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# FEDERAL RESERVE BANK OF ST. LOUIS

# Review

## CONTENTS

	Page
<i>Total Demand, Credit Demand, and Interest Rates</i> .....	1
<i>The United States as World Banker</i> .....	6
<i>Banking Markets for Business Firms in the St. Louis Area</i> .....	9



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FEDERAL RESERVE BANK  
OF ST. LOUIS

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## *Total Demand, Credit Demand, and Interest Rates*

**T**OTAL DEMAND for the products of the economy has expanded strongly through the summer. While output of goods and services rose sharply, the rise in supply did not keep pace with expanding demand. As a result, the general price level rose further. Moreover, demands on the financial system have correspondingly expanded more rapidly than supply, causing a continued upward movement of market interest rates.

Government actions affecting total demand were very stimulative during the year ending in the second quarter of 1966 and may be even more stimulative in the third and fourth quarters. The high-employment Federal budget averaged a surplus of \$1 billion in the four quarters ending in June, the most stimulative since the measure has been computed (1955). There are indications that a deficit may occur during the remainder of 1966. The stock of money rose rapidly (6 per cent) from June 1965 to June 1966 but declined in July and August.

### *Expanding Total Demand*

Total dollar demand for goods and services rose strongly during the past year. Gross national product measured in current prices rose about 9 per cent over the past four quarters. This rate of increase compares with the 6.4 per cent average increase from the fourth quarter of 1960 to the fourth quarter of 1964, a period when substantial excess resources were available, and the 4.5 per cent and 4.9 per cent average rates of increase from 1957 to 1960 and 1953 to 1957, respectively.

Income and spending rose sharply in July following even stronger gains in June. Personal income expanded at a 7 per cent annual rate from May to July, up sharply from the pace which prevailed in the spring. Retail sales, a portion of total spending, jumped markedly in June and expanded at a 9 per cent annual rate from April to July.

Real product has risen less rapidly than total demand and, as a result, prices have continued to move up. Wholesale prices jumped sharply in July, following relative stability from February to June. Variations in the rate of increase of wholesale prices over the past year have largely reflected shifts in agricultural prices. However, these shifts since the fall of 1965 have occurred against the background of a strong upward movement in prices of industrial commodities. After rising about 1.5 per cent in the year ending in November 1965, the rate of increase has since been about twice as rapid. Consumer prices have risen at a 3.7 per cent annual rate since last November compared with 1.8 per cent in the preceding twelve months.



The rise in prices, according to one view, reflects the pull of rapidly expanding total demand against a lesser rate of expansion in the supply of goods and services. In terms of this view, public policy to limit inflation needs to operate through exercising a restrictive effect on total demand by such measures as a restrictive Federal budget (fiscal policy) or by monetary actions. A different view is that unions and management, by an exercise of market power, have increased prices. According to this view, policy prescriptions to control inflation involve convincing those who wield power to exercise restraint and otherwise seeking to moderate the effect of inflation psychol-

ogy on wage negotiations and price determination. Through "guidelines," the Administration has sought to influence wage settlements and pricing decisions in the United States and, thereby, to control inflation.<sup>1</sup>

As the economy's use of resources has neared capacity, there has been a moderation in the rate at which the productive process could obtain additional resources. Employment, which rose 3.5 per cent during 1965, has this year risen at a 1.5 per cent annual rate. Similarly, nonfarm payroll employment, which rose 5.3 per cent in the year ending in March, has since expanded at a 4.0 per cent annual rate.

Although total output (including that of the agricultural sector and service industries) has been expanding less rapidly this year than last, industrial output has continued to rise markedly. Industrial production, a measure of the physical output of mines, factories, and utilities, has risen at a 9 per cent rate since February compared with a 6 per cent rate of growth during the last five years as a whole. Industrial output, however, has risen more slowly than the 14 per cent rate of the six months prior to February.

### *Continuing Demand for Loan Funds*

The demand for loan funds continued very strong through the summer. The great demand for loan funds is largely a by-product of the strong total demand situation. As business firms and consumers have made decisions to build plant and equipment, accumulate inventories, and buy goods and services, there has been an accompanying expansion in the demand for credit. This expansion in the demand for credit has had an impact on the continuous process by which funds are channeled from those who incur a surplus by spending less than their income to those who run a deficit by spending more than their income. Because demands for loan funds have grown more rapidly than supplies, market interest rates have risen.

The act of financial saving is engaged in by a variety of decision-making units and takes numerous forms. There are many "small" savers, those who typically abstain from spending all of their current income and who place a portion of it in banks, savings and loan associations, mutual savings banks, insurance companies, etc. There are a number of "big" savers such as corporations and governments who, for temporary periods, accumulate funds. These big savers typically place their funds in CD's, commercial paper,

<sup>1</sup>The United Kingdom has adopted a similar form of inflation control under its comprehensive "Incomes Policy." In that country, where fiscal and monetary policies have been expansive since 1963, inflation has persisted for a longer period than in the United States.

Government securities, corporate securities, or other money market instruments.

The demand for finance stems from those individuals, business firms, and governments which seek to spend in excess of their current incomes. To do so they must create debt or convert their assets into money. There is an ancillary demand for finance stemming from financial institutions serving as intermediaries between savers and investors. The demand for such funds by intermediaries is derived from the demand for funds by those spending in excess of their current income.

As market interest rates rise, funds tend to be attracted away from financial intermediaries or flow in less volume through them if the rates they pay lag behind market rates. Instead, funds find their use through the open market or are lodged in real investment by internal financing. In order to continue to play their customary role, financial intermediaries are impelled to increase the rates they pay to depositors.

Many financial institutions, however, are constrained by law or regulation from raising the rates they pay above certain maxima. For example, in recent months many market interest rates have risen above the maximum which banks are legally permitted to pay. This change in rate relationships has been a factor in the reduced growth of large certificates of deposit and of total time deposits at commercial banks. Large certificates of deposit of major banks have risen at a 3 per cent annual rate since May compared with a 13 per cent increase during the past year and a 32 per cent increase in the preceding year. Total time and savings deposits at commercial banks have risen at a 7 per cent rate since May compared with a 12 per cent increase in the past year and a 16 per cent increase in the preceding year.

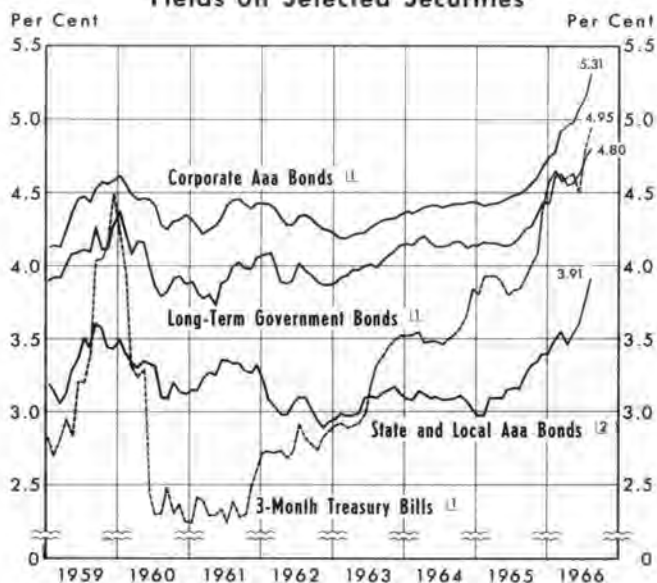
Interest rates charged by banks have increased as part of the general rise of interest rates. Banks and other financial intermediaries have been forced to increase the interest rates they pay in order to maintain their role in the flow of saving into investment.

Limiting rates which financial institutions may pay for funds induces a shift of financial flows toward the open market and diminishes the role of intermediaries as middlemen between savers and investors. Such a development may have an adverse impact on small borrowers and small savers. Funds tend to be allocated to those who find it practical to borrow in the open market—such as large corporations, municipalities, and the Federal Government. It becomes increasingly difficult for the small borrower, whose

credit rating must be evaluated by specialists, to obtain funds. Viewed from the perspective of the small saver, limitations on rates paid by intermediaries and a decline in the role of intermediaries tend to reduce the interest rates which he can effectively receive. On the other hand, those with sufficient funds to permit them to accommodate large borrowers in the open market are enabled to receive higher interest rates.

Interest rates have risen especially sharply since late spring and early summer. The rise has occurred throughout the maturity structure and has been manifested in both market and administered rates. In the short-term area of the market, the yield on three-month Treasury bills increased from about a 4.60 per cent level in April and May to 5.07 per cent in the week ending September 2; rates on prime commercial paper (4- to 6-month) rose from 5.40 per cent to 5.88 per cent; and rates on prime bankers' acceptances rose from 5.10 per cent to 5.75 per cent. Rates which banks pay on large denomination certificates of deposit also rose during the period. The yield on such certificates in the secondary market, a market determined rate whose movements frequently presage movements in rates posted by commercial banks, rose from 5.25 per cent in April to 5.75 per cent in the week ending September 2. In turn, the prime rate, the rate of interest which banks charge to borrowers with unquestioned credit standing, rose from 5.5 per cent to 6 per cent.

Yields on intermediate- and long-term Government bonds and other long-term securities have moved up  
**Yields on Selected Securities**



(1) Monthly averages of daily figures.  
(2) Monthly averages of Thursday figures.  
Latest data plotted: August  
Sources: Board of Governors of the Federal Reserve System and Moody's Investors Service

sharply since June. Yields on intermediate-term U. S. Government bonds rose from 5.00 per cent in June to 5.63 per cent in the week ending September 9. Over this same period, yields on long-term U. S. Government bonds rose from 4.65 per cent to 4.76 per cent. Yields on corporate bonds (Aaa) rose from 4.95 per cent in April to 5.52 per cent in early September.

The great demand for loan funds, and the resulting higher interest rates, has been associated with a decline in stock prices since early this year. After reaching 92.55 (1941-43 = 10) in 1965 and 94.06 in early February 1966, the Standard and Poor's index of 500 common stocks has drifted downward. In the first 12 days of September average prices were 76.95, 18 per cent lower than the February high. Dividend payments have continued strong thus far in 1966; and the yield on common stock has risen from 3.02 per cent in January to 3.75 per cent in the first 12 days of September.

The rise in yields on equities may be associated with the rising yields on long-term debt. Alternative forms of investment tend to have similar yields, after allowance for differences in risk, liquidity, expected capital appreciation, and other considerations. As a result, broad movements in interest rates may be associated with corresponding movements in yields on equities, though there have been prolonged periods when yields on equities have moved differently from yields on long-term debt. The stimulative fiscal situation has contributed to the rise in interest rates both directly, in terms of the Government's demand for funds, and indirectly, through the stimulative effects of the fiscal stance on total private demand. Thus, the stimulative fiscal situation has probably contributed to the decline in prices of equities.

### Expanding Commercial Bank Credit

Commercial banks have continued to expand their loans in response to strong demands for credit. Total loans have continued to rise at a rate of about 14 per cent a year. Business loans have risen 18 per cent during the past year and at a 25 per cent annual rate in the past three months. In order to accommodate strong loan demands of businesses, banks have made adjustments in their portfolios. The rate of increase of consumer and real estate loans has moderated in recent months, while total bank holdings of securities have fallen. There has been little change in the rate of expansion in total bank credit, which has grown rather steadily during the past year at a rate of about 9 per cent per annum.

Implications of bank credit expansion for the econ-

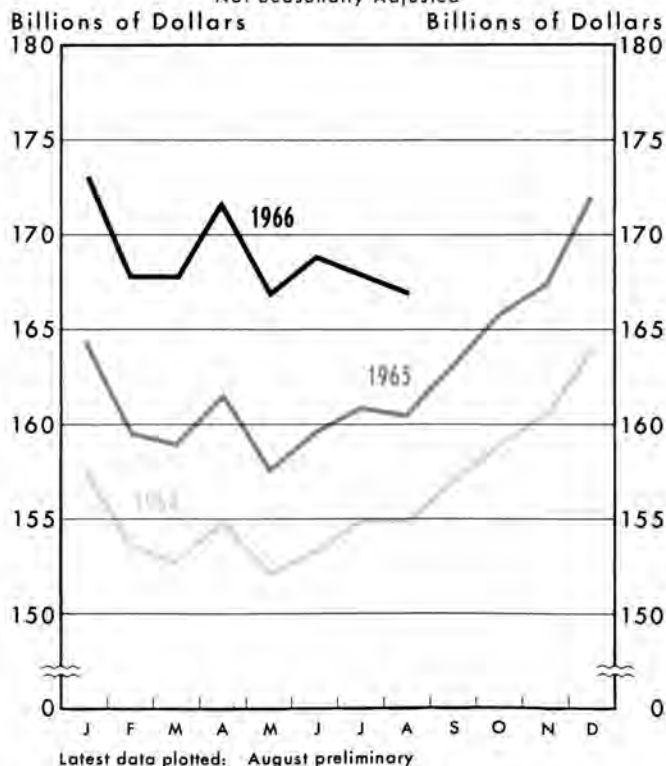
omy are increasingly difficult to evaluate. There has been a view that bank credit can be created in the sense that no prior act of saving is required. By comparison, funds lent by financial intermediaries, per se, have, prior to intermediation, been deposited in the intermediary. That is, there has been saving prior to lending. In recent years the view that banks have a distinctive character—that is, that they are creators of credit—has lost ground, especially in the light of the increased role of commercial banks as intermediaries. In evaluating bank credit expansion it is necessary to consider the extent to which shifts in bank credit reflect changes in commercial bank intermediation and the extent to which they represent created credit.

### Monetary Developments

The money supply continued to expand very rapidly through late spring and early summer but declined in July and August. The reserve base of the banking system, after rising rapidly from late 1965 to last spring, has subsequently decreased. There is a view that changes in the pace of monetary expansion affect total demand after some lag. To the extent that this is the case, the rapid and prolonged monetary expansion which appears to have abated after mid-year may continue to stimulate total demand in the immediate future.

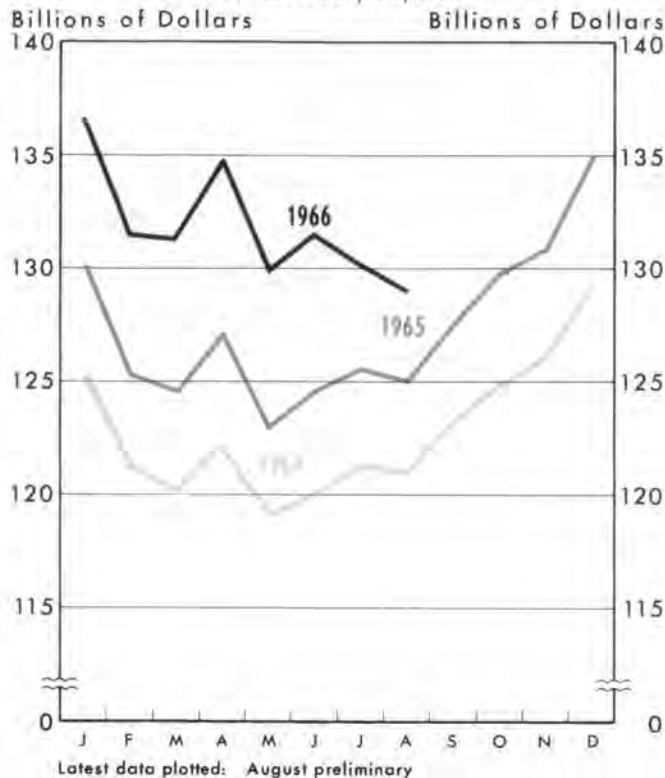
#### Money Supply

Averages of Daily Figures  
Not Seasonally Adjusted



## Privately Held Demand Deposits

Averages of Daily Figures  
Not Seasonally Adjusted



Total reserves of member banks have shown a net decline in the last three months, after rising at about a 7 per cent annual rate from late 1965 to late spring. Reserves available to support private demand deposits, the major component of the money stock, have fallen at about an 8 per cent annual rate in the last three months, after increasing from mid-1965 to the spring of 1966 at a 6 per cent annual rate. Demand deposits are the component of the nation's money supply most amenable to central bank control.

The decline in the banking system's reserve base reflects chiefly increases in such factors absorbing reserves as currency held by the public and Treasury deposits with Federal Reserve Banks and a decrease in the gold stock. Also, the Federal Reserve System supplied fewer reserves through net purchases of Government securities. Member banks have obtained few additional reserves by borrowing from the Federal Reserve in recent months. Member bank borrowing from Reserve banks has fluctuated around the \$750 million level since the end of May.

The money supply, privately held demand deposits plus currency, after increasing about 6 per cent during the year ending in June, declined in July and

August. The actual money stock not adjusted for seasonal variation has remained fairly stable since spring. Typically, money begins moving strongly upward after May. In the last three months the seasonally adjusted money stock decreased at a 3 per cent rate.

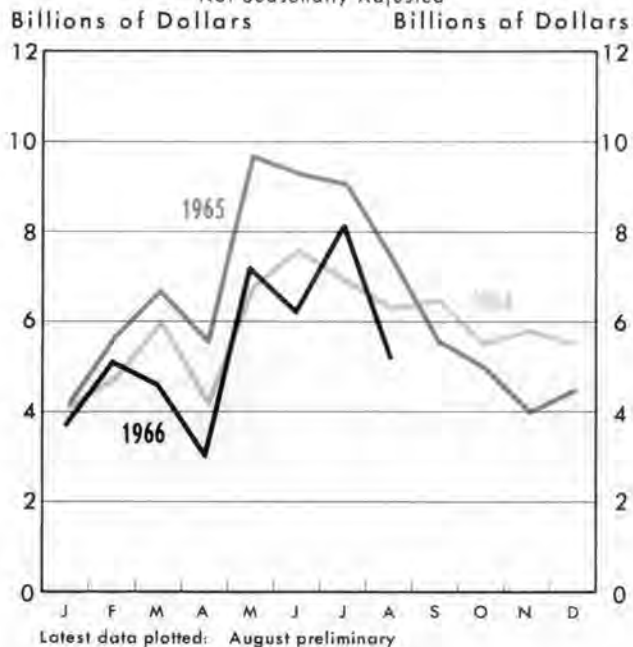
The decline in seasonally adjusted money has centered in demand deposits; currency has risen moderately. Actual demand deposits not adjusted for seasonal movements were about unchanged after May. Typically, demand deposits rise during this period.

Declines in privately held demand deposits at commercial banks can reflect shifts into Government deposits at commercial banks (not included in money as usually defined) or, for temporary periods, into time deposits. Private demand deposits may also decline along with a reduction in the commercial banking system's holdings of earning assets.

Shifts of U. S. Government deposits at commercial banks help explain some of the movements in money since April. From April to July, U. S. Government demand deposits rose substantially more than seasonally; this rise may account in some degree for the slowing in money growth during the April-to-July period. After July, however, U. S. Government demand deposits moved seasonally downward, but private accounts have not increased.

## U.S. Government Demand Deposits at Commercial Banks

Averages of Daily Figures  
Not Seasonally Adjusted



# The United States as World Banker

## Introduction

WIDESPREAD ATTENTION has been directed toward the international payments system and the status of the dollar for the past several years. It has been almost universally accepted that the United States payments position has been in disequilibrium, with published deficit figures and U. S. gold losses as the main evidence. As a result of this "disequilibrium" the viability of the present international payments system has been questioned, and many reforms have been suggested. This article presents some representative views on the U. S. balance of payments which have divergent implications for the world payments system and U. S. economic policy.

One method of accounting for a nation's international trading and financial transactions is a balance-of-payments statement, a set of accounts which records the totality of payments to, and receipts from, foreigners for a given period. Table I and Chart 1 present a condensed summary of the U. S. balance-of-payments accounts for the period 1958 through 1965. Further perspective can be obtained by examining changes in a nation's international balance sheet. This statement shows, at a given time, a nation's claims and liabilities vis-a-vis the rest of the world.

Table I  
U. S. BALANCE OF PAYMENTS, 1958-1965

(Billions of dollars)			
Expenditures		Receipts	
Goods and services	\$222.9	Goods and services	\$241.1
Capital:		Capital:	
Private	31.2	Nonliquid assets	4.5
Government	9.4	Liquid-official	7.3
		Liquid-other	5.8
		Change in reserve assets	9.4
Subtotal	\$ 40.6	Subtotal	\$ 27.0
Errors and omissions	5.5	Errors and omissions	.9
Total	\$269.0	Total	\$269.0

Since both sets of accounts are only neutral accounting statements, historical examination and analytical interpretation is required to judge whether a nation's international economic and financial experience has been proceeding in a "sustainable" manner. Traditionally,

the U. S. balance-of-payments accounts have been arranged to show changes in the nation's liquidity, the relation between official reserve assets (gold, convertible currencies, and automatic IMF drawing rights) and short-term dollar liabilities to foreigners. Since 1957 this position for the United States has deteriorated an average of \$3 billion per year.

Chart 1  
U.S. Balance of Payments  
1958 - 1965



\*Includes unilateral transfers.  
Source: U.S. Department of Commerce.  
Latest data plotted: 1965.

Viewed from the balance sheet standpoint, the United States since 1957 has increased its international net worth by about \$19 billion. United States claims against the world have risen \$53 billion, foreign claims against the United States have risen only \$25 billion (Table II and Chart 2), and the U. S. gold stock has declined \$9 billion. This increase in net claims against the rest of the world indicates growing financial strength.

Whether to view the deterioration of the liquidity, or the increase of the net creditor, position of the United States as the best indicator of its international financial standing is debatable. By the criterion of "sustainability," either view might be acceptable. Since the expansion of foreign official dollar holdings has been a main source of the increase in world monetary reserves since 1957 (Chart 3), an evaluation of the appropriateness or sustainability of past and future U. S. payments deficits must consider the attitudes of foreign monetary authorities regarding the distri-

Table II

U. S. INTERNATIONAL BALANCE SHEET, 1957 AND 1965<sup>1</sup>

(Billions of dollars)

U. S.-Owned Foreign Assets		Foreign-Held Claims on the U. S.	
	1957	1965 <sup>2</sup>	
Privately owned:			
Long-term	\$33.7	\$ 72.5	U. S. private long-term obligations
Short-term	3.2	10.0	
			U. S. liquid liabilities to foreigners
U. S. Government:			
Long-term	15.6	20.4	
Short-term	1.8	5.0	
Subtotal	\$54.3	\$107.9	Subtotal
U. S. gold stock	22.9	13.8	U. S. net worth
Total	\$77.2	\$121.7	Total

<sup>1</sup> End of year.<sup>2</sup> Estimated by the Federal Reserve Bank of St. Louis.

bution, composition, and overall growth of world reserves.

### Divergent Views of the U. S. Balance of Payments

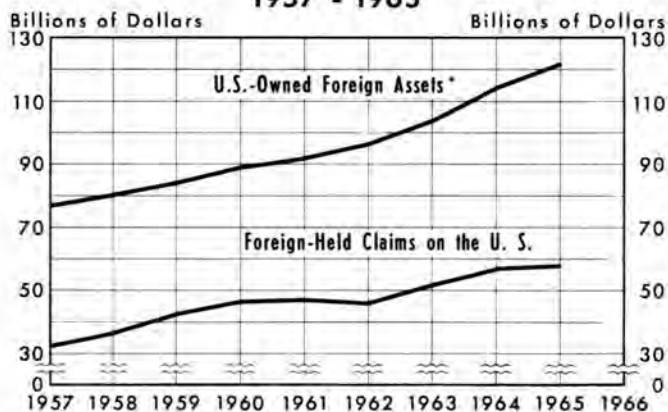
According to a traditional view of the U. S. balance-of-payments problem, the net outflow of capital and Government aid should have been offset by improvement in the balance on goods and services. Two exponents of this view are Lutz and Roepke.<sup>1</sup> Given exchange rates and the magnitude of private capital and Government expenditures abroad, the existence of a deficit indicates that monetary policy has been too lax. Monetary "overpressure" causes imports to be too large, exports too small, and perpetuates the capital outflows. The policy implication is drawn that the United States has been derelict in not following restrictive monetary policies which would have restored balance by reducing U. S. price and income levels relative to other countries.

An alternative line of thought takes account of some important aspects of current world financial institutions which make present circumstances unique. Given the organization of world money and capital markets, the patterns of international savings and credit demands, and the role of the dollar as a world currency, this school of thought argues that the traditional views on balance-of-payments equilibrium are outmoded.

<sup>1</sup> See Wilhelm Roepke, "The Dollar Seen from Geneva," *National Review*, March 8, 1965; and Friedrich A. Lutz, "Internal Policies Compatible with External Equilibrium at Stable Exchange Rates," *International Payments Problems*, A Symposium Sponsored by The American Enterprise Institute, Washington, D. C., September 23 and 24, 1965.

Roosa<sup>2</sup> argues that traditional views on balance-of-payments adjustment focussed attention on trade in goods and services, assuming that appropriate monetary policies would assure control over capital movements. But given present day conditions—a reluctance or inability to manipulate prices, wages, and incomes in the advanced countries, fragmented and cartelized capital markets abroad, and the large, uncontrolled, diverse U. S. market—the view that capital flows are a passive balancing item is unrealistic. Rather, U. S. capital outflows have been a means whereby the international economy has acquired needed dollar holdings.

Chart 2  
U. S. International Balance Sheet  
1957 - 1965



\*Includes U. S. gold stock.

Source: U. S. Department of Commerce

Latest data plotted: 1965 estimated by Federal Reserve Bank of St. Louis

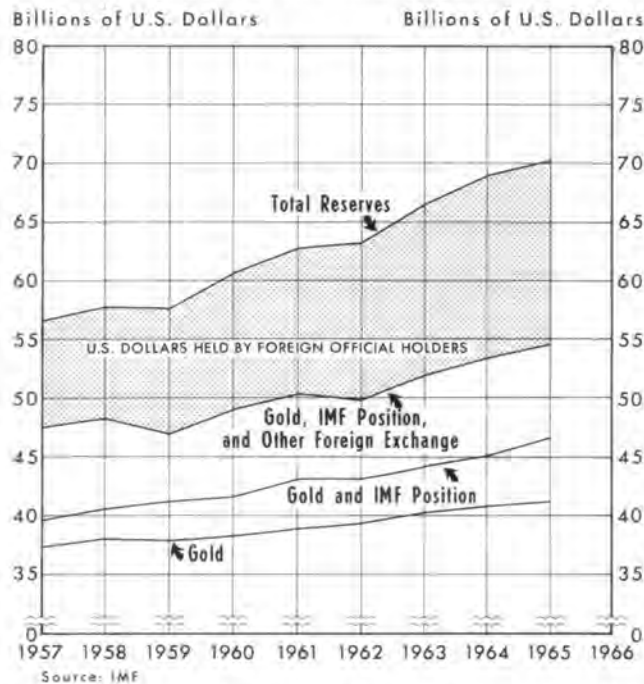
Despres, Kindleberger, and Salant<sup>3</sup> emphasize the role of financial intermediation performed by the United States for the rest of the world. With differences between U. S. and foreign liquidity preferences (the desire to hold financial assets in short-term form and liabilities in long-term form), a trade in financial assets arises, with the United States purchasing long-term foreign liabilities and foreigners holding short-term dollar assets. This phenomenon technically increases the U. S. deficit, measured by the liquidity approach, but these authors' views would imply that short-term dollar holdings are capital imports and should not be included in a deficit measure.

An important point is at issue: A significant part of U. S. reported capital outflows may not represent an

<sup>2</sup> Robert V. Roosa, Lecture, "The Place of Monetary Policy in the United States," *The Balance Between Monetary Policy and Other Instruments of Economic Policy in a Modern Society*, Washington, D. C.: Per Jacobsson Foundation, 1965, pp. 42-43.

<sup>3</sup> Emile Despres, Charles P. Kindleberger, and Walter S. Salant, "The Dollar and World Liquidity—A Minority View," *The Economist*, February 5, 1966, p. 526.

Chart 3  
Total World Monetary Reserves



intended real capital transfer but may arise out of the fulfillment of a worldwide financial intermediation function by the United States. Similarly, if increasing foreign private dollar holdings are also the product of international financial intermediation, these liabilities may be considered a capital movement and not as increasing the deficit.

A simplified view of this intermediation process is as follows: If long-term capital markets in other countries function so that funds are not available at prices or in quantities comparable to the U. S. market, foreign borrowers will seek long-term finance in the United States. The proceeds of these borrowings can be easily converted, under the present international monetary system, into domestic currency. If a foreign demand for liquid dollars holdings offsets the long-term capital outflow, then the U. S. net investment position is unaffected except for a diminution of liquidity as conventionally measured. No pressure on exchange rates will occur, other things equal, and in the borrowing country additional spending of the borrowed funds is offset by savings in the form of short-term dollar holdings. On the other hand, if the demand for short-term dollar holdings and the demand for long-term borrowing in the United States does not balance within each foreign country, then these conclusions regarding exchange rates and savings-investment equality may not hold.<sup>4</sup>

<sup>4</sup>Many other considerations may qualify the validity of the intermediation process presented here. If foreign short-term dollar holdings are acquired not with current savings but with

### *Effects of National Preferences with Respect to the Form in Which Reserves Are Held*

If private foreigners do not wish to hold short-term dollars to the extent that they come into existence, the dollars will flow into the hands of foreign monetary authorities. To what extent these dollars will be held as reserves and to what extent converted into gold is an important question. The reserves of a country which converts into gold will be the same in either case, but global reserves will decrease to the extent that gold is purchased.

Since the main source of growth in world liquidity during the last decade has been additional dollar holdings (See Chart 3)<sup>5</sup> and little progress has been made toward changing this aspect of the world payments system, it is of great interest to inquire whether the combined effects of separate national policies regarding the form in which reserves are held are in the general interest.

Whatever the form in which international reserves are held, there is a presumption that, under normal conditions, the overall total of reserves should increase at a reasonably stable, appropriate rate. Obviously, there are differences of opinion among nations as to what constitutes an appropriate rate. But one of the difficulties of assuring growth of reserves, under the present world monetary system, is that some official holders of reserves discriminate between gold and other types (mainly dollars) of reserves. As noted, shifting the composition of a nation's reserve holdings from reserve currencies to gold cannot affect the accumulation of reserves by a particular country, but it does reduce the world supply of reserves. It is questionable whether the international financial system benefits from these actions of surplus nations which shrink world reserves. Rather, steps might be taken toward real adjustment of international payments imbalances by altering comparative international prices and incomes and relaxing restraints on trade and capital transactions.

idle foreign currency balances, then investment will outrun savings in the borrowing country, generating higher levels of income which might lead to higher imports or investment abroad by the borrowing country. In this case, exchange rate effects would not be neutral. Again, foreign stabilization policies may resist higher levels of local investment financed by borrowing abroad, regardless of whether financed by savings or mobilization of idle balances.

<sup>5</sup>To the extent that foreign monetary authorities hold dollar reserves in non-U. S. financial institutions and certain non-marketable U. S. Government obligations, this measure of foreign official dollar holdings understates world monetary reserves.



# Banking Markets for Business Firms in the St. Louis Area

**S**TUDIES OF BANKING MARKETS are important for several reasons. First, the structure of banking markets affects bank performance. Since commercial banks provide much of the nation's money supply, accumulate a large portion of its savings, and finance a sizable proportion of its business transactions, the efficiency of their performance is important to the nation's economic well-being. Second, banking is a regulated industry, and changes in the market structure through entry of new banks, opening of branches, or consolidations of existing banks require the approval of one or more regulatory agencies. Studies of banking markets are necessary for agencies to make decisions promoting financial efficiency and the public interest. Further, commercial bank management is vitally interested in banking market studies as an aid in decision making relative to operating efficiency, expansion into new areas, and provision of additional bank services.

This article presents the results of a survey of non-bank business firms in the St. Louis Metropolitan Area.<sup>1</sup> The survey was designed to obtain information on the establishment and maintenance of banking connections by business firms and business use of bank products and services.

## Banking Structure

The banking structure of the St. Louis area, reflecting legal requirements, consists primarily of independent unit banks. Exceptions to unit banking are a bank holding company which controls six banks in the area and some two-bank and three-bank groups which are controlled through common stock ownership.

<sup>1</sup>The May 1966 Dun and Bradstreet *Reference Book* was used to obtain a list of all firms with a St. Louis or East St. Louis address. These firms account for about 90 per cent of all firms in the St. Louis Standard Metropolitan Statistical Area (SMSA). From this list a random sample was selected of 10 per cent of those firms with net worth of \$1 million and above, excluding those headquartered outside the area. One per cent of the firms with net worth of less than \$1 million was selected, again excluding branches and subsidiaries of out-of-town firms. The sample included 23 large firms and 96 smaller firms. Usable responses were received from 22 large firms and 67 smaller firms.

There were 138 commercial banks in the St. Louis SMSA with aggregate deposits of \$4.6 billion at the end of 1965. Most of these banks were relatively small, with 100 banks (72 per cent) each having less than \$25 million of deposits (Table I). There were only a few large banks in the area. The largest had deposits of nearly \$1 billion, and the three largest banks combined held about 41 per cent of total bank deposits in the SMSA.

Table I  
NUMBER OF BANKS AND TOTAL DEPOSITS  
BY SIZE OF BANK  
St. Louis Metropolitan Area  
December 31, 1965

Deposits per Bank (Millions of dollars)	Number of Banks	Total Deposits (Millions of dollars)
Under 25	100	946.1
25 - 49.9	25	913.7
50 - 99.9	5	325.3
100 - 249.9	5	535.0
250 and over	3	1,899.6
	138	4,619.7

## Bank Selection by Business Firms

Large firms in the St. Louis area do business primarily with the large banks (Table II). Ninety per cent of the responding firms with net worth of \$1 million and above had as their principal bank one of

Table II  
RELATION BETWEEN SIZE OF FIRM AND SIZE OF  
PRINCIPAL BANK

Deposits per Bank (Millions of dollars)	Firm Size (Net Worth)				
	\$1,000,000 and Over	\$200,000 to \$999,999	\$50,000 to \$199,999	\$10,000 to \$49,999	\$2,000 to \$9,999
	(Per cent of firms)				
250 and over	90	63	23	8	6
100 - 249	0	9	15	20	6
50 - 99	0	9	0	8	22
35 - 49	5	9	38	8	17
25 - 34	5	0	8	16	28
Under 25	0	9	15	40	22
Total <sup>1</sup>	100	100	100	100	100

<sup>1</sup>Detail may not add to total due to rounding.

the three largest banks in the city. Firms with net worth between \$200,000 and \$1 million also tended to prefer large banks. Sixty-three per cent of the firms in this size group had one of the three largest banks as their principal bank.

Firms with net worth of less than \$200,000 are motivated by considerations other than bank size in selecting their principal bank. About two-thirds of the firms in each of the three size groups under \$200,000 had as their principal bank one with deposits under \$50 million. Convenience is apparently the primary consideration in selection of the principal bank, with nearness to place of business the factor most often mentioned (Table III). Banking hours, drive-in windows, quick service, and parking facilities were also mentioned. In addition to convenience factors, frequent reasons given by small firms for choosing or preferring a certain bank included personal considerations, credit policies of the bank, services offered, and habit.

Table III  
REASONS GIVEN FOR CHOOSING BANK

	Per Cent of Firms Mentioning Reason <sup>1</sup>	
	Large Firms (Net Worth over \$1,000,000)	Smaller Firms (Net Worth \$2,000-\$1,000,000)
Size of bank	46	6
Credit policies	36	24
Personal considerations	36	24
Out-of-area source of funds	32	0
Convenience	27	58
Habit	14	18
Surviving bank upon merger	14	4
Services offered	9	19
Recommendation of friend or associate	4	9
Merger of previous bank	4	3
Bank of a predecessor firm	4	0
Not largest bank	4	0
Errors of previous bank	0	6
Outside downtown area	0	3
No reasons	23	31

<sup>1</sup>Some firms mentioned several reasons for choosing a bank.

Nearly one-fourth of the large firms reported that their principal bank was the nearest bank to their place of business. In the case of the small firms, 42 per cent selected the nearest bank. In addition, of those small firms that do business at more than one bank and whose principal bank is not the nearest bank, 43 per cent have as their secondary bank the nearest bank. The average distance from the business to its principal bank was 5.7 miles for the large firms and 2.9 miles for the small firms. Nearly three-fourths of the small firms banked within three miles of their place of business (Table IV). A large portion of deposits and withdrawals by small firms, often retail oriented,

Table IV  
RELATION BETWEEN SIZE OF FIRM  
AND DISTANCE TO PRINCIPAL BANK

Distance (Miles)	Firm Size (Net Worth)				
	\$1,000,000 and Over	\$200,000 to \$999,999	\$50,000 to \$199,999	\$10,000 to \$49,999	\$2,000 to \$9,999
	(Per cent of firms)				
Under 1	23	18	31	28	28
1 - 2.9	18	54	31	44	44
3 - 4.9	18	0	0	8	17
5 - 9.9	14	18	23	16	11
10 - 14.9	14	9	8	4	0
15 and over	14	0	8	0	0

are coin and currency, which require personal trips to the bank.<sup>2</sup> In contrast, large firms, which are generally in manufacturing or wholesale trade, bank primarily by check, and banking by check can be handled by mail at a minimum cost. Furthermore, if banking involves a personal trip, the cost is insignificant relative to income. Small firms which make deposits or withdrawals of cash daily may find, however, that the time involved in banking at greater distances is excessive in relation to income.

One-third of the large-firm respondents reported out-of-city banking connections. Most out-of-city banks used were large eastern banks, but included were banks in Nashville, Memphis, Chicago, and California. In addition to those already using out-of-city banks, three large firms are presently considering the use of out-of-city banks.

#### Number of Banks Used

The number of banks used by business firms varies with the size of firm. More than two-thirds of the large firms had multi-bank checking accounts, whereas only 23 per cent of the firms with net worth under \$1 million maintained checking accounts at more than one bank (Table V). Of the very small firms, those with net worth between \$2,000 and \$10,000, only 12 per cent maintained multi-bank checking accounts.

Table V  
NUMBER OF BANKS USED BY BUSINESS FIRMS

Number of Banks Used by Each Firm	Checking Accounts		Loans	
	Per Cent of Large Firms	Per Cent of Smaller Firms	Per Cent of Large Firms	Per Cent of Smaller Firms
None	0	1	14	40
1	32	76	41	46
2	9	20	27	12
3	32	3	9	1
4	18	0	5	0
5	5	0	0	0
More than 5	5	0	5	0

<sup>2</sup>Based on interviews with local bankers.

About one-third of the large firms maintained checking accounts at three banks, and one-fourth had accounts at four or more banks.

Eighty-six per cent of the large firms had bank loans outstanding during the past year, and of these firms one-half had loans at two or more banks. The amount outstanding to this class of firms averaged over \$3 million. By comparison, 60 per cent of the small firms responding to the survey had bank loans outstanding during the past year. Of the small firms with bank loans, about four-fifths had loans from a single bank, while only one had loans at as many as three banks during the past year. The average outstanding loan to firms with net worth of less than \$1 million was \$34,000.

Nonbank credit is used by fewer firms in the St. Louis area than bank credit. Only 32 per cent of the large firms and 25 per cent of the smaller firms obtained loans from nonbank financial institutions during the past five years. By comparison, 86 per cent of the large firms and 60 per cent of the smaller firms had bank loans outstanding sometime during the past year (Table VI).

Table VI  
RELATION BETWEEN SIZE OF FIRM  
AND SOURCE OF CREDIT<sup>1</sup>

Source of Credit	Firm Size (Net Worth)				
	\$1,000,000 and Over	\$200,000 to \$999,999	\$50,000 to \$199,999	\$10,000 to \$49,999	\$2,000 to \$9,999
	(Per cent of firms)				
Commercial banks	86	82	54	64	44
Savings and loan associations	0	0	8	20	6
Insurance companies	18	9	15	4	0
Finance companies	4	0	15	16	6
Others	9	0	0	12	11
No loans outstanding	4	18	31	28	50

<sup>1</sup>Per cent of firms obtaining credit from commercial banks during past year or from other institutions during past five years.

The average size of loans from nonbank financial institutions, however, was greater than from banks. Large firms which used nonbank credit had loans outstanding at these institutions averaging over \$12 million per firm during the past year compared with \$3 million of bank loans outstanding. For the smaller firms, loans from nonbank sources averaged \$94,000, and from commercial banks, \$34,000.

### Bank Loyalty

The survey indicated that firms seldom change banks. The large firms had done business with their principal bank an average of 26 years and with their secondary bank for 20 years. About 18 per cent of the

large firms had done business with their principal bank for over 50 years, and three-fourths of the large firms had been with their principal bank for 15 years or more (Table VII).

Table VII  
RELATION BETWEEN SIZE OF FIRM  
AND YEARS WITH PRINCIPAL BANK

Years with Principal Bank	Firm Size (Net Worth)				
	\$1,000,000 and Over	\$200,000 to \$999,999	\$50,000 to \$199,999	\$10,000 to \$49,999	\$2,000 to \$9,999
	(Per cent of firms)				
Under 5	4	9	31	16	28
5 - 9.9	9	0	8	20	6
10 - 14.9	14	18	31	32	22
15 - 19.9	18	9	8	8	17
20 - 49.9	36	64	15	24	28
50 and over	18	0	8	0	0

The smaller firms had done business with their principal bank an average of 15 years and with their secondary bank 16 years. About one-half of these firms had been with their principal bank for less than five years, and one-third of the firms with net worth under \$200,000 had been with their principal bank for less than ten years. Part of this difference between large and small firms probably reflects differences in age of firms rather than in tendency to change banks.

### Knowledge of Interest Rates and Loan Policies at Other Than Principal Banks

Only about one-half of all firms responding attempt to keep informed of interest rates and loan policies at banks other than the banks they are presently using (Table VIII). Proportionally, about as many small firms (except those with net worth under \$10,000) as large firms keep informed. Of those who do keep informed, the most common means is through direct contact with banks, although business acquaintances were

Table VIII  
RELATION BETWEEN SIZE OF FIRM AND KNOWLEDGE  
OF INTEREST RATES AND LOAN POLICIES  
AT ALTERNATIVE BANKS

	Firm Size (Net Worth)				
	\$1,000,000 and Over	\$200,000 to \$999,999	\$50,000 to \$199,999	\$10,000 to \$49,999	\$2,000 to \$9,999
	(Per cent of firms)				
Informed	59	54	38	56	28
Not informed	32	36	61	36	67
No answer	9	9	0	8	6
<b>Source of information</b>					
Direct contact	36	27	38	28	17
Business acquaintances	27	46	15	12	6
Personal friends	4	27	15	8	0
Periodicals	9	9	8	12	6

mentioned frequently. Few business firms obtained information regarding interest rates or loan policies from advertisements.

### Implications of Study

The study indicates that there are various markets for bank products and services for business firms in the St. Louis area. One market is limited primarily to large banks and large business firms. The banking market for small firms is more fragmented in that it really comprises numerous small markets.

The market area for the banking business of large firms extends throughout the central United States and much of the nation. As indicated earlier, three large banks are the principal St. Louis banking participants in this market. They are the principal banks for nine-tenths of the large firms in the St. Louis area.

Competition by banks for deposits and loans of large firms in St. Louis may be quite intense, despite the small number of St. Louis banks which participate in this business. These banks must compete with other large banks in neighboring SMSA's and throughout the nation for the banking business of large firms, since many such firms do a portion of their banking in other cities. Although these firms seldom change their principal banking connections, they apparently are not reluctant to open new accounts. This willingness to shift portions of accounts to other banks in St. Louis and to large banks in other cities provides the incentive for current banking connections to offer products and services at a minimum price.

On the other hand, the relevant bank market for the accounts of small firms is relatively small, both in area and in number of bank participants. The im-

portance of convenience in banking for small firms suggests the possibility of more limited competition by neighborhood banks for such accounts. Instead of one large area-wide market for these accounts, the study suggests that there are a large number of small markets within which only a few banks compete. The number of banks in the City of St. Louis and St. Louis County averages about one for each nine square miles. The ratio of banks to land area averages one to 12 square miles in St. Louis County and one to 50 square miles in outlying areas of the St. Louis SMSA. These smaller ratios, coupled with the fact that 72 per cent of the firms with net worth of \$2,000 to \$50,000 bank less than three miles from the firm's location, points to the possibility of relatively restricted alternative banking facilities for many small business firms. Unit banks in outlying neighborhoods thus may enjoy a substantial advantage with nearby small business firms.

In unit-banking metropolitan areas the question of bank competition for business accounts may thus turn not so much on the concentration of resources in a few banks as on whether more than one or two banks are effectively competing for the business of small firms and households in the neighborhood shopping centers and sub-areas of the SMSA's. Furthermore, the number of large banks may not be an important competitive factor. Actual and potential competition from large banks in other metropolitan areas helps to assure competitive pricing for the banking needs of large firms. Each SMSA, however, needs some large banks, and such large banks with well-trained specialists in all major lines of banking activity can be more competitive in the regional and national markets.

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