FEDERAL RESERVE BANK OF RICHMOND

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Mobile and Modular Housing

Fifth District Investors and the Bill Market

The Flow-of-Funds Accounts

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MOBILE AND MODULAR HOUSING

Since 1950 the construction of private one-family housing units has been declining, and in the last years of the decade of the 1960's, the rate of decline has risen sharply. In 1969 one-unit private housing starts decreased 9.9 per cent from the preceding year. The housing shortage has become more pronounced in recent years not only because of the decline in housing starts, but also because of a faster-than-expected growth in the number of new households demanding housing units. In 1967 and 1968, the number of new households increased by an average of 1.5 million per year. Requirements for new homes, resulting from a growing population, and a demand for replacement units and second homes of approximately a half million per year, have been estimated at some 2 million new housing units annually. Less than three-fourths of that number of homes were built in 1969.

The most important factors contributing to the national housing shortage are rising costs of construction and financing. Although the price of materials has increased an average of only 1 per cent per year over the past three years, land costs in metropolitan areas rose between 10 and 25 per cent last year. Current union contracts for construction workers have provided wage increases of 10 to 20 per cent per year in recent years, and the wages for unorganized workers have risen at a similar pace. Financing costs have also moved up sharply, with both down payment requirements and mortgage rates rising. Overall, the cost of home building has risen at a rate of approximately 10 per cent annually during the past few years.

In 1969 the average price for conventionally-built new homes was $19,225, $5,425 higher than the cost of a similar home in 1960. Based on rules of thumb commonly used by financial institutions, income statistics indicate that almost half of the families in the United States cannot afford to pay over $15,000 for a home.

During the past decade mobile homes have evolved as a partial solution to the low-cost housing problem. Manufacturers' shipments of mobile homes quadrupled in the 1960's (see Chart I). One of the major reasons for the growth in sales of mobile homes has been the low cost of construction for these units compared to construction costs for conventional homes. Labor, which accounts for as much as 50 per cent of on-site construction costs, represents as little as 10 per cent of the cost of a mobile home. Manufacturers of mobile homes employ semi-skilled workers at wage levels comparable to those of other industrial workers. Building contractors, however, must pay much higher wages for skilled craft laborers.

The changing composition of today's population has also been a factor pushing sales upward. For many years, the largest groups of mobile home dwellers have been young couples and retired couples. Historically these two groups have accounted for 70 per cent of mobile home sales. Rapidly increasing life expectancy and the post World War II population boom have made these two groups the fastest growing segments of our population.

Growing popular acceptance has enhanced the sale of mobile homes significantly. Although many factors have contributed to their popularity, two of the most important have been improved construction and durability and the development of modern, well-planned mobile home parks. Each of these factors has been instrumental in the decision of many urban communities to use mobile homes in redevelopment projects.

DEVELOPMENT OF THE MOBILE HOME MARKET

Mobile homes originally developed as an extension of the trailer industry. Although the construction of camping and travel trailers began in the 1930's, it was not until after World War II that the house trailer became popular. These were usually 8 feet wide and 25 to 28 feet long. Units 10 feet wide and 34 to 60 feet long were developed in the 1950's. In 1962, 12-foot wide units were introduced and these have become increasingly popular. Larger sizes, as well as improvements in the quality of furnishings, have made mobile homes more attractive to low-to-middle income families whose demand for housing is restricted to homes under $20,000.

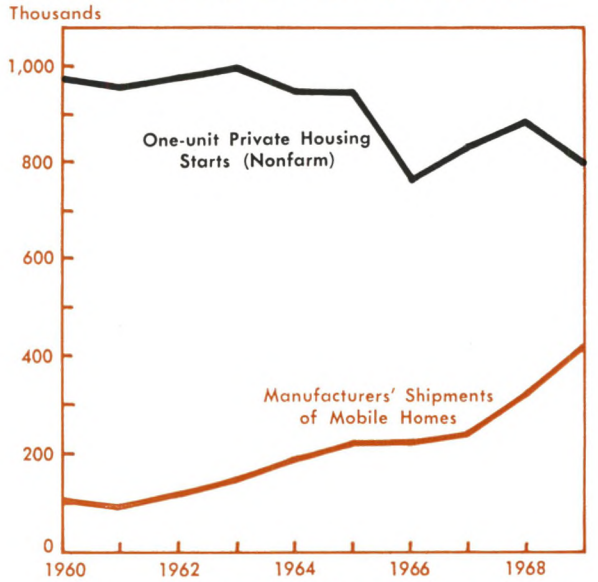
In spite of improved construction, better furnishings, and more living space, many people still associate mobile homes with the trailer camps that

mushroomed in the post World War II period. Evidence of the slowly changing image of mobile homes can be seen by examining current housing statistics. The Department of Commerce continues to exclude mobile homes from their housing statistics; instead mobile homes are classified with vehicles, even though 80 per cent initially placed on a landsite are never moved. Mobility is not an important reason for purchasing mobile homes. Statistics indicate that the average American family living in a conventionally-built home moves more frequently than the average mobile home dweller.

The importance of mobile homes to the housing market should not be underestimated. These homes accounted for 90 per cent of all housing selling for under $15,000 in 1968. More than one-third of all single-unit homes started in 1969 were mobile homes. The median income of mobile home families was less than $1,000 below the 1968 national average of $8,632. One-fourth of the heads of mobile home families are skilled workers, and 15 per cent are professional workers. A recent Housing and Urban Development (HUD) survey of families living in new mobile homes showed that 50 per cent of the heads-of-households were under thirty-five years old. Since the peak earning years are still ahead for most of these families, this partially explains why the median income of mobile home families is less than the median U. S. family income. The large percentage of retired couples also contributes to a lower median income level for mobile home dwellers.

Chart I

COMPARISON OF HOUSING STARTS AND MOBILE HOME SHIPMENTS, 1960-1969



Source: Mobile Homes Manufacturers Association and U. S. Department of Commerce, **Construction Review.**

PROBLEMS FACING THE MOBILE HOME INDUSTRY

Although the low cost of mobile homes makes them attractive for purchase by several income groups in the United States, the mobile home industry faces major obstacles in its efforts to assume an important role in reducing the national housing shortage. Among the most significant problems are those concerned with park development, local zoning laws and tax structures, and availability of favorable financial terms for purchase of mobile homes and development of parks.

Park Development Universal C.I.T. Credit Corporation recently conducted a national survey of mobile home dealers to determine the major obstacles to future growth in the industry. Forty-three per cent of the dealers responding to the national survey cited shortage of parks as the main problem that should be solved to improve sales. Woodall Publishing Company, which publishes the Mobile Home Park Directory, claims that there is a sizeable shortage of park space. Their figures show an increase of 118,105 mobile home sites in 1969 compared to a gain of 77,444 in 1968. Although Woodall compiles statistics on less than 55 per cent of the sites, the Company contends that the remaining sites are filled. Specific figures on the shortage of park space are very difficult to determine, since approximately 50 per cent of all mobile homes produced are placed in rural areas or backyards of suburban land developments.

Recent ventures into construction of mobile home parks by corporate giants indicate a widespread feeling among these firms that shortages of space will provide sufficiently attractive returns to warrant continued expansion in the industry. Some of the recently developed parks are designed to give the appearance of a typical suburban housing development. Some parks also provide swimming pools, community centers, and golf courses.

Zoning and Taxation Another major obstacle to future growth in the industry results from the reluctance of local government authorities to permit parks to be built in areas zoned for residential housing. These restrictions drastically reduce the quantity of reasonably priced land available to park developers and result in the location of parks in sections that are unattractive for, and often far removed from, other residential housing. Not only does this cause the head of the household to commute from outlying areas, but it often means that

schools and shopping centers are inconvenient for the mobile home dweller.

Recently some states have begun to regulate mobile and other factory-built housing rather than leaving supervision to local authorities. In Virginia, for example, a law which will become effective July 1971, provides that factory-built units and mobile homes meeting state specifications will be allowed in all localities. The opposition which county officials have expressed to this law illustrates why states must take the initiative in zoning regulations. Since the major criticisms cited by county officials have been overcrowding of existing schools and increased need for new schools, an influx of factory-built homes into the counties may force local government officials to reevaluate the role of these homes in their overall tax structure.

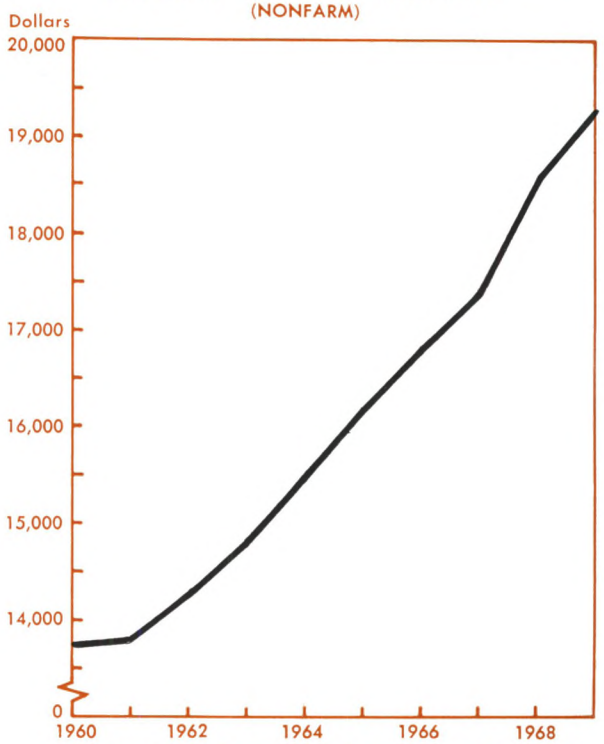
At the present time, some states consider mobile homes as vehicles and issue license plates, while others treat them as personal property not subject to real estate taxes. One state considers them homesteads if they are attached to the ground, and owners are permitted to claim a $3,000 homestead exemption. The various ways that governmental units approach the problem of taxing mobile home dwellers point to the need for further study in determining an appropriate tax structure.

Financing The third major problem confronting the mobile home industry has been the financing of new homes and parks. Recent legislation should greatly ease financial conditions for both purchasers and developers. In 1968 and again in 1969 Congress passed housing legislation authorizing the Federal Housing Administration to insure mobile homes. The 1969 bill, passed in December, extended the maximum repayment period to 12 years and increased the maximum permissible size of the loan to $10,000. In order to qualify for a loan, a borrower must plan to use the mobile home as his principal residence at least three-fourths of the year and must have FHA approval of the proposed site.

Revised FHA regulations also provide more favorable conditions for park developers. They permit loans to be insured up to a maximum of $3,500 per space and permit repayment over a 40-year period. The former regulation limited the insurance to $1,800 per space and the repayment period to 15 years.

Conventional retail financing of mobile homes is currently similar to that of automobiles. The lending institution usually buys consumer paper from the dealer. Maturity terms range up to seven years for new homes and require only about a 10 per cent down payment. Rates charged by financial institutions for mobile home purchases vary widely throughout the country, currently ranging from the 8 to 9 per cent average on conventional home mortgages to the 18 per cent that other lenders charge for instalment credit. The average effective interest rates are usually 11 to 12 per cent, because mobile homes are still considered vehicles and loans are made on an instalment basis. Since these loans yield a higher rate of return to financial institutions than most other loans, mobile home buyers have been able to finance their purchases in tight money periods.

Chart II
AVERAGE CONSTRUCTION COST OF PRIVATE ONE-UNIT HOUSING, 1960-1969
(NONFARM)



Source: U. S. Department of Commerce, Construction Review.

Many commercial banks and savings and loan associations, however, are reluctant to begin making mobile home loans. Financing in the past has been concentrated in a small number of commercial banks and finance companies which also provide inventory financing for dealers. Since 1965 finance companies have become more and more active in mobile home and park financing. Statistics indicate not only a higher rate of return on mobile home loans than most other types of loans found in the portfolios of financial institutions, but also a lower delinquency rate than loans on one- and two-family houses insured by the FHA.

In an effort to allow Federal savings and loan associations to engage actively in mobile home financing, the Federal Home Loan Bank Board has enacted three changes. The recent ruling permits the savings and loan industry to lower immediately its ratio of liquid assets to total deposits from 6 to 5½ per cent, thus freeing additional funds for lending purposes; it formally authorizes Federal savings and loan associations to finance mobile homes; and it allows them to lend up to 5 per cent of their assets for new and used mobile homes. Maximum maturity periods of 12 years are permitted for new homes and 8 years for used homes.

OTHER DEVELOPMENTS IN HOUSING

Despite a threefold increase in sales since 1960, mobile homes alone cannot fill the void in housing requirements. A likely candidate which has emerged in recent years to fill this gap is the related modular housing industry. Like mobile homes, modular homes are built in factories rather than at the residential site. One or more units are moved to the location and are then assembled at the site.

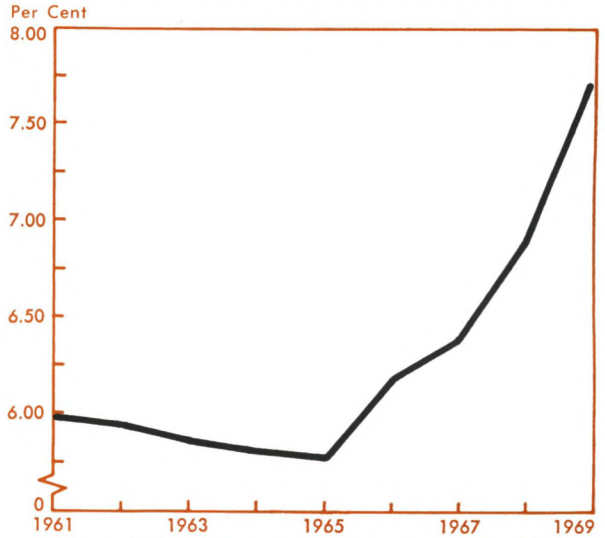
The major advantages enjoyed by modular construction firms over conventional contractors are obvious. Labor costs, as indicated earlier, are substantially lower for factory-produced housing than for conventionally-built units. Assembly line techniques result in more efficiency and better quality control than is possible in on-site building. The rate of output per man-hour is also considerably higher for factory-built homes.

Modular units are no longer limited to a small number of unattractive box-like structures. Several firms now have the ability to produce single- or multiple-family housing units in a variety of shapes with choices of wood, aluminum, and brick-veneer sidings.

HUD's "Operation Breakthrough" provides an indication of the importance of modular construction in satisfying future housing needs. The project's major purpose is to develop methods for producing reasonably-priced high-density housing. HUD selected 22 companies to participate in Government-sponsored nationwide building projects. The emphasis is apparent when examining the plans of the award-winning firms; for example, one HUD award winner plans to build two 150-unit high-rise apartment houses using modular units.

Modular construction, however, is not without its obstacles. Problems similar to those facing the mobile home industry must be overcome if the potential of the industry is to be realized. In some sections of the country, modular units are prohibited since local building inspectors must be able to examine wiring and plumbing at the home site. FHA officials travel to factories to check units as they are constructed, but local governments often do not provide factory inspection. Before factory-built housing receives general acceptance, the public must be convinced that the quality of workmanship equals or surpasses that of conventionally-built homes.

Chart III
CONTRACT RATE ON CONVENTIONAL FIRST MORTGAGES FOR NEW HOMES, 1961-1969



Note: Interest rate data for 1961 and 1962 are F.H.A. estimates.
Source: Federal Reserve Bulletin.

CONCLUSIONS

With the total number of households expected to grow from approximately 63 million in 1970 to 84 million in 1985, total housing requirements in this country will continue to increase. Mobile homes have emerged as one possible means for satisfying a small portion of the housing needs. Perhaps the greatest potential, however, lies in multiple-unit modular construction. Rising land and construction costs necessitate the development of methods that will provide high-density low-cost housing, and modular construction appears to be the most likely candidate to meet these qualifications.

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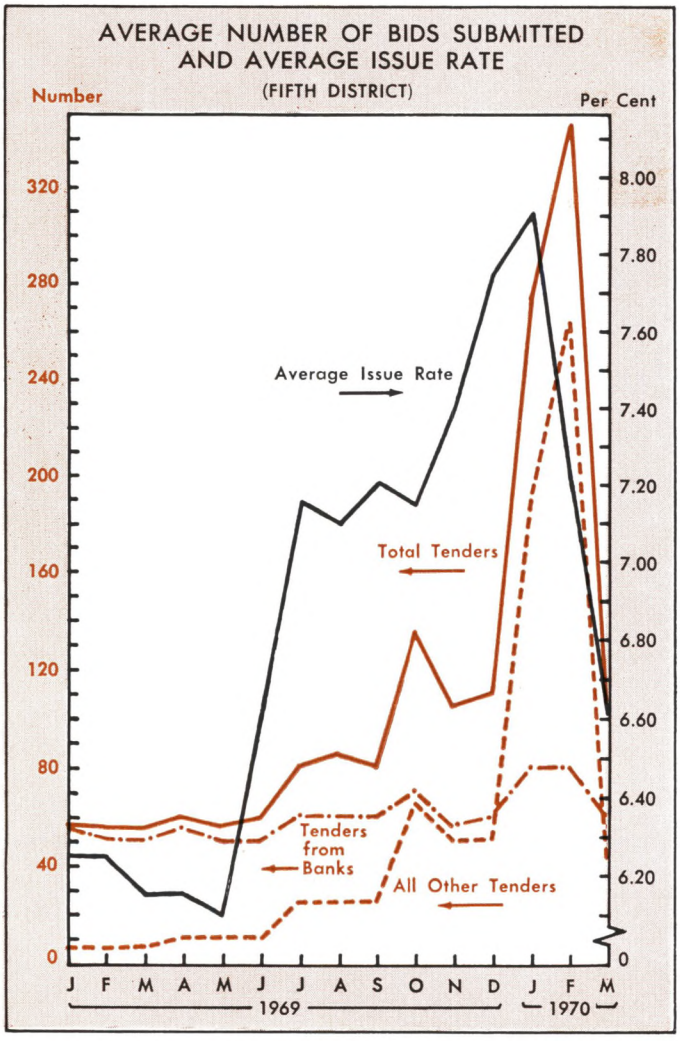
Fifth District Investors and the Bill Market

In 1969 individuals, particularly small investors, became increasingly important as purchasers of Treasury bills. These obligations have traditionally been a popular short-term investment for banks and other financial institutions, nonfinancial corporations, state and local governments, and U. S. Government trust accounts. The Federal Reserve System carries out its open-market operations mostly through purchases and sales of Treasury bills. Individual investors have shown little interest in Treasury bills, generally placing their funds in commercial bank savings deposits or with savings and loan associations or mutual savings banks where interest rate ceilings are fixed by the various regulatory agencies. In 1969, as rates paid on Treasury bills greatly exceeded these ceilings, individuals began increasingly to invest their money directly in Treasury bills and other market instruments, bypassing the financial institutions. This article discusses the changing participants in Fifth District Treasury bill auctions during 1969 and early 1970.



At present the Treasury sells four types of bills on a regular basis. Each month the Treasury auctions $0.5 billion of bills maturing in nine months and $1.2 billion of bills maturing in twelve months. And each week the Treasury offers $1.8 billion of bills due in three months and $1.3 billion of six-month bills. The bills sold in these regular auctions replace maturing issues. In addition to its regular bill auctions, the Treasury occasionally offers strips of bills, tax anticipation bills, notes, and bonds.

The Federal Reserve Banks act as agents of the U. S. Treasury in marketing the new Federal issues. The weekly auctions of three- and six-month bills are held each Monday at the various Federal Reserve Banks and their branches.

Tenders for Treasury bills may be submitted through commercial banks, or directly to the Federal Reserve Bank by the subscriber or his agent. Often a single tender form from a commercial bank may contain bids from many investors. In 1969, as a growing number of investors entered the market, more and more banks began to charge a fee for this service. As a result many investors in the Fifth District submitted their bids directly to the Federal Reserve Bank of Richmond or to its Baltimore or Charlotte Branches. The first chart shows a monthly average of the number of tenders submitted and the average issue rates for the weekly bill auctions. The average number of tenders submitted directly increased from 57 in January 1969 to 272 in January 1970.

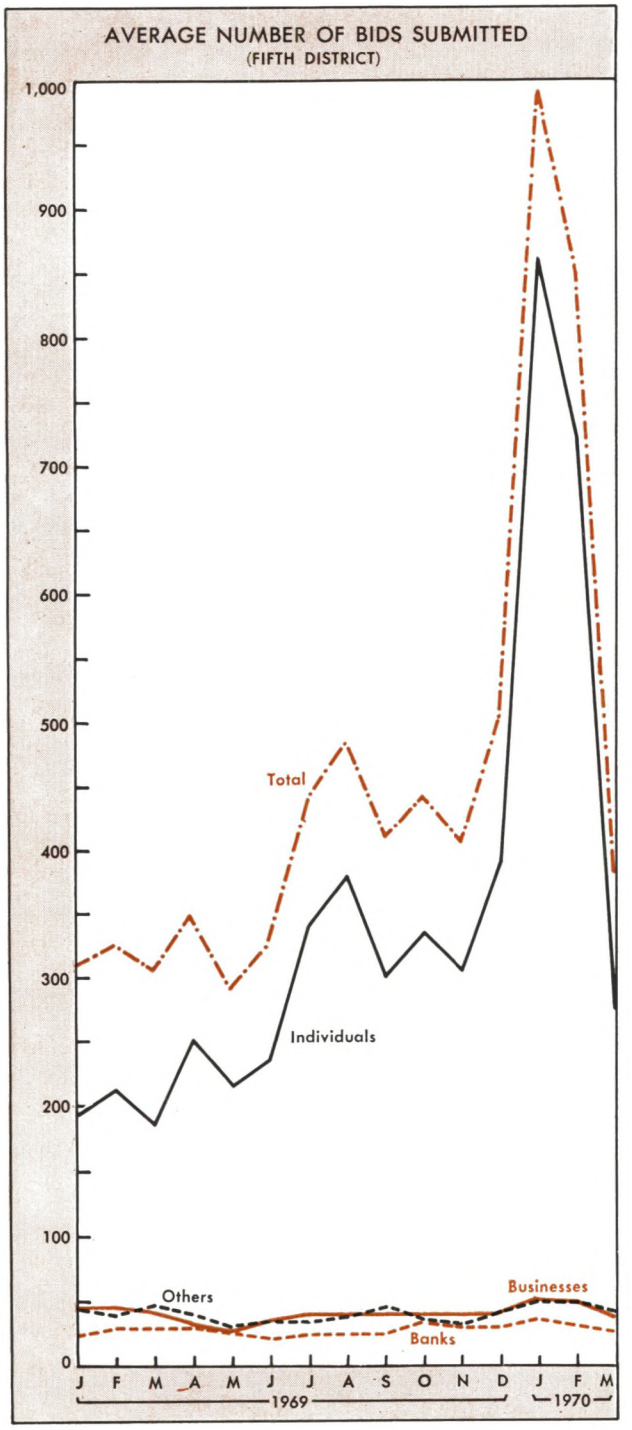
The second chart shows that the number of subscribers submitting bids in weekly auctions, whether directly or through banks, increased from an average of 310 in January 1969 to 992 in January 1970. The number of bids submitted by Fifth District banks, nonbank financial institutions, nonprofit institutions, state and local governments, and businesses remained relatively stable over the year. The bulk of the gain came from individuals whose bids numbered on average around 200 a week in early 1969 and 858 bids a week in January 1970.

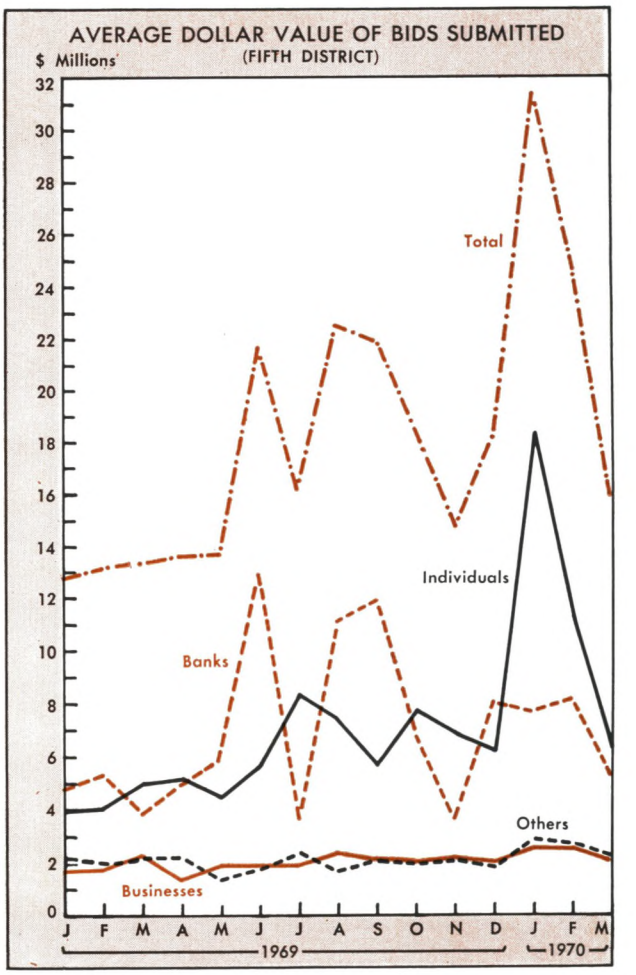
As the number of participants in weekly bill auctions increased, the total dollar value of bids submitted rose. As shown in the third chart the average weekly value of bids in the Fifth District climbed from $12.8 million in January 1969 to $31.4 million in January 1970. Not all of the rise was due to in-

creased participation of individuals in the market. While the number of banks and other institutions submitting bids did not grow substantially, there was an increase in the size of bids, particularly from banks, nonbank financial institutions, and state and local governments. The average size of bids from individuals remained relatively constant at about $20 thousand during most of 1969, but dropped to around the $16 thousand level in December 1969 due to the increased number of small bids.

The peak of activity in weekly Treasury bill auctions was reached in January and February 1970, after having begun to accelerate in July 1969. March 1970 saw a reversal of this trend. The Treasury Department increased the minimum denomination of Treasury bills from $1,000 to $10,000, effective March 5, 1970. The increased minimum denomination of bids together with declining rates and the lifting of interest rate ceilings at banks and other thrift institutions led to reduced participation in Treasury bill auctions. The number of tenders offered in the Fifth District fell from 345 in February to 107 in March, primarily because of a decline in directly submitted tenders. The number of bids placed dropped from an average of 850 a week in February to 381 in March. This decrease was due almost entirely to reduced bids from individuals. The average size of individual bids increased to about $23 thousand in March, following the increase in the minimum denomination of Treasury bills.

Wynnelle Wilson and Marjorie Solomon





THE FLOW-OF-FUNDS ACCOUNTS

Though the first form of the flow-of-funds accounts had been developed by 1952,[1] and has been published by the Board of Governors since 1955, knowledge of this system of accounts and of its possibilities for economic analysis appears to be limited to a few official and academic quarters. Yet, the information mobilized in these accounts is of great potential usefulness not only for the professional economist and the policy-maker, but also for observers of current and prospective conditions in the country's financial markets.

The flow-of-funds accounts provide a basis for measuring financial flows through the economy. Dividing the economy into sectors, the accounts record purchases and sales of goods and services for each sector, capital flows to and from each sector, and changes in balances of money, other deposits, money market instruments, and financial positions in general.

Like any other accounting framework, the flow-of-funds rests on certain equalities. On a business balance sheet, assets equal liabilities plus net worth. Similarly, in the flow-of-funds accounts, one person's financial asset equals another's liability. This is the basic equation of the flow-of-funds framework. The conceptual usefulness of the flow-of-funds lies in its provision of a measurement of credit flows and of the monetary needs of the economy. Some continuous balance must be maintained between total credit actually used (borrowed) by all sectors and total credit advanced by all sectors, including the monetary authorities. The flow-of-funds accounts make use of this equality to analyze this balance.

More importantly, the accounts offer a method of analyzing the relationship between credit flows and nonfinancial flows for each major sector. From such analysis inferences may be drawn respecting the amount of new money which must be supplied to the economic and financial system if economic growth is to proceed at capacity rate. Enough cash should be provided to support an expanding volume of transactions and to support additional purchasing power needed to buy the increment in output at stable prices.

RELATION TO NATIONAL INCOME ACCOUNTS

The flow-of-funds are closely related to national income-product accounts. The national income-product aspect of social accounting provides a means of viewing the economy's real output produced and distributed in each sector, without specific information about the money or financial flows that have accompanied income and production. The flow-of-funds system is specifically concerned with the financial sector and complements the national income approach by illustrating how one sector's saving finances investment of another sector, and by showing the impact of financial transactions on income and product. In particular, saving is used either to acquire assets or to reduce liabilities.

STOCKS AND FLOWS

The flow-of-funds data published in the *Federal Reserve Bulletin* are divided into 'sources' and 'uses' and assets and liabilities. The 'source-use' classification refers to flows, and asset-liability, to stocks of funds. These labels may be best understood by analogy with business accounting statements. The income statement of a firm represents a flow of in-

Table I

SUMMARY STATEMENT BASED ON NATIONAL INCOME AND PRODUCT ACCOUNTS

($ billions)

	1964	1965-67 (total)
Federal Government		
1. GNP Expenditures	65.3	234.5
2. Proceeds received from final sales[1]	61.6	221.7
3. Line 1 minus line 2	3.7	12.8
4. Personal taxes minus transfer payments, grants, and net interest	— 0.1	2.0
5. NI and P deficit	3.8	11.0
6. Sum of lines 4 and 5	3.7	13.0
All Other Sectors		
7. GNP Expenditures	563.4	1,986.2
8. Proceeds received from final sales[2]	567.1	1,999.0
9. Line 8 minus line 9	3.7	12.8
10. Personal taxes minus transfer payments, grants, and net interest	— 0.1	2.0
11. Net funds advanced to Federal Government[3]	3.8	10.8
12. Sum of lines 10 and 11	3.7	12.8

[1] Corporate profits tax liability plus indirect business tax and nontax liability plus contributions for social security insurance less subsidies minus current surplus of Government enterprises.

[2] Gross national income less 2.

[3] Gross private saving plus state and local government surplus minus gross investment.

Source: Department of Commerce, **Survey of Current Business.**

[1] Morris A. Copeland, *Study of Moneyflows in the United States* (New York: National Bureau of Economic Research, 1952.)

come into and expenditures out of a business. The balance sheet is an instantaneous picture of the financial position of the firm at a given point in time, usually the end of a year. Sources and uses of funds are analogous to the income statement, measuring increments in financial holdings of each sector. Assets and liabilities are similar to the balance sheet and present a picture of the stock of financial holdings outstanding at the end of the year for each sector.

The flow-of-funds accounts classify sectors as follows: households, businesses (corporate and noncorporate), state and local governments, the Federal Government, the rest of the world, and the financial sector. The financial sector includes the monetary authorities, commercial banks, and nonbank financial institutions. The Treasury's monetary accounts are included under the monetary authorities sector.

SOME EXAMPLES

The analytical usefulness of flow-of-funds data can be illustrated by considering credit flows in 1966 and 1969, both years of stringent credit restraint. Over both years, the economy experienced rising interest rates accompanied by little growth in the money supply and bank reserves. The stock of bank credit outstanding, which had shown fairly stable growth at about 8 per cent per year from 1960 to 1965, slowed to a growth rate of 5 per cent in 1966 and 2 per cent in 1969. The 1969 rate followed 10 per cent rates of increase in 1967 and 1968. Bank credit flows, measured as a percentage of total credit, also reveal the effect of the monetary restraint. As may be seen in Chart I-A, this percentage fell sharply in the first quarter of 1966 and 1969 and remained relatively low throughout each year.

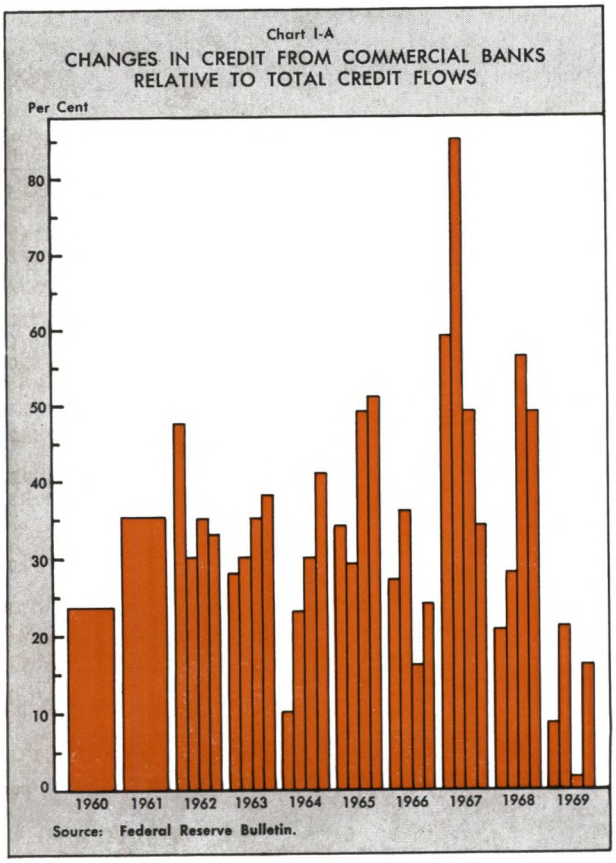
On the other hand, even though funds from bank credit fell sharply, the total volume of funds advanced in all credit markets was high in 1966 and 1969 when compared to previous years. Judging from the behavior of total credit extended by commercial banks, these institutions felt the effects of monetary stringency more than other lending institutions.

The other major sources of credit are: (1) nonbank financial institutions, which include savings and loan associations, mutual savings banks, insurance companies, etc. and (2) direct lending in security markets by nonfinancial sectors such as individuals and nonfinancial businesses. As shown in Charts I-B and I-C, it is clear that when bank credit flows declined, the resulting shortages of funds were met by direct lending and to some extent by nonbank financial institutions.

To illustrate, bank credit flows were reduced in the first quarter of 1964. At the same time, credit from direct lending and nonbank financial institutions met the demand. During the monetary restraint

Chart I-A

CHANGES IN CREDIT FROM COMMERCIAL BANKS RELATIVE TO TOTAL CREDIT FLOWS



Source: Federal Reserve Bulletin.

Table II

U. S. GOVERNMENT SECTOR SOURES AND USES OF FUNDS

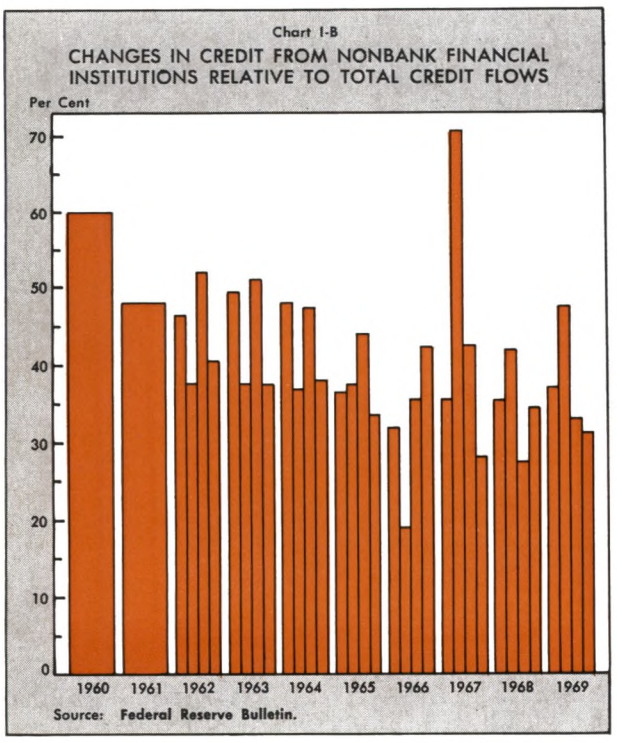
($ billions)

Sources	1964	(Average Per Year) 1965-67	1968
1. Total nonfinancial sources	115.0	139.5	176.3
2. Increase in outstanding obligations	6.4	6.1	13.4
3. Increase in trade debt and miscellaneous liabilities	.9	2.1	2.2
Total	122.3	147.7	191.9
Uses			
4. Expenditures on defense	52.3	63.5	78.0
5. Other expenditures	12.9	16.0	21.5
6. Grants, donations, etc.	22.8	28.0	33.5
7. Interest payments	8.3	9.4	11.6
8. Insurance benefits	23.3	28.8	38.2
9. Increase in cash	.6	− .2	− 1.7
10. Increase in other financial assets	3.9	3.9	11.0
Total	124.0	149.4	192.1

Source: **Federal Reserve Bulletin.**

of 1966, however, both bank credit and lending from nonbank financial institutions fell. Bank credit declined in the first quarter of 1966, and the percentage of credit from nonbank financial institutions began to drop beginning in the fourth quarter of 1965. But direct lending began to rise during the first quarter of 1966. Commercial banks again felt the squeeze of tight money in 1969 when direct lending increased sharply in the first quarter. Credit flows from nonbank financial institutions did not diminish until the third quarter of that year. Both 1966 and 1969 were years in which direct lending supplied a large portion of credit.

In 'normal' periods, bank credit and nonbank financial flows remain fairly stable, and direct lending is relatively low. Credit funds tend to flow through intermediaries, e.g., banks, savings and loan associations, mutual savings banks, etc., during periods of nonrestrictive monetary policy. In contrast, the data suggest that a larger fraction of total funds advanced are supplied directly by other sectors of the economy during periods of monetary restraint. Interest rate ceilings and other regulations which affect the lending activities of the financial sector made it profitable for individuals and nonfinancial businesses, which ordinarily provided funds to the financial sector, to lend directly in the credit markets. The increased activity of individuals in Treasury bill auctions and sales in the past year is a good example of this point.



In terms of long-run trends, it appears that there is an inverse relationship between credit supplied by financial institutions and by private investors.

Uses of Funds Chart II presents the percentage shares of total credit flows going to each sector for the decade of the 1960's. While state and local governments and the foreign sector received a relatively constant share of credit, the other three sectors' shares fluctuated a great deal more.

The per cent share going to households was relatively stable until the tight money period of 1966, when it decreased from 40.9 per cent in 1965 to 33.9 per cent. The household sector experienced an even greater reduction of about 10 percentage points in 1967. The proportion going into the business sector declined during the first half of the 1960's but began increasing in 1965. In 1965, the Federal Government had a very low percentage, 2.4 per cent, of total credit funds raised. Its share rose to 5.1 per cent in 1966, and to 15.7 per cent in 1967. The rise in the Government's share was at the expense of both the business and household sectors. When monetary policy eased in 1968, the household's share increased, while the shares of business and Government dropped by 6 percentage points and 2 percentage points, respectively. In 1969, the Federal Government was a net redeemer of debt, while businesses and households increased their share of credit flows. Considering the long-term trends, it appears that the business sector has been increasing its share of credit relative to the other sectors for the last five years.

Financing the Government Deficit[2] Chart II shows that the Government did little borrowing in 1965 and 1966 relative to the rest of the economy, but greatly increased its credit demands in 1967. Though its share fell back in 1968 from 1967, the Federal Government still maintained a large percentage share compared to the other sectors.

Using national income accounts, it is possible to determine Federal nonfinancial receipts and expenditures and the resulting surplus or deficit. Such receipts and expenditures can also be determined for the remaining sectors of the system. Table I presents the picture for 1964 and 1965-1967. During the 1965-1967 period, the Government had a total deficit of $12.8 billion. The other economic units, which include households, businesses, state and local governments, banking, and the rest of the world, had a nonfinancial surplus of $12.8 billion. Hence, the

[2]This portion of this paper is an updating of Morris A. Copeland's analysis, "Some Illustrative Analytical Uses of Flow-of-Funds Data," in N.B.E.R., *The Flow of Funds Approach to Social Accounting* (Princeton: Princeton University Press, 1962), pp. 195-238.

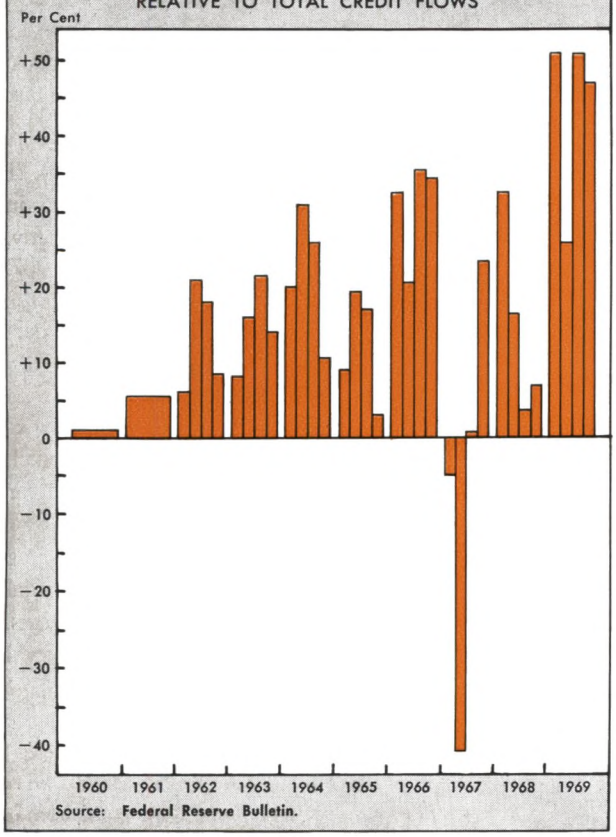
deficit of the Government was financed by the surplus of the other sectors, or by the lending of these sectors. This balance of deficit and surplus is the information which the national income accounts provide.

The flow-of-funds accounts, on the other hand, show who purchased the Government bonds issued to finance the deficit and to what extent it was financed by the banking and monetary sector. Table II shows funds raised by the Government, and column 1 of Table III shows fund flows to the Government sector. The rest of Table III summarizes the other uses and sources of funds. From column 1 of Table III, it can be seen that the banking sector financed $11.6 billion of the $12.8 billion deficit.

The two tables reveal the intersectoral balance of the accounts. The Government deficit was made up by net borrowing (lines 2 and 3 minus lines 9 and 10). The other economic units had a nonfinancial surplus of $12.8 billion, and the funds they advanced, net of borrowing among themselves, equaled the net amount borrowed by the Government. This balance is analogous to that brought forth in the national income accounts, and adds meaning

Chart I-C

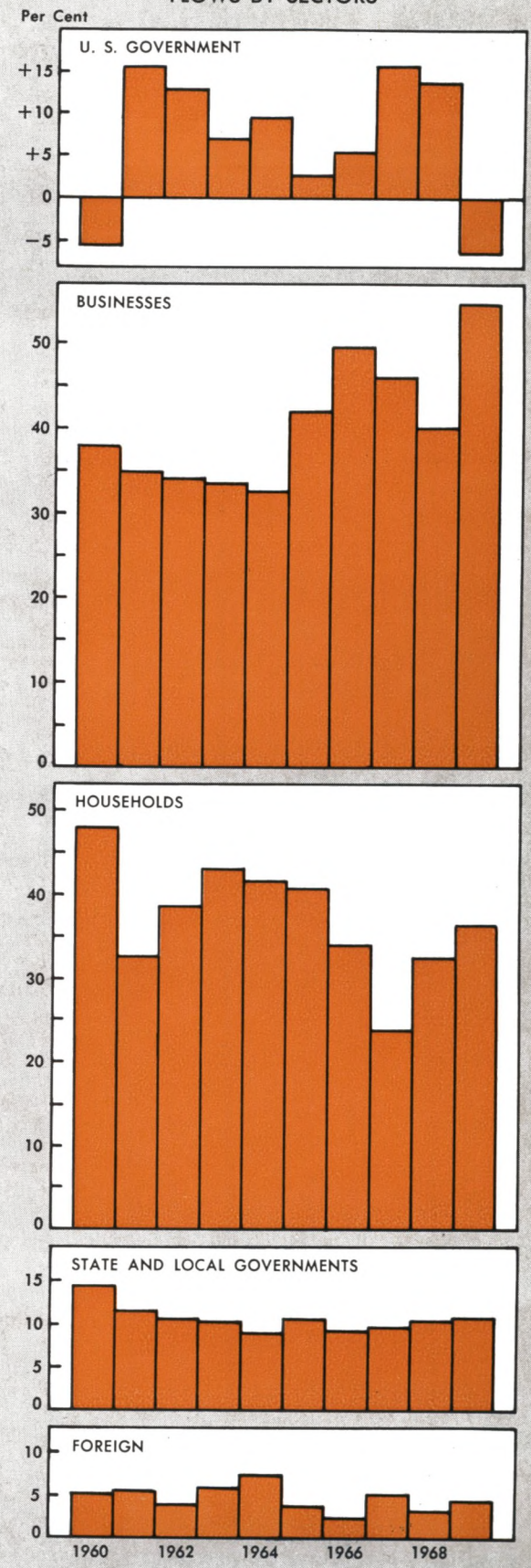
CHANGES IN CREDIT FROM DIRECT LENDING RELATIVE TO TOTAL CREDIT FLOWS



Source: Federal Reserve Bulletin.

Chart II

PERCENTAGE SHARE OF TOTAL CREDIT FLOWS BY SECTORS



Source: Federal Reserve Bulletin.

through the financial detail. National income-product accounts indicate that income equals consumption plus investment, saving equals income minus consumption, and, therefore, saving equals investment. This equality of saving and investment is the balance brought out in the national income accounts. The additional financial detail illustrates clearly how the product and financial markets adjust to each other through different market mechanisms. In the product market, aggregate demand equals aggregate supply, while in the financial market, there is an adjustment in the demand for and supply of loanable funds.

SUMMARY AND CONCLUSIONS

Many possibilities lie in the flow-of-funds data, detailed analysis of which can add greater insight into economic interactions and assist materially in policymaking. The accounts are used regularly in the Federal Reserve System and the information they supply is used by other policymaking groups as well. Continuing efforts are under way in the System to improve the quality of information they provide. The accounts also have more general usefulness, and it is remarkable that they are not regularly employed by economic analysts in the private sector of the economy.

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Table III

OTHER SECTORS, SOURCES AND USE OF FUNDS
1965-67 TOTALS
($ billions)

SOURCES Sector	1 Increase in Federal Obligation Held	2 Nature of Item in Column 3	3 Sources as in Column 2	4 Increase in Liabilities	5 Total 3 + 4 − 1
1. Households	6.5	Net Disposable Source—Nonfin.	1,775.5	77.5	1,846.5
2. Businesses	− 6.0	Current Surplus	227.0	126.4	359.4
3. Banking	11.6	Current Surplus	7.4	97.4	93.2
4. Other	0.7	Total Nonfin. Sources of Funds	− 4.0	162.9	158.2
Total	12.8		2,005.9	464.2	2,457.3
USES	6	7	8	9	10
	GNP Expenditures	Nonfinancial Uses, n. e. c.	Increase in Cash on Hand	Increase in Other Financial Assets	Total 6 + 7 + 8 + 9
5. Households	1,430.3	278.2	98.4	54.5	1,861.4
6. Businesses	274.7	0.0	− 2.0	64.1	336.8
7. Banking	2.1	0.0	4.0	82.3	88.4
8. Other	1.5	0.0	1.1	141.7	144.3
Total	1,708.6	278.2	101.5	342.6	2,430.9

Source: **Federal Reserve Bulletin.**