
Banks								
Federal funds sold	384	374	10	--	3,603	2,740	624	239
Government Sector	1,030	292	170	568	7,719	3,889	2,099	1,731
Federal Government	--	--	--	--	3,664	1,721	1,138	805
U.S. Treasury securities	--	--	--	--	3,571	1,721	1,093	757
Federal agency securities	--	--	--	--	93	--	45	48
State and local government								
State and local gov't. sec.	1,030	292	170	568	4,055	2,168	961	926
Other Earnings Assets	328	77	178	73	917	645	179	93
Other loans	229	--	170	59	762	542	135	85
Other securities	99	77	8	14	155	103	44	8
Cash and Due from Banks	638	365	--	273	2,675	363	974	1,338
Reserves with Federal Reserve Banks	638	365	--	273	397	--	181	216
Balances with banks in United States	--	--	--	--	1,202	--	515	687
Foreign bank balances	--	--	--	--	37	21	13	3
Currency and coin	--	--	--	--	1,039	342	265	432
Other Assets	445	93	131	221	1,442	1,059	230	153
Other Uses	1,999	1,999	--	--	502	--	326	176
TOTAL USES	15,810	8,337	3,458	4,015	28,622	14,460	7,749	6,413

	First Half, 1969				Second Half, 1969			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds								
External Sources	23,346	18,141	2,947	2,258	14,396	8,564	4,773	1,059
Total deposits	138	--	--	138	9,252	6,273	2,979	--
Demand deposits	--	--	--	--	9,252	6,272	2,979	--
Time and savings deposits	138	--	--	138	--	--	--	--
Capital Accounts	888	297	284	307	570	133	119	318
Federal funds purchased	3,175	1,025	1,275	875	3,355	2,021	910	424
Borrowings	1,707	651	567	489	420	137	283	--
Euro-dollars	7,738	7,506	211	21	593	--	321	272
Other liabilities	9,700	8,662	610	428	206	--	161	45
Internal Sources	12,004	6,009	4,450	1,545	2,062	1,762	109	191
U.S. Treasury securities	4,461	2,559	1,902	--	--	--	--	--
Federal agency securities	153	51	62	40	--	--	--	--
State and local gov't. securities	1,464	1,271	193	--	1,022	964	--	58
Other securities	419	365	35	19	82	82	--	--
Consumer loans	--	--	--	--	15	15	--	--
Real estate loans (1-4 family)	1,314	662	438	214	13	13	--	--
Loans to purchase of carry securities	4	4	--	--	228	194	--	34
Loans to farmers	--	--	--	--	131	68	19	44
Real estate loans - farmland	--	--	--	--	59	25	11	23
Business loans	--	--	--	--	--	--	--	--
Real estate loans - nonfarm, nonres.	--	--	--	--	76	--	76	--
Real estate loans - multi-family	--	--	--	--	74	55	--	19
Loans to fin. inst. and dealers and brokers	642	--	308	334	--	--	--	--
Reserves with Federal Reserve Banks	1,632	922	527	183	--	--	--	--
Balances with banks in United States	826	--	441	385	--	--	--	--
Foreign bank balances	20	20	--	--	10	--	--	10
Currency and coin	508	155	154	199	--	--	--	--
Other loans	--	--	--	--	6	--	3	3
Federal funds sold	561	--	390	171	148	148	--	--
Other assets	--	--	--	--	198	198	--	--
Other Sources	4,973	--	1,062	3,911	10,050	1,773	731	7,546
TOTAL SOURCES	40,323	24,150	8,459	7,714	26,508	12,099	5,613	8,796

	First Half, 1969				Second Half, 1969			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	18,563	11,045	4,897	2,621	8,809	2,962	2,069	3,778
Deposit withdrawals	18,563	11,045	4,897	2,621	8,809	2,962	2,069	3,778
Demand deposits	10,118	4,332	3,165	2,621	2,621	--	--	2,621
Time and savings deposits	8,445	6,713	1,732	--	6,188	2,962	2,069	1,157
Capital Accounts	--	--	--	--	--	--	--	--
External Uses	16,677	8,022	3,562	5,093	17,699	9,137	3,544	5,018
Repayment of borrowings	--	--	--	--	284	--	--	284
Repayment of Euro-dollars	--	--	--	--	1,385	1,385	--	--
Repayment of Federal funds purchased	--	--	--	--	--	--	--	--
Other liabilities	--	--	--	--	2,563	2,563	--	--
Household Sector	1,227	345	356	526	1,240	--	356	884
Consumer loans	1,104	345	264	495	920	--	251	669
Real estate loans (1-4 family)	--	--	--	--	296	--	81	215
Loans to purchase or carry sec.	123	--	92	31	24	--	24	--
Business Sector	7,628	3,933	1,924	1,771	6,861	3,003	1,316	2,542
Farm	265	99	149	17	--	--	--	--
Loans to farmers	168	95	59	14	--	--	--	--
Real estate loans - farmland	97	4	90	3	--	--	--	--
Nonfarm	7,063	3,534	1,775	1,754	4,990	3,003	772	1,215
Business loans	4,436	2,185	1,162	1,089	3,022	2,013	343	666
Real estate loans - nonfarm, nonres.	567	323	172	72	313	82	--	231
Real estate loans, multi-family	1,982	948	441	593	245	--	245	--
Loans to fin. inst. & brokers & dealers	78	78	--	--	1,410	908	184	318
Banks								
Federal funds sold	300	300	--	--	1,871	--	544	1,327
Government Sector	2,136	--	--	2,136	1,522	825	567	130
Federal Government	1,763	--	--	1,763	1,124	825	169	130
U.S. Treasury securities	1,763	--	--	1,763	941	768	143	30
Federal agency securities	--	--	--	--	183	57	26	100
State and local government								
State and local gov't. securities	373	--	--	373	398	--	398	--
Other Earning Assets	241	138	46	57	331	305	--	26
Other loans	241	138	46	57	305	305	--	--
Other securities	--	--	--	--	26	--	--	26
Cash and Due from Banks	342	327	1	14	2,973	1,056	1,053	864
Reserves with Federal Reserve Banks	--	--	--	--	1,453	698	489	266
Balances with banks in United States	327	327	--	--	883	164	374	345
Foreign bank balances	15	--	1	14	47	8	39	--
Currency and coin	--	--	--	--	590	186	151	253
Other Assets	5,103	3,279	1,235	589	540	--	252	288
Other Uses	5,083	5,083	--	--	--	--	--	--
TOTAL USES	40,323	24,150	8,459	7,714	26,508	12,099	5,613	8,796

Appendix Table II (continued)

	First Half, 1970				Second Half, 1970			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds								
External Sources	8,507	2,271	1,378	4,858	32,705	15,138	8,039	9,528
Total deposits	6,743	2,075	920	3,748	29,935	13,664	7,372	8,899
Demand deposits	1,883	--	--	1,883	10,613	3,835	2,869	3,909
Time and savings deposits	4,860	2,075	920	1,865	19,322	9,829	4,503	4,990
Capital Accounts	728	196	234	298	680	163	187	330
Federal funds purchased	788	--	173	615	1,625	1,311	314	--
Borrowings	66	--	--	66	166	--	166	--
Euro-dollars	51	--	51	--	133	--	--	133
Other liabilities	131	--	--	131	166	--	--	166
Internal Sources	7,681	4,905	1,530	1,246	583	162	182	239
U.S. Treasury securities	1,590	711	419	460	--	--	--	--
Federal agency securities	--	--	--	--	--	--	--	--
State and local gov't. securities	--	--	--	--	--	--	--	--
Other securities	--	--	--	--	--	--	--	--
Consumer loans	87	--	87	--	--	--	--	--
Real estate loans (1-4 family)	106	--	106	--	186	--	12	174
Loans to purchase or carry securities	304	161	57	86	29	29	--	--
Loans to farmers	--	--	--	--	125	88	37	--
Real estate loans - farmland	69	23	46	--	52	3	49	--
Business loans	1,964	1,964	--	--	--	--	--	--
Real estate loans - nonfarm, nonres.	126	68	58	--	--	--	--	--
Real estate loans - multi-family	56	14	42	--	83	2	19	62
Loans to fin. inst. and dealers and brokers	2,138	1,453	306	379	--	--	--	--
Reserves with Federal Reserve Banks	133	--	133	--	--	--	--	--
Balances with banks in United States	581	50	276	255	--	--	--	--
Foreign bank balances	6	--	--	6	51	40	11	--
Currency and coin	156	131	--	25	47	--	43	3
Other loans	365	330	--	35	11	--	11	--
Federal funds sold	--	--	--	--	--	--	--	--
Other assets	--	--	--	--	--	--	--	--
Other Sources	1,262	1,121	141	--	7,249	6,449	800	--
TOTAL SOURCES	17,450	8,297	3,049	6,104	40,537	21,749	9,021	9,767

Appendix Table II (continued)

	First Half, 1970				Second Half, 1970			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	5,071	3,204	1,867	--	--	--	--	--
Deposit withdrawals	5,071	3,204	1,867	--	--	--	--	--
Demand deposits	5,071	3,204	1,867	--	--	--	--	--
Time and savings deposits	--	--	--	--	--	--	--	--
Capital Accounts	--	--	--	--	--	--	--	--
External Uses	8,646	5,093	1,182	2,371	40,406	21,749	9,021	9,636
Repayment of borrowings	886	654	232	--	241	232	--	9
Repayment of Euro-dollars	636	631	--	5	4,589	4,257	332	--
Repayment of Federal funds purchased	171	171	--	--	212	--	--	212
Other liabilities	1,105	992	113	--	4,731	4,493	238	--
Household Sector	480	158	--	322	1,617	537	451	629
Consumer loans	400	111	--	289	1,093	402	313	378
Real estate loans (1-4 family)	80	47	--	33	309	135	--	174
Loans to purchase or carry securities	--	--	--	--	215	--	138	77
Business Sector	1,769	83	268	1,418	9,392	3,109	3,083	3,200
Farm	143	72	31	40	256	--	--	256
Loans to farmers	128	72	31	25	15	--	--	15
Real estate loans - farmland	15	--	--	15	241	--	--	241
Nonfarm	943	--	160	783	6,038	2,636	1,627	1,775
Business loans	798	--	160	638	2,271	700	528	1,043
Real estate loans - nonfarm, nonres.	46	--	--	46	400	22	132	246
Real estate loans, multi-family	99	--	--	99	--	--	--	--
Loans to fin. inst. & brokers & dealers	--	--	--	--	3,367	1,914	967	486
Banks								
Federal funds sold	683	11	77	595	3,098	473	1,456	1,169
Government Sector	2,281	1,417	374	490	12,632	5,419	3,298	3,915
Federal Government	272	170	47	55	8,156	4,128	1,875	2,153
U.S. Treasury securities	--	--	--	--	6,382	3,442	1,362	1,578
Federal agency securities	272	170	47	55	1,774	686	513	575
State and local Government								
State and local gov't. securities	2,009	1,247	327	435	4,476	1,291	1,423	1,762
Other Earning Assets	152	68	46	38	626	416	62	148
Other loans	24	--	24	--	344	260	--	84
Other securities	128	68	22	38	282	156	62	64
Cash and Due from Banks	288	236	25	27	3,488	1,427	986	1,075
Reserves with Federal Reserve Banks	220	193	--	27	1,330	182	688	460
Balances with banks in United States	--	--	--	--	2,029	1,159	298	572
Foreign bank balances	44	43	1	--	43	--	--	43
Currency and coin	24	--	24	--	86	86	--	--
Other Assets	878	683	124	71	2,878	1,859	571	448
Other Uses	3,733	--	--	3,733	131	--	--	131
TOTAL USES	17,450	8,297	3,049	6,104	40,537	21,749	9,021	9,767

Appendix Table II (continued)

	First Half, 1971				First Half, 1971			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds								
External Sources	15,511	8,001	3,108	4,402	23,404	9,098	6,632	7,674
Total deposits	10,850	5,669	1,785	3,396	18,728	6,808	5,477	6,443
Demand deposits	--	--	--	--	9,781	3,288	3,194	3,299
Time and savings deposits	10,850	5,669	1,785	3,396	8,947	3,520	2,283	3,144
Capital Accounts	1,156	613	294	249	936	493	145	298
Federal funds purchased	3,228	1,609	1,029	590	3,681	1,797	1,010	874
Borrowings	158	110	--	48	--	--	--	--
Euro-dollars	119	--	--	119	8	--	--	8
Other liabilities	--	--	--	--	51	--	--	51
Internal Sources	4,286	1,868	1,289	1,129	147	123	22	2
U.S. Treasury securities	739	--	507	232	--	--	--	--
Federal agency securities	--	--	--	--	85	85	--	--
State and local gov't. securities	--	--	--	--	--	--	--	--
Other securities	2	2	--	--	--	--	--	--
Consumer loans	--	--	--	--	--	--	--	--
Real estate loans (1-4 family)	--	--	--	--	--	--	--	--
Loans to purchase or carry securities	38	--	--	38	--	--	--	--
Loans to farmers	--	--	--	--	10	--	10	--
Real estate loans - farmland	258	2	--	256	12	--	12	--
Business loans	927	801	126	--	--	--	--	--
Real estate loans - nonfarm, nonres.	--	--	--	--	--	--	--	--
Real estate loans - multi-family	--	--	--	--	--	--	--	--
Loans to fin. inst. and dealers and brokers	99	--	99	--	--	--	--	--
Reserves with Federal Reserve Banks	400	--	250	150	--	--	--	--
Balances with banks in United States	421	--	--	421	--	--	--	--
Foreign bank balances	--	--	--	--	--	--	--	--
Currency and coin	--	--	--	--	40	38	--	2
Other loans	104	55	17	32	--	--	--	--
Federal funds sold	290	--	290	--	--	--	--	--
Other Assets	1,008	1,008	--	--	--	--	--	--
Other Sources	7,207	6,351	116	740	1,168	736	432	--
TOTAL SOURCES	27,004	16,220	4,513	6,271	24,719	9,957	7,086	7,676

Appendix Table II (continued)

	First Half, 1971				Second Half, 1971			
	Total	Multi-National Banks	Regional Banks	Local Banks	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds								
Internal Uses	3,270	805	1,256	1,209	--	--	--	--
Deposit withdrawals	3,270	805	1,256	1,209	--	--	--	--
Demand deposits	3,270	805	1,256	1,209	--	--	--	--
Time and savings deposits	--	--	--	--	--	--	--	--
Capital Accounts	--	--	--	--	--	--	--	--
External Uses	24,734	15,415	3,257	5,062	24,512	9,957	7,086	7,469
Repayment of borrowings	675	--	675	--	351	219	9	123
Repayment of Euro-dollars	6,066	5,810	256	--	591	563	28	--
Repayment of Fedreal funds purchased	--	--	--	--	--	--	--	--
Other liabilities	4,969	4,830	61	78	579	528	51	--
Household Sector	1,397	516	200	681	3,278	1,164	730	1,384
Consumer loans	585	123	98	364	1,479	461	326	692
Real estate loans (1-4 family)	773	377	79	317	1,721	686	402	633
Loans to purchase or carry securities	39	16	23	--	78	17	2	59
Business Sector	2,860	1,106	259	1,495	8,312	3,015	3,197	2,100
Farm	267	139	43	85	95	8	--	87
Loans to farmers	267	139	43	85	71	3	--	68
Real estate loans - farmland	--	--	--	--	24	5	--	19
Nonfarm	1,933	798	216	919	5,542	2,234	1,963	1,345
Business loans	525	--	--	525	1,777	142	1,001	634
Real estate loans - nonfarm, nonres.	451	76	159	216	698	214	209	275
Real estate loans, mutli-family	293	175	57	61	134	26	8	100
Loans to fin. inst. & brokers & dealers	664	547	--	117	2,933	1,852	745	336
Banks								
Federal funds sold	660	169	--	491	2,675	773	1,234	668
Government Sector	5,562	1,810	1,367	2,385	5,219	2,027	1,131	2,061
Federal Government	1,619	987	42	590	2,959	1,149	901	909
U.S. Treasury securities	899	899	--	--	2,458	1,149	694	615
Federal agency securities	720	88	42	590	501	--	207	294
State and local Government								
State and local gov't. securities	3,943	823	1,325	1,795	2,260	878	230	1,152
Other Earning Assets	187	--	72	115	621	347	139	135
Other loans	--	--	--	--	410	271	84	55
Other securities	187	--	72	115	211	76	55	80
Cash and Due from Banks	1,833	1,343	365	125	3,852	1,348	1,140	1,364
Reserves with Federal Reserve Banks	973	973	--	--	2,723	887	931	905
Balances with banks in United States	636	318	318	--	1,030	431	171	428
Foreign bank balances	50	11	12	27	87	30	26	31
Currency and coin	174	41	35	98	12	--	12	--
Other Assets	185	--	2	183	1,709	746	661	302
Other Uses	--	--	--	--	207	--	--	207
TOTAL USES	27,004	16,220	4,513	6,271	24,719	9,957	7,086	7,676

	First Half, 1972			
	Total	Multi-National Banks	Regional Banks	Local Banks
Sources of Funds				
External Sources	16,896	8,422	4,499	3,975
Total deposits	8,099	4,100	1,152	2,847
Demand deposits	--	--	--	--
Time and savings deposits	8,099	4,100	1,152	2,847
Capital Accounts	1,355	742	347	266
Federal Funds purchased	5,169	2,214	2,275	680
Borrowings	641	312	312	17
Euro-dollars	566	536	16	14
Other liabilities	1,066	518	397	151
Internal Sources	5,937	3,160	1,845	932
U.S. Treasury securities	2,155	1,192	963	--
Federal agency securities	237	237	--	--
State & local gov't. securities	--	--	--	--
Other securities	--	--	--	--
Consumer loans	--	--	--	--
Real estate loans (1-4 family)	--	--	--	--
Loans to purchase or carry securities	--	--	--	--
Loans to farmers	--	--	--	--
Real estate loans - farmland	1	1	--	--
Business loans	52	52	--	--
Real estate loans - nonfarm, nonres.	--	--	--	--
Real estate loans - multi-family	--	--	--	--
Loans to fin. inst. and brokers and dealers	55	--	--	55
Reserves with Federal Reserve Banks	511	177	98	236
Balances with banks in United States	216	--	--	216
Foreign bank balances	12	--	--	12
Currency and coin	526	183	124	219
Other loans	--	--	--	--
Federal funds sold	454	--	260	194
Other Assets	1,718	1,318	400	--
Other Sources	1,253	--	--	1,253
TOTAL SOURCES	24,086	11,582	6,344	6,160

	First Half, 1972			
	Total	Multi-National Banks	Regional Banks	Local Banks
Uses of Funds				
Internal Uses	5,611	1,356	2,362	1,893
Deposit withdrawals	5,611	1,356	2,362	1,893
Demand deposits	5,611	1,356	2,362	1,893
Time and savings deposits	--	--	--	--
Capital Accounts	--	--	--	--
External Uses	15,460	8,117	3,076	4,267
Repayment of borrowings	--	--	--	--
Repayment of Euro-dollars	--	--	--	--
Repayment of Federal funds purchased	--	--	--	--
Other liabilities	--	--	--	--
Household Sector	3,166	929	844	1,393
Consumer loans	1,253	278	290	685
Real estate loans (1-4 family)	1,694	568	477	649
Loans to purchase or carry securities	219	83	77	59
Business Sector	7,711	4,723	1,612	1,376
Farm	296	121	70	105
Loans to farmers	257	121	54	82
Real estate loans - farmland	39	--	16	23
Nonfarm	6,225	3,412	1,542	1,271
Business loans	1,402	--	623	779
Real estate loans - nonfarm, nonres.	1,053	518	159	376
Real estate loans, multi-family	567	137	314	116
Loans to fin. inst. & brokers & dealers	3,203	2,757	446	--
Banks				
Federal funds sold	1,190	1,190	--	--
Government Sector	1,843	390	244	1,209
Federal Government	1,126	--	131	995
U.S. Treasury securities	771	--	--	771
Federal agency securities	355	--	131	224
State and local Government				
State and local Government	717	390	113	214
Other Earnings Assets	920	398	322	200
Other loans	511	272	169	70
Other securities	409	126	153	130
Cash and Due from Banks	1,731	1,677	54	--
Reserves with Federal Reserve Banks	--	--	--	--
Balances with banks in United States	1,590	1,581	9	--
Foreign bank balances	141	96	45	--
Currency and coin	--	--	--	--
Other Assets	89	--	--	89
Other Uses	3,015	2,109	906	--
TOTAL USES	24,086	11,582	6,344	6,160