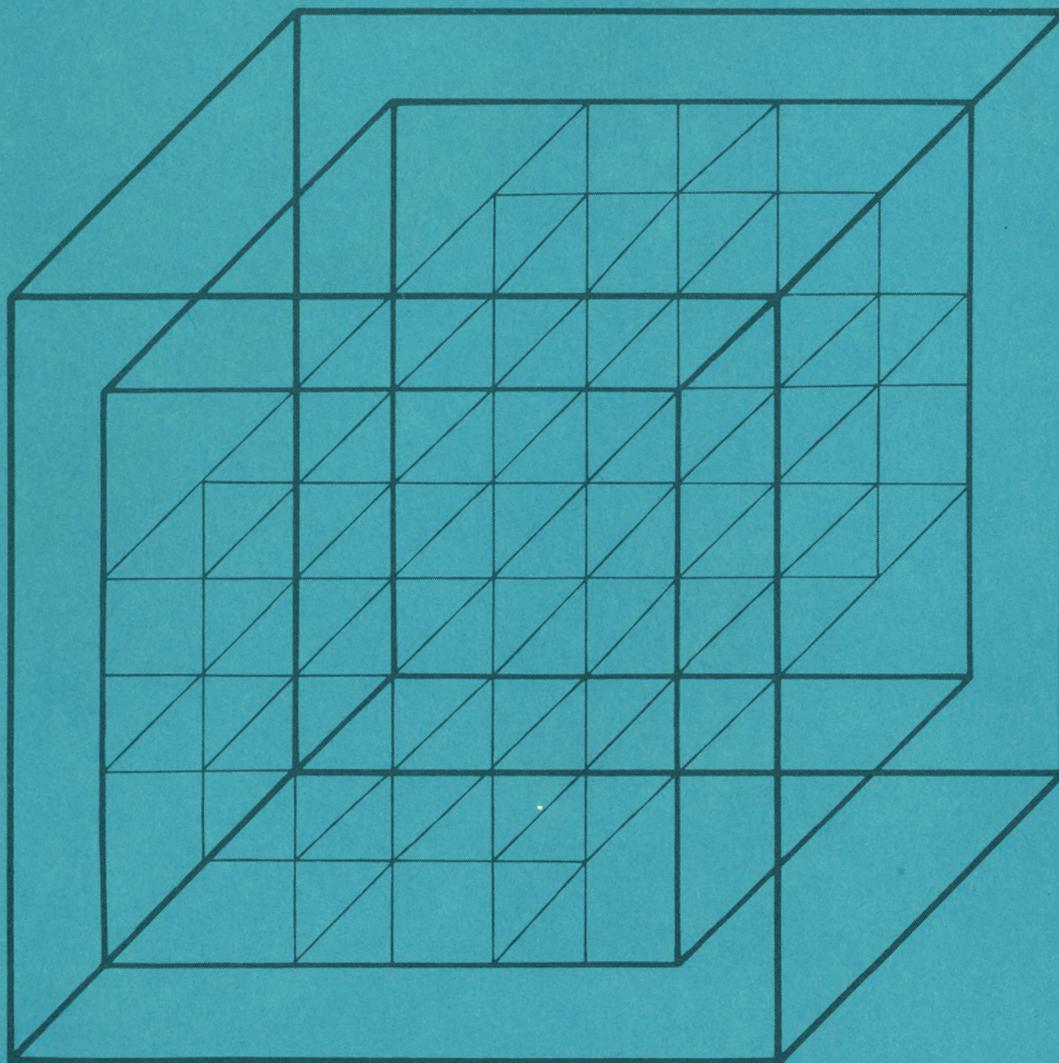
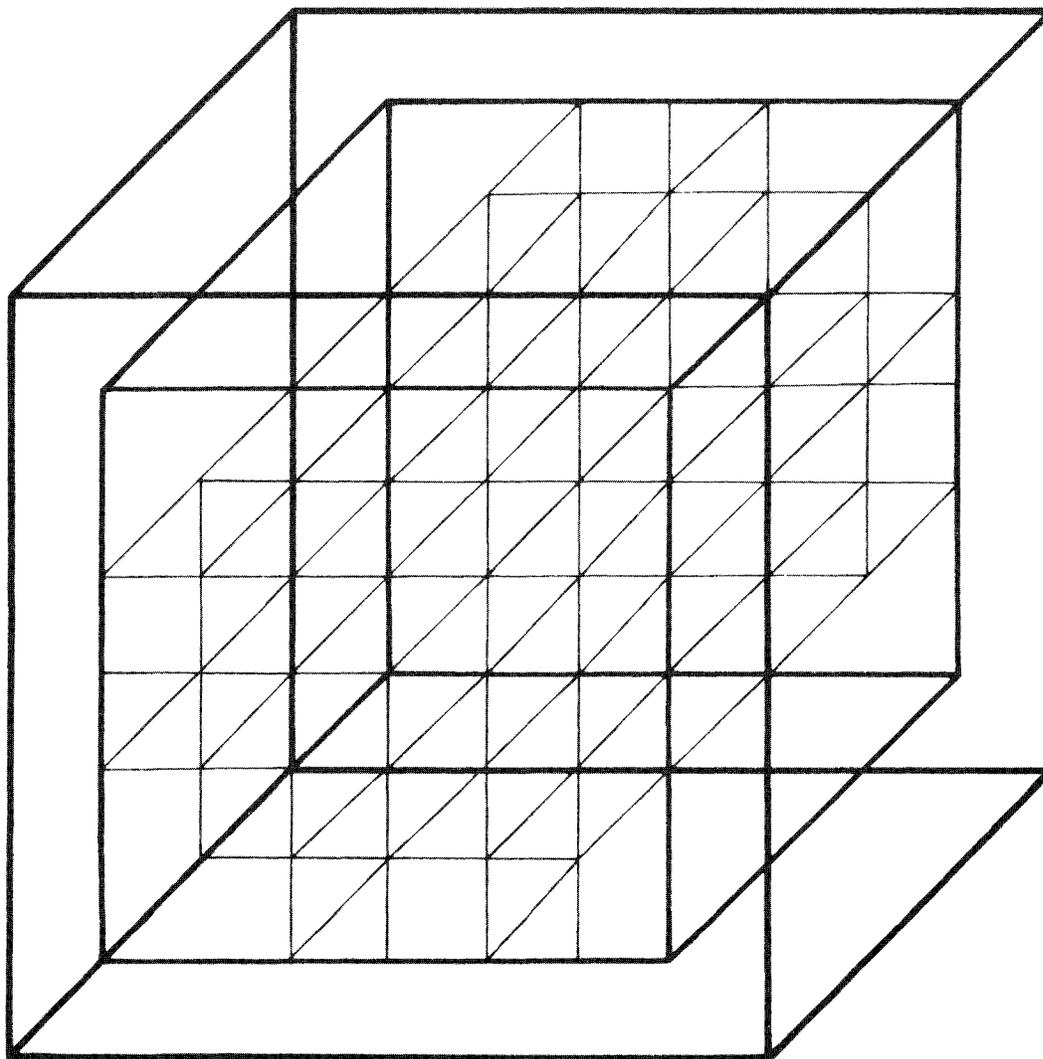


Introduction to Flow of Funds



Board of Governors of the Federal Reserve System

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June 1980

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Preface

Flow of funds accounting is a national statistical system that has been under development by the Federal Reserve since 1947 and that has been published in several forms. Descriptions and definitions of the successive forms of accounts have appeared in the *Federal Reserve Bulletin* and in separate publications.¹ In the following pages that descriptive material is pulled together and brought up to date with the current form of the accounts.

Section 1 of this publication describes broadly the purposes of the flow of funds system and the aggregative view of recent decades that emerges from the data in their present form. Section 2 gives the conceptual framework of the system, while sections 3 and 4 present a detailed description of statistical relationships and definitions. The structure of the system described in section 4 is of the form published in late 1979 and differs in some respects from earlier presentations. The structure will inevitably continue to change to keep up with the evolution of financial practices, and after 1980 some of the descriptions may no longer fit the current form of presentation.

1. For earlier publications, see the bibliography.

This is not a statistical publication, although a few tables in the appendix underlie the historical material in section 1. Nor does it describe specific statistical sources and derivation procedures used in compiling the accounts. The data are published and made available in several forms as described in section 5. A separate publication on the derivation methods is mentioned in section 6, which discusses briefly the problems of adapting data sources to the account structure.²

This publication is at a general level and is intended merely to indicate the purposes of the system and what it encompasses. The bibliography includes several review papers that go into further detail on uses of financial accounts for judgmental and econometric analysis and that include their own extensive bibliographies on macroeconomic work in financial analysis. This publication is an introduction to that work as well as to the flow of funds accounts themselves.

2. All requests for data and for information about the accounts should be addressed to Flow of Funds Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Section 1: Concept of Accounts

The flow of funds system of national accounts is designed to bring the many financial activities of the U.S. economy into explicit statistical relationship with one another and into direct relation to data on the nonfinancial activities that generate income and production. The purpose of the accounts is to provide, systematically, the aggregate measures of transactions needed to identify both the influences of the nonfinancial economy on financial markets and the reciprocal influences of developments in financial markets on demand for goods and services, sources and amounts of saving and investment, and the structure of income. The accounts are intended to provide an empirical base for exploring such questions as the sensitivity of borrowing to interest rates as against other influences, the effects of the cost and supply of credit on demand for physical investment, the role of money holdings in the public's structure of assets and liabilities, and the relation of financial positions—levels of assets and liabilities—to demands for goods and services, for credit, and for investment in financial claims.

The flow of funds system focuses on such questions in a macroeconomic setting that covers, as far as possible, all of the institutional groups and all types of transactions in the economy. Some elements of the system exist elsewhere and separate from the structure—as statements of, for example, corporate finance, government finance, balance of payments, money and banking activities, individuals' saving, residential finance, and security market activity. These elements are incorporated into the system as integral parts, together with information from income and product accounts on saving and capital formation. Each such element is one aspect of an integrated economy, and each connects with the others in several ways. The security markets, for example, are a point of intersection among business developments generating long-term credit needs, international capital movements, the availability of bank credit, flow of credit through financial institutions, and the financing of government deficits. When all of the relevant information is put together in mutually consistent fashion in one framework, each element is seen as part of a broader macroeconomic system, and its connection with the other parts can be made explicit enough for analysis. Like the national income and product accounts, published by the U.S. Department of

Commerce, the flow of funds system is a social accounting structure that records both the payment and the receipt aspects of any transactions included in the system and that includes a balance in each account of the structure between total payments and total receipts. The flow of funds accounts can, in fact, be viewed as a direct extension of the Commerce income and product structure into the financial markets of the economy, with the purpose of establishing direct linkages between the Commerce data on saving and investment—the capital account in the income and product structure—and the lending and borrowing activities that are associated with saving and investment.

Model account structure

The nature of those linkages and, more generally, the relation of financial markets to the nonfinancial activities of the economy are portrayed in table 1. The table is a severely condensed and simplified form of the flow of funds matrix found on page S.1, which maps the basic structure of the flow of funds system.³ The arithmetic of the matrix is fairly simple, and when applied to the full system of accounts it lays a basis for understanding both the accounting relationships among the time-series tables in this publication and the analytic approach underlying the system.

The accounting rules of the matrix, their consequences for analysis, and the relation of the matrix to the tables are spelled out in section 2. A very simplified form of the matrix structure appears in table 1, which is a statement of the capital account for the economy as a whole showing investment in assets in the use columns and the means of financing that investment in the source columns. The table divides the economy into several groups of sectors, each of which has a column in the matrix; and all transactions of each group are recorded on one or another row of the matrix. Row 1—saving—is for each sector the net sum of current receipts from income less current outlays for consumption, operating expenses, and so forth. Saving appears as a net amount available from current operations for investment purposes. Other amounts are borrowed

3. The note to table 1 is important for working out the relation between the general description in this section and the more complex form that financial activity takes in the actual economy.

in financial markets by each sector, and borrowings and saving together are the sources of funds used to acquire physical and financial assets.

A distinction is drawn between nonfinancial transactions reflected in rows 1 and 2 of table 1—purchases and sales of goods and services, transfer payments and receipts, and taxes—and financial transactions in rows 3 through 6—net changes in the capital amounts of claims owed as liabilities or held as assets by each sector. All of the financial transactions of a sector are combined into a net financial investment that is the excess of the sector's lending (financial uses) over its borrowing (financial sources).

The two basic constraints in the matrix are (1) that for each sector total investment, which is the sum of capital outlays plus net financial investment, is by definition equal to the saving shown in

row 1 for the sector, and (2) that on any one row of the matrix the sum of all uses of funds shown across the columns is equal to the sum of all sources of funds in that row. (Rows 1 and 2 of table 1 are the source and use sides respectively for a single account covering all nonfinancial transactions together.) With balance vertically between saving and investment and horizontally between payments and receipts, each column constitutes one full sector account of the structure and each row a transaction account. The relationships among columns, among rows, and between columns and rows express the interlocking nature of the accounting system as a whole.

As one illustration of the structure, the government column in table 1 can be seen to be a particular form of budget statement, with a nonfinancial deficit in the first row offset by a net sum of

Table 1. Model flow of funds matrix¹

Hypothetical data

Type of transaction	Sector										MEMO: Domestic totals	
	Private domestic nonfinancial		Govern- ment		Financial inter- mediaries		Rest of world		Total			
	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source
<i>Nonfinancial</i>												
1. Saving		179		-10		5		-4		170		174
2. Capital outlays	170									170		170
<i>Financial</i>												
3. Net financial investment	9		-10		5		-4		0			4
4. Total financial uses and sources (5 + 6)	69	60	5	15	70	65	3	7	147	147	144	140
5. Deposits at financial intermediaries	50		3		55		2		55	55	53	55
6. Loans and securities	19	60	2	15	70	10	1	7	92	92	91	85

1. This table compresses twenty-six sectors in the full system into four columns for sector types that are to be distinguished in the present discussion; the rows are a similar grouping of transaction categories. In addition, the matrix is simplified by omitting the row and the column for discrepancies and a number of items peripheral to the mainstream of financial transactions. These omitted items are treated as nonexistent in the simple economy shown. The relation of transactions in this table to the full matrix on page S.1 is as follows:

FULL MATRIX

Gross saving
Gross investment
Private capital expenditures, net
Net financial investment
Financial uses, net, and financial sources
Gold, foreign exchange, Treasury currency
Deposits and currency
Insurance and pension reserves, interbank items
Credit market instruments
Security credit, trade credit, taxes payable, equities, miscellaneous, and sector discrepancies

MODEL

Saving
Omitted
Capital outlays
Net financial investment
Total financial uses and sources
Omitted
Deposits at financial intermediaries
Omitted
Loans and securities
Omitted

The government sector should be interpreted as central government only, with state and local governments omitted as another simplification. Of the omissions, the most important for the discussion that follows is insurance and pension reserves, which are a major form of intermediation. This item is left out because part of such reserves are liabilities of governments and complicate the relation between intermediation and financial institutions. The present section focuses only on the broad outlines of structural relationships, and a more detailed description requires many qualifications and additions to the broad form to incorporate these governmental reserves and the other omitted items.

changes in cash balances, loans, and debt outstanding in the rows below. This column is a balanced account that differs from other budget statements for governments mainly in that it distinguishes sharply between nonfinancial and financial transactions and arranges transactions so that they can be identified across the rows in the accounts of other parties to the transactions. The rest-of-the-world column is similarly a particular form of balance of payments statement, arranged so as to connect it with other sector columns along specific rows. A loan from the government to a foreign borrower, for example, appears on row 6 as a government use of funds and a foreign source of funds, regardless of how it may be treated in other budget statements or balance of payments statements. Each of the two loan entries—the use and the source—is then playing a double role in the matrix: vertically as a component of its sector's column balance, and horizontally as part of the row balance. Horizontally they of course balance each other, but vertically they integrate in more complex ways with the other transactions of the two sectors separately. The interlock of the system consists of establishing such double roles, horizontally and vertically, for all transactions of all sectors in the system simultaneously. The result is an integrated structure that can be used to measure linkages either vertically or horizontally or, in the most complete forms of analysis, in both directions simultaneously.

The condition that saving equal investment for each sector is identical in form with the well-known equality of saving and investment for the overall economy in income and product accounting. For the total economy, investment on a consolidated basis consists of outlays for capital goods plus net foreign investment, the excess of lending abroad over borrowing from abroad. In the flow of funds accounts, similarly, each sector's investment consists of its purchases of capital goods plus a net financial investment that includes net lending to the rest of the domestic economy as well as abroad. In the model matrix (table 1), the first three rows state the equality of saving and investment for each sector, and a separate memo column gives totals for the three domestic sectors. This memo column is one form of the capital account in the Commerce Department income and product system. It can be seen that the matrix, in its domestic sector columns, constitutes a deconsolidation of that capital account, with capital outlays distributed among the domestic sectors and with a detailing of each sector's net financial investment that is a more general form of the net foreign investment in the consolidated total.

This relation to the Commerce domestic capital account is expressed in the first three rows of the matrix. In the lower rows, the matrix goes into detail on the forms of lending and borrowing by each sector that underlie the sector's net financial investment. Only two types are shown in the model—deposits at intermediaries and loans and securities—but the full matrix (page S.1) has many more categories, as shown by table 7 on page 39. For each of these financial categories a full accounting of purchases and sales of the particular type of instrument is required in the system. It is this detailing of credit transactions in the capital account that brings the financial statistics of the economy into coherent relation to one another and into direct relation to the nonfinancial statistics in the income and product accounts. The accounting link to nonfinancial transactions is net financial investment (row 3 of table 1), but the economic substance of the information is in the interactions among specific types of credit flows—deposits and loans—and between such flows and specific forms of capital outlay, income generation, and saving, all within the accounting constraints of the system.

The matrix goes beyond the Commerce capital account in that it incorporates the foreign sector (rest-of-the-world) explicitly. This form requires that the consolidated domestic capital account be shown as a memo column, but it has the advantage that for each category of financial transaction the matrix states directly all of the transactions in the market, whether domestic or foreign. Alternative forms tend to obscure market conditions without adding information.

Analytic role of matrix

The matrix is an essential framework for both calculating and using financial market statistics on an economy-wide basis. It is general enough in form to assimilate new types of financial instruments, new forms of relationship, and the continual changes in emphasis or practice in individual financial markets. The explicit constraints of the system enforce a consistency of analysis not easily reached without the framework, particularly in questions at a macroeconomic level, at which all market forces interacting with one another are to be accounted for. Such questions can be handled only when the transactions involved have been stated within the matrix on a complete basis but without double-counting.

The role of the matrix for such purposes can be demonstrated by the simple exercise of assuming some major financial development, such as a sharp rise in government borrowing or in deposit flows to banks; placing that flow in its appropriate cell of the matrix, and working out even a minimum possible conjunct set of entries necessary to keep the matrix in balance. If the example is in government borrowing, that source of funds to the government must be mirrored in the government column in some combination of a nonfinancial deficit (negative saving) and government lending as an offsetting use of funds, because the money raised is obviously being absorbed in one way or another. At the same time, the borrowing itself must be matched by an equal amount of lending somewhere along the row that carries government securities. And in whatever column that lending appears, there must be a source of funds available for this use. In the simplest situation, that source can be the positive private saving and borrowing from the government that are already implied in the government account. For example, a minimum complete accounting for the government borrowing might be as follows:

ITEM	PRIVATE		GOVERNMENT	
	Use	Source	Use	Source
Saving		7		-7
Government loans		3	3	
Government securities	10			10

When this form of speculation is extended from the merely possible to the likely, economic analysis enters the exercise. In the example above there are questions of the probable demand by private sectors for other types of financial assets, such as cash and other deposit claims, that are competitive with government securities as investment forms and that affect the volume of flow into financial intermediaries and the volume of credit supplied by intermediaries. More broadly, analysis raises questions as to the circumstances that generated the government deficit, including income distribution and private demand for capital goods, and the resulting influences on credit market flows. Each aspect interacts with the others, and as the various tendencies are itemized they are to be fitted into the frame of the whole in mutually consistent forms.

The operation of the matrix is also illustrated by considering what happens when the money supply increases. Money is a liability of the banking system and an asset of the public; any increase in it must be accompanied by some combination of a de-

crease in other bank liabilities, an increase in bank assets, and offsets in the accounts for other sectors. The organization of the accounts forces these contra-entry questions to the surface and in the process spells out the initial question in a complete form.

Analysis of this kind can be applied to an actually expected set of developments by using the matrix structure as a device in forecasting or projecting the future, with the specific function of keeping individual parts of the forecast in touch with one another. The merit of such constrained systemwide forecasts is that each element can be tested by the plausibility of its counterparts in other areas of the matrix. The structure as a whole is reasonable only when all of its parts are reasonable. Whether the elements are derived econometrically from empirical models or assembled judgmentally by hand, the procedure has room for successive approximations that approach the final result by working out the effects of each change on the rest of the structure and by then working back from the effects to revised versions of the initiating change.

A complete forecast on this basis illustrates the integral role of financial market behavior in capital theory and in general theories of income, production, and economic growth. The choices each individual in the economy makes as to consumption, physical investment, financial investment, and borrowing are related to one another and are confined only as a group within the limits of his income and net worth. The option of borrowing lets a person shift his consumption and investment patterns over time, and higher levels of debt allow him to carry higher levels of either physical or financial assets at any time. He may in his mind attach priorities to one or another use of his income, but in practice all of his demands work against one another to some extent and indeed also influence the amount of income he tries to earn.

The columns of the matrix reflect these relations among the activities of an individual transactor by putting all of his transactions together in the general form of a statement of sources and uses of funds.⁴ The system becomes macroeconomic when the columns for all sectors are aligned with one another to generate the market summary rows in which the demands of different transactions impinge on one another. The effect is a joining of financial investment analysis directly to theories of production, income, saving, and physical investment in a manner that adds generality to the model as a whole.

4. By statistical necessity, however, they are combined with similar transactions of many other individuals.

Stocks and flows

The immediate connection between financial markets and nonfinancial activity is in terms of net flows of claims, since it is as flows that financial markets absorb funds from income and supply funds to spending. These financial flows are always increments in amounts of assets and liabilities outstanding, however, and the levels of these claims in existence are as much a part of the picture as the flows themselves. Economic equilibrium (in any sense of that term) must be a balance simultaneously among stocks, among flows, and between the stocks and flows, a consideration that is reflected not only in advanced models but also in such rule-of-thumb indexes as liquidity ratios, turnover rates, and debt-service coverage by income.

Over the period covered by the flow of funds accounts, several types of credit have shown fairly stable relations to expenditures or receipts in terms of flows; but the flows have been at such rates as to generate strong secular drifts, relative to activity, in levels of debts and assets, either upward or downward. The meaning of these drifts in stock relationships, or even whether they have meaning, is an important aspect for financial analysis; for such questions, data on stocks of financial claims outstanding are included in this publication on a basis parallel to the tables on flows, including both a matrix of claims as assets and as liabilities, on pages S.2 and S.3, and time-series compilations for individual rows and columns.⁵

Intermediation and primary credit flows

The generality of the matrix tends to obscure certain structural aspects of the financial system that are of continuing interest in analysis. These structural aspects are concerned with concepts such as intermediation, "primary" demands for credit, and "ultimate" sources of credit—or more broadly with "double-counting" of credit flows and the position

5. As the matrix on outstandings shows, stock data are presented only for financial claims in the accounting structure and do not include parallel data for holdings of tangible assets or for sector net worth, which are the balance sheet counterparts of capital expenditures and saving in the flows. A more complete set of sector balance sheets that include tangibles and net worth has been compiled recently at the Federal Reserve using Commerce Department estimates of stocks of reproducible assets, estimates of land values based mainly on data from the Census Bureau and financial positions from flow of funds data. These full balance sheets are part of the flow of funds accounting system and include statements of the relation between gross investment

of financial institutions in the system. In a general sense, intermediation consists of borrowing for the purpose of lending rather than for nonfinancial outlays. The term is usually associated with financial business, such as banks, savings institutions, insurance companies, and investment companies that concentrate on such activities. The distinction between intermediary and nonintermediary sectors must be recognized as an institutional one, however, rather than a concept definable in theory; on the one hand households, nonfinancial business, and governments also engage in intermediation to some extent, and on the other intermediaries are subject to the same *general* investment principles as nonfinancial sectors. Nevertheless, the difference in degree is extreme and the distinction justified in practical analysis.

Intermediaries tend to specialize in the forms of debt they offer, or the forms of credit they extend, or both. Insurance companies, for example, raise funds primarily through policy premiums but invest broadly in credit markets, while finance companies specialize in their lending but not their borrowing. Savings and loan associations are specialists both in borrowing—through deposit accounts—and in lending—through mortgages. In whatever way they specialize, however, these institutions are filling a gap between the types of claims the nonfinancial public wants to hold as assets, such as liquid deposits and insurance reserves, and the very different types of claim the public wants to (or is able to) owe as debts, such as bank loans, consumer credit, and mortgages. With or without intermediaries, the total of claims held as assets by nonfinancial transactors is nearly equal to the total of their debts, because directly or indirectly they owe the debt to one another. But with intermediation the composition of their assets becomes very different from the composition of their debts. The intermediaries are thus performing a transformation process within the financial markets between the asset and the liability sides of the public's balance sheet.

Intermediaries are important to analysis in many

as a flow and changes in net worth, both for principal sectors and for national totals. Tangible assets are valued at current prices in the balance sheets, and as a result much of the difference between investment flows and movements in net worth arises from valuation changes that are reflected in net worth but not in saving or investment.

The complete balance sheets have been available so far only on an informal basis, and their description has not been included in this publication. They are maintained on a current basis in annual form, however, and copies can be requested from the Flow of Funds Section at the Federal Reserve.

ways. Their presence in the market broadens enormously the forms of both financial investment and borrowing available to the public: capital formation, saving, income, and consumption are all higher than they would be without the catalyst of intermediaries in raising financial flows. In the U.S. economy a large part of all credit goes through intermediaries. In the short run much of financial analysis is concerned with how well intermediaries are meeting demands for the specialized forms of credit they offer with the funds they are able to attract from savers. Legal constraints on their rate structures, lending practices, and forms of borrowing often prevent intermediaries from adjusting fully to current conditions and decision patterns, causing sizable shifts of funds into and out of them. On the other hand, intermediaries frequently introduce new practices or new credit instruments that also have major effects on the structure of flows. Both the constraints and the innovations of intermediaries have to be taken into account in even simple and summary analysis of economic development.

Flow of funds summary tables

Intermediation implies some basic or primary flow of credit in the economy that in part passes through these institutions. The idea of such a flow raises the question as to what it might be or, more specifically, how it might be defined in an analytically useful form. The matrix itself is too general in form to show such a concept, inasmuch as it puts financial intermediaries parallel to other sectors and gives totals along the rows that include all sectors indiscriminately. This matrix accommodates both the intermediary-type debt owed by nonfinancial sectors, particularly governments, and the marketable debt of intermediaries, such as bonds and open market paper, that are not distinguishable as debt instruments from the same types of claim owed by nonfinancial sectors.

Nevertheless, the elements needed to approximate a concept of a basic flow of credit that may or may not be intermediated can be abstracted from the matrix. One such approximation is put together in the two summary tables on credit markets that appear at the beginning of most flow of funds presentations, one on the structure of borrowing in credit markets and the other on sources and forms of supply of funds to credit markets. They appear in this publication beginning on page S.4 for flows and page S.6 for outstandings. The summary tables are not

an explicit part of the flow of funds structure, but they are useful in outlining relationships among forms of borrowing, among forms of lending between credit demand and supply, and between intermediary and direct lending in markets.

Using figures from the model matrix in table 1, the two summary tables are illustrated together in table 2, with borrowing in the upper part and credit supply in the lower. Table 2 identifies the intermediation process through an institutional distinction, isolating groups of firms that are mainly in the business of borrowing funds for the purpose of re-lending and treating these groups as a channel of financial flows rather than a primary source of credit demand or supply. The primary credit flow, on the first row of the table, is thus borrowing by everyone else, that is, nonfinancial sectors, itemized by sector in the next three lines. The total of 82 is less than the matrix total of 92, on the bottom row of table 1, by the amount of credit market borrowing by intermediaries. The full form of the table, on page S.4 includes the types of instruments used as well as a listing of borrowing sectors.⁶

Part II of table 2 is a summary structure of the sources of supply for the credit flows listed in part I. It is more complex than part I in that it shows

6. Notes to table 1 list several types of financial claims that have been omitted from the model matrix for simplification, such as trade credit and taxes payable. These omitted forms are not part of organized credit markets and are omitted from the full form of table 2, as on p. S.4. Types of credit included in the table 2 total are listed in the full version on page S.4.

Table 2. Model credit market summary
Figures from table 1

1.	I Funds raised by nonfinancial sectors	82
2.	Government	15
3.	Foreign	7
4.	Private domestic nonfinancial	60
5.	II Sources of credit supplied	82
6.	Government	2
7.	Foreign	1
	Financial intermediaries	
8.	Total funds advanced	70
	Sources of funds	
9.	Private domestic deposits	50
10.	Funds raised in loans and securities	10
11.	Other sources	10
	Private domestic nonfinancial sectors	
12.	Direct purchases of loans and securities (lines 5-6-7-8+10)	19
13.	Deposits in intermediaries (line 9)	50
14.	Total financial investment (lines 12+13)	69
15.	Credit sources not in line 14 (lines 6+7+11)	13

supply at more than one level simultaneously: direct lending in credit markets by nonfinancial sectors and by intermediaries as well as the sources of funds to intermediaries to finance their part of the direct credit supply. The first item (row 6 in table 2) shows lending activity by federal government units, federally sponsored intermediaries, and the Federal Reserve, a source of funds to credit markets that is almost entirely directed by public policy objectives such as assistance to particular credit markets and open market operations by the Federal Reserve. Foreign lending on row 7 includes foreign private funds, but in recent years it has been dominated by foreign official transactions in U.S. government securities as a reflection of balance of payments developments. Both row 6 and row 7 are largely external influences on credit markets in that most of the amounts that appear do not reflect profitmaking decisions in the narrow sense but rather are policy directed or almost automatic.

The middle section of part II of the table summarizes credit market lending by intermediaries, including commercial banks, and the main types of financing for that lending. In the table 2 example, intermediaries supplied credit of 70, mainly from private deposit growth but also from their own borrowing in credit markets and from other sources, such as foreign and government deposits, insurance and pension reserve growth, and their own retained income. The several sources of intermediary funds vary greatly in relative proportions as credit conditions change, and shifts in their sources are reflected elsewhere in the table, such as in government lending to intermediaries and the forms of financial investment by the private nonfinancial sectors.

The bottom section of part II, beginning with row 12, integrates into the preceding picture the structure of financial investment by private domestic nonfinancial sectors: households, businesses, and state and local governments. Row 12 is direct lending by these sectors in credit markets, which consists of any of the credit flow in row 1 not supplied by government or foreign sources, or by intermediaries, together with credit market borrowing by intermediaries on row 10. From the viewpoint of the private sectors, this direct lending is but one of several possible forms of financial investment, with alternatives that in the model table are wrapped together as deposits, such as checking accounts, savings deposits, and negotiable certificates of deposit. These deposits, shown here as a use of funds, are the same flows that appear on row 9 in

the intermediary section of the table as a source for intermediary credit supply. The distribution of private funds between direct lending and deposit flows has sizable influence on although not total control of the flow of credit through intermediaries and thus on supply of the specialized forms of credit, such as mortgages and bank loans, that come mainly from intermediaries. Line 14 contains the total flow from the private nonfinancial groups that is distributed between direct and deposit flows. It is somewhat less than total borrowing on row 1 although closely related. The difference, on row 15, consists of direct flows from government and foreign sources and the "other" sources of intermediary lending.⁷ In recent years a major element of change in row 15 has been foreign official lending that reflects shifts in the U.S. trade balance and capital outflows in the balance of payments statements. Most movements in government lending are reflected directly or indirectly in the private total on row 14, while intermediary "other" sources are relatively stable over the long run.

Diagram of financial structure

The view of the economy that is reflected in table 2 is indicated in diagram D-1. The diagram is a picture of the nation's capital account and, again, uses the model matrix (table 1), abstracting in the same way from the full complexity of the system. The diagram is specific to the data in the model in that it shows current-account deficits for the government and foreign sectors on the right, in parallel with physical investment, as "uses" of private saving entering the capital account on the left; if either of these sectors had a positive current balance, it would appear at the left in the diagram. In a fully detailed picture, the dissaving of any individual transactor with a negative current-account balance would also appear on the right, with treatment of financial flows parallel to that for a deficit government. To simplify the diagram, all saving of the private domestic sectors is on the left, even though the total for the sector is a net sum for savers and dissavers together.⁸ The diagram takes on precision if each sector is viewed as a single person in an economy made up of only four different persons.

7. Row 15 is not included in the full form of the table.

8. Saving in the diagram is the total for private sectors, including intermediaries. Intermediary saving is an internal source of funds for lending that is identified in the diagram.

This primitive view can be extended easily to a more general picture with many separate units in each sector.

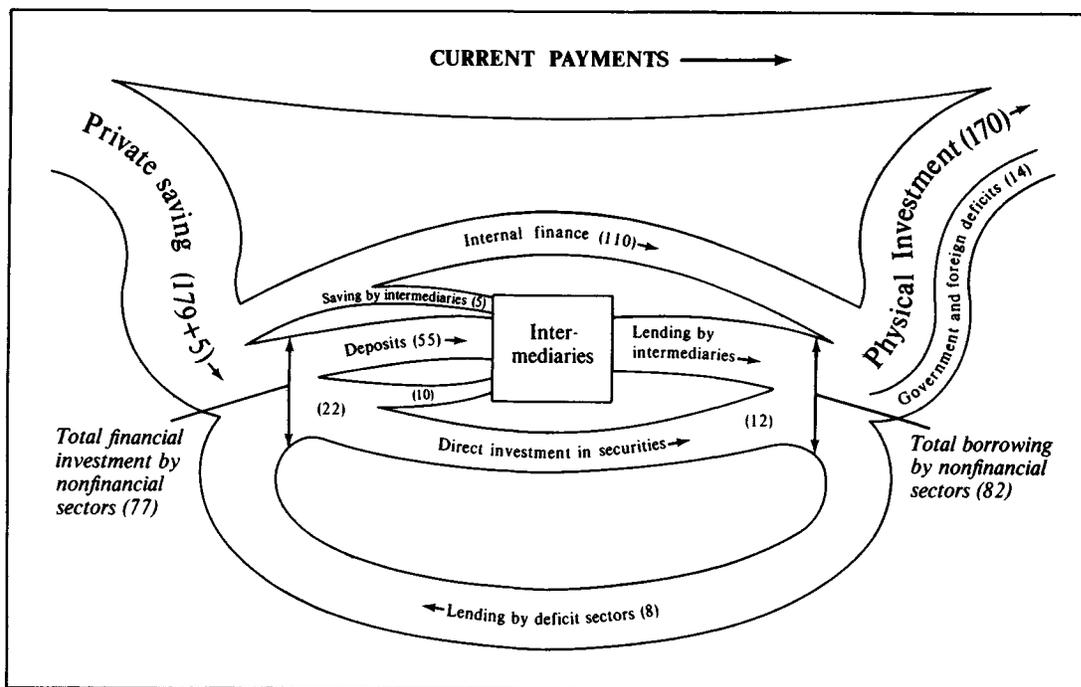
The diagram pictures saving entering the capital account as a diversion from the current payments stream and passing through a number of channels to finance physical investment outlays and government and foreign deficits that inject spending back into the current stream. Part of the saving goes directly into physical assets, to the extent that people buying capital goods pay for them without recourse to borrowing, and this appears as "internal finance," the excess of capital outlays (170) over private borrowing (60). Another part of saving goes into financial assets, however, such as cash and deposits for liquidity and marketable securities for capital gains. Part of this financial investment goes directly to nonfinancial borrowers (12), but most of it is put into deposit (55) and security claims on intermediaries (10), who relend the funds to nonfinancial sectors through quite different forms of credit instruments, such as mortgages and bank loans (70).⁹ These credit flows from intermediaries, combined with direct lending from savers, make up the total

volume of borrowing (82) by nonfinancial sectors that it used mainly to cover the deficits of dissavers and to pay for investment outlays not covered by internal finance.

The bottom of the diagram shows a reverse flow of funds from the borrowing to the lending side of the structure that is equal to the investments in financial assets made by the two deficit sectors. In the model matrix (table 1) these two sectors have not limited their borrowing to the minimum needed to cover their deficits but rather have borrowed extra amounts to add to their asset positions (8). They borrow in part for liquidity purposes and in the government's case to help carry out lending programs for public policy purposes. These extra credits represent borrowing in order to relend and as such constitute a form of intermediation by nonfinancial sectors. The U.S. government does in fact act as an intermediary to financial markets, floating its own securities to assist agriculture, small business, the home mortgage market, and other private markets; a more complex diagram could show that activity explicitly. The more general point, however, is that quasi-intermediation occurs in many forms in nonfinancial sectors, that all of its forms create reverse flows in the diagram, and that they

9. Intermediaries use their own retained income (5) to lend somewhat more than they borrow.

Diagram 1



add an element to the relation between the total flow of credit as defined in the diagram and the associated totals of saving and investment.

Typically, this kind of intermediation is difficult to identify, as is illustrated by taking the private domestic nonfinancial sector in the diagram to be a single individual. Even though this person's saving (179) was greater than his capital outlays (170), he chose to put a substantial amount into financial investments (69) and then to borrow some of these funds on the other side of the market in different forms (60). This is reasonable behavior, since the combination of assets and liabilities he now has suits his short-term and long-term needs better than do lower totals of both assets and liabilities. However, it raises the question whether he borrowed to invest in physical or in financial assets, and the answer is that he borrowed for the two purposes jointly in unidentifiable and even undefinable proportions. Only in special cases, such as the two deficit sectors in this model or a borrowing total that is larger than total investment outlays, can such intermediation be even partially measured.

This discussion illustrates the ambiguities in the concept of intermediation and thus in the concept of a basic or primary flow of credit that is to some extent intermediated. Intermediation is nevertheless a useful construct for analysis when it is given an institutional sense that is based on the characteristics of a set of financial businesses, including the legal constraints on their operations, their typical practices as borrowers and lenders, and their flexibility in responding to changing economic conditions. Isolating financial institutions as an intermediary group brings out the broad division of financial flows between those that enter this area of specialized and constrained lending operations and those that are available only in more generally marketable instruments. It is this institutional foundation for analysis that underlies table 2. As applied to nonfinancial sectors, the concept of intermediation is too ambiguous to be useful, and it is well replaced by the integrated balance-sheet view of physical investment, financial investment, and borrowing that is implicit in this discussion.

In comparison with the accounts as published, the diagram is primitive although accurate as far as it goes. In both the model matrix and the diagram, credit flows are limited to the main-stem group of financial claims that are handled in organized credit markets, such as securities, mortgages, consumer credit, and bank loans. In flow of funds publications these are labeled credit market instruments.

This central group of claims is the focus of the summary tables in publications as well as in the model used for this discussion. A glance at the full matrix on page S.1 reveals that the financial structure as a whole includes a variety of other claims, such as gold, foreign exchange, trade credit, and equities in noncorporate business. These are more specialized instruments that are also part of the financing of the economy and that appear in the accounts where appropriate, but for summary purposes they are treated as outside the credit markets proper. The diagram is also primitive in that it cannot easily show negative financial flows, such as debt repayment or reductions in asset holdings, and because it ignores the layers of intermediation among financial firms, such as bank loans to security dealers and insurance company purchases of finance company bonds.

The diagram serves only to illustrate in broad outline the relation between saving and investment on the one hand and the aggregates of borrowing and intermediation shown in table 2 on the other. The financial markets absorb part of saving and supply part of the funds for spending; but the total volume of credit flows as defined here has no necessary relation, dollar for dollar, either with saving or with investment because of the opportunities for internal finance and for borrowing to carry financial assets that the diagram suggests. The effects of restricting or expanding credit flows are thus not necessarily or immediately on saving and investment but rather tend to be diffused throughout the system inside and outside financial markets. Such relations as exist between credit flows and nonfinancial activity must be found analytically and empirically, with credit seen both as borrowing by nonfinancial sectors and as lending by those same sectors.

Historical relationships

The charts on the following pages give examples of the empirical relationships over time that have emerged from the data at the broadest levels of the economy. The charts do not go into specific sector analysis, which would consist of relations among shifts over time in sources of funds, uses of funds, prices, and interest rates, and which can become more complicated than is suitable for this historical survey. The focus is rather on broad aggregates and on the story they tell of changing financing practices and changing financial structure. Some of the relations are close, but they do not point directly to

conclusions about the workings of the economic system as a whole. With credit flows dependent on demands by borrowers for financial assets as well as their nonfinancial outlays, the problem of distinguishing supply and demand is more complex for financial markets than for many other areas of analysis, and has yet to be worked out.

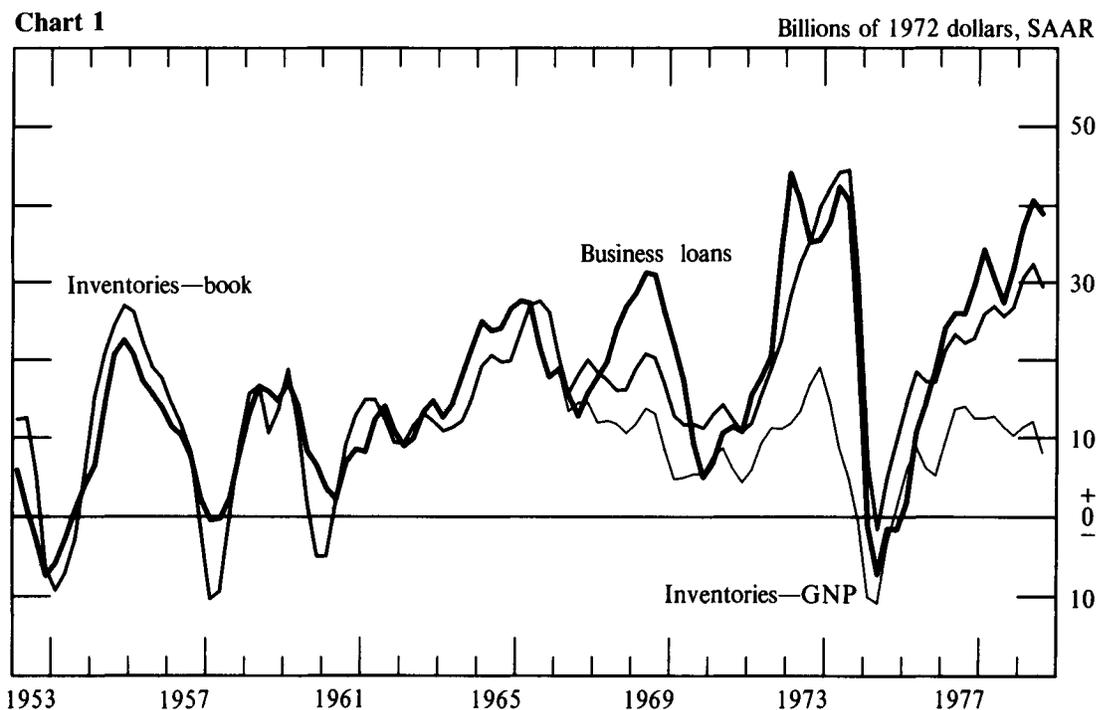
The charts start, somewhat arbitrarily, at the point of household and business borrowing, proceed to the total borrowing by nonfinancial sectors that is pictured in the diagram, connect that total to private financial investment, and summarize the results of these flows in terms of debts and assets outstanding.

The statistical relations of the charts to flow of funds tables are listed in the notes to charts (page 23), which refer to the appendix tables (pages S.1–S.10). Except for the matrices and the two summary tables discussed earlier, the only tables included are those reflected in the charts.¹⁰ Before charting, all of the data used were deflated by a compound index of prices and the 1952–79 trend of gross national product in order to highlight cyclical relationships apart from the strong growth trends over the period in most of the data. A single defla-

tor was used for all of the time series, and a rising trend in any of the plotted series indicates a rate of growth faster than the trend of GNP, although not necessarily faster than GNP growth in any short period. A series with a falling trend is not necessarily decreasing in actual dollar amounts; it may be only increasing at a slower rate than the GNP trend. The deflator itself is presented and described in the notes to charts; it is not directly part of the accounts, which show only current-dollar quantities.

Charts 1 and 2 illustrate the associations that have existed between short- and long-term borrowing in credit markets by business and households, and their spending for capital goods. Capital expenditures here cover all private domestic investment in the national income and product accounts except capital outlays by financial sectors, and they also include purchases of consumer durables, which are consumption spending in the national income and product accounts (NIPA). Chart 1 shows the closely parallel movements of changes in short-term business credit and net inventory movements over the period except for a short time in the late 1960s and during 1973. The relation exists not with the NIPA measure of inventory change, however, but rather with book inventory movements, which include complicated interactions among price movements, inventory turnover rates, and inventory accounting

10. The tables carry annual data for a few years only. They are taken from *Flow of Funds Accounts, 1949–78* (Board of Governors of the Federal Reserve System, 1979).



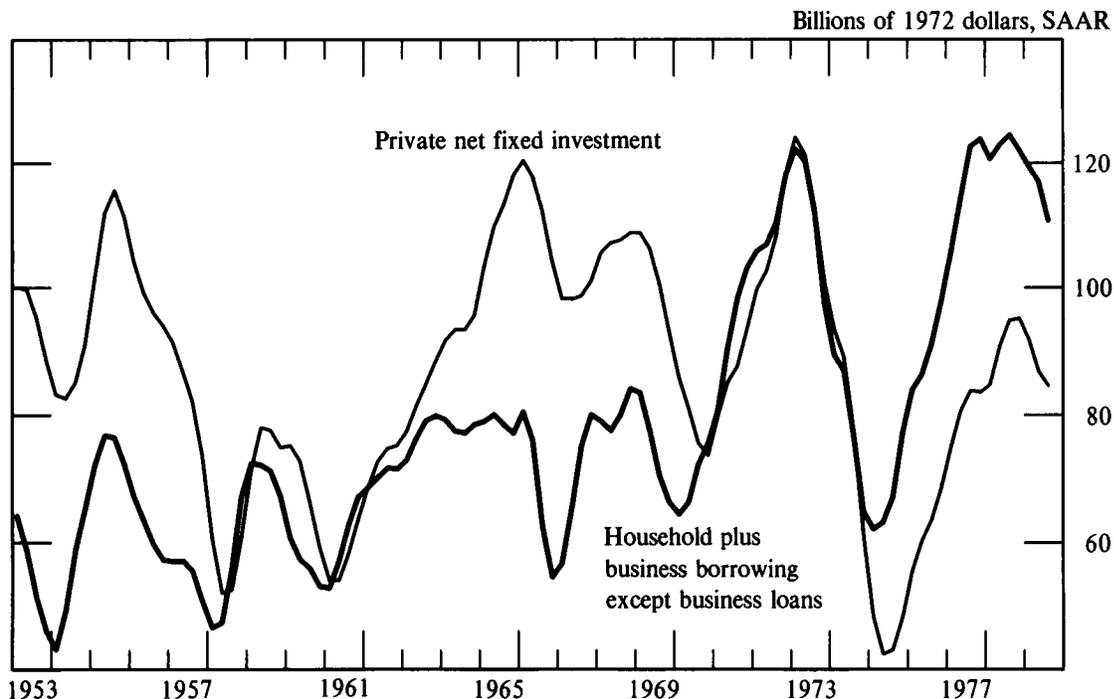
methods such as FIFO and LIFO (first-in-first-out and last-in-first-out). The difference between the two inventory measures is small before the later 1960s on the scale of this chart, and the NIPA measure, which reflects standardized pricing and accounting methods, is shown in the chart only for the later years, when higher inflation rates made the difference substantial. On an a priori basis there is no reason for the closer relation of short-term financing to book rather than NIPA inventory movement because the higher prices that buyers pay during inflation to maintain inventory on a book basis is offset, in general, by higher prices in their sales, and the increased cash flow from sales are available to be used directly to finance higher costs of inventory maintenance. The chart indicates that this is not dominant business practice, however, and that in general price effects of inflation on cash flow appear to be isolated from inventory financing operations. The 1969 and 1973 aberrations in the chart are strong cases of the general tendency for short-term borrowing to grow somewhat more than inventories during cyclical expansions and to fall somewhat more during recessions. This tendency is consistent with increased expectations, as activity approaches a peak, that short-term financing can soon be refunded in longer-term forms at more attractive long rates.

Chart 2 gives a similar pairing of longer-term private investment and credit, which in this chart is

a mixed collection of corporate bonds, mortgages, and consumer credit.¹¹ In the early years shown in the chart the high rate of investment relative to credit raised was centered in housing, in which purchases of new construction were considerably larger than net mortgage borrowing. Beginning in 1961 home mortgage financing shifted upward relative to construction, possibly reflecting an increase in transactions in existing houses; but later in the 1960s this shift was offset by a marked reduction in consumer credit flows relative to consumer durables purchases and by a restraint in business long-term financing relative to outlays. In the later 1960s business relied heavily on short-term credit, as chart 1 shows, but in 1970 long-term financing shifted upward again relative to spending, at first to fund short-term debt and later to take advantage of the expanded supply of both business and housing credit. The years after 1974 contrast with preceding periods in the high rates of private borrowing relative to both capital spending and GNP. After 1974 net borrowing by the group started running at rates well above net fixed investment, primarily because of unusually large financings in residential mortgages. While these flows accelerated the growth rates in debt outstanding during the later 1970s, the high inflation rates of those years acted to mod-

11. Investment appears in charts 2 and 3 net of depreciation charges, which are measured on a current-cost basis, as in NIPA.

Chart 2



erate the rise in debt relative to income and product, as the later charts show.

Chart 3 combines the data from charts 1 and 2 and illustrates the extent to which movements in private capital outlays have been dominant components of GNP fluctuations. The two vertical scales in chart 3 have the same gradient while their absolute values are very different, and only during the Vietnam period of the later 1960s are the movements in GNP substantially larger than those in the investment series. Total private borrowing has almost the same volatility as net investment and thus is almost as closely related to fluctuations in GNP.¹²

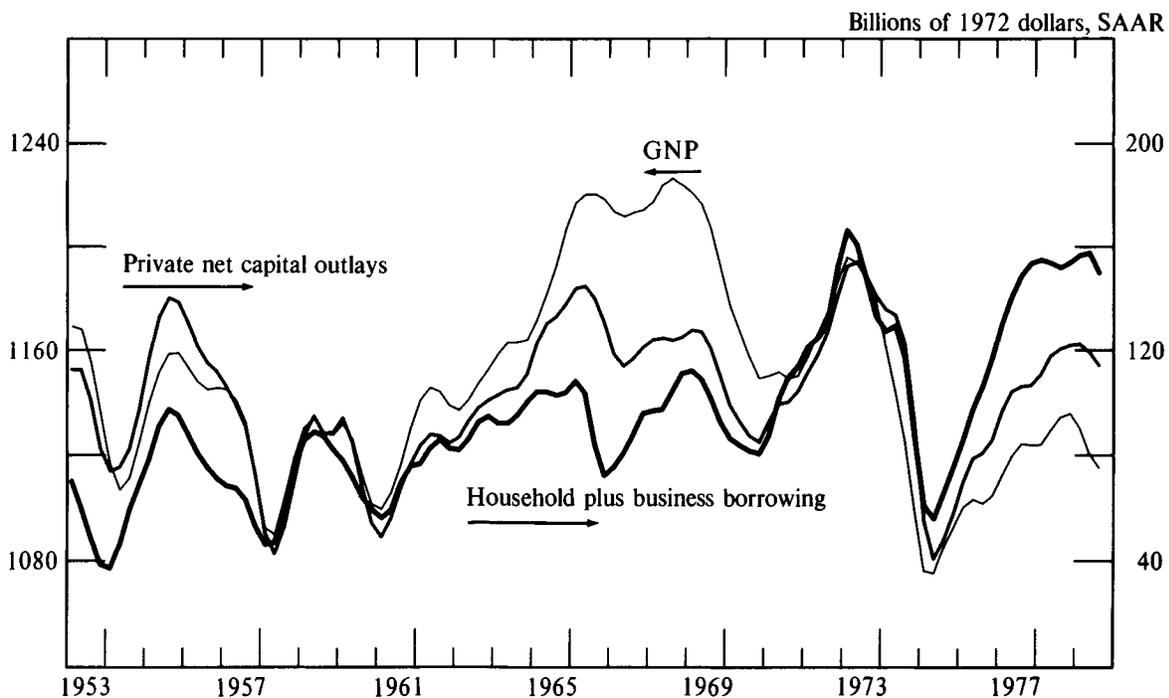
Chart 4 completes the structure of borrowing by adding to the business and household components net funds raised by foreign borrowers, state and local governments, and the U.S. government. Net borrowing by the U.S. government is much the most volatile of these elements and is the source of most of the changes in differences between the pri-

vate and total series. In general its effect has been to shift peaks and troughs into earlier quarters, making total borrowing a slightly leading series at GNP turning points.¹³ Over the 1970s federal net borrowing also contributed considerably to the upward tendency of total credit flows relative to GNP trend, for reasons that are apparent in later charts. State and local governments are a hybrid group in the economy and hence in the social accounts: as governments they are attributed no physical investment outlays in income and product data but as independent decisionmakers these units base their financial planning on much the same market considerations as households and businesses and in this respect are part of the "private" segment of credit markets. Although borrowing by state and local governments is excluded from the private totals in charts 1 and 2 that are related to physical investment, their investment in financial assets is included with other private financial investment in later charts on supply of funds to credit markets.

12. A common practice in current analysis is to measure either investment or net borrowing as a percentage of GNP. The relationship illustrated in the chart—that is, roughly equivalent amplitudes on very different base levels—produces volatile percentage movements relative to GNP that are sensitive indicators of cyclical movements. The chart suggests, however, that the movements in percentages are somewhat beside the point and that comparisons of absolute movements indicate more directly regular and irregular cyclical developments.

13. Turning-point relationships among series are affected by the deflation of the data that was described earlier. With undeflated data, the leading characteristic of total borrowing is more pronounced, because adding growth trends to the data shifts peaks in GNP further into later quarters than peaks in borrowing. The reason is that GNP is a proportionately more stable quantity than net credit flows and has a relatively larger trend component.

Chart 3



Charts 5 and 6 indicate the cumulative effect on debt outstanding that has resulted from the structure of borrowing since 1952 that appears in preceding charts. Within a total debt owed by nonfinancial

sectors that has risen only slightly in relation to GNP, there was a major shift from federal into private liabilities outstanding over the whole period 1953-74, with U.S. government debt shrinking

Chart 4

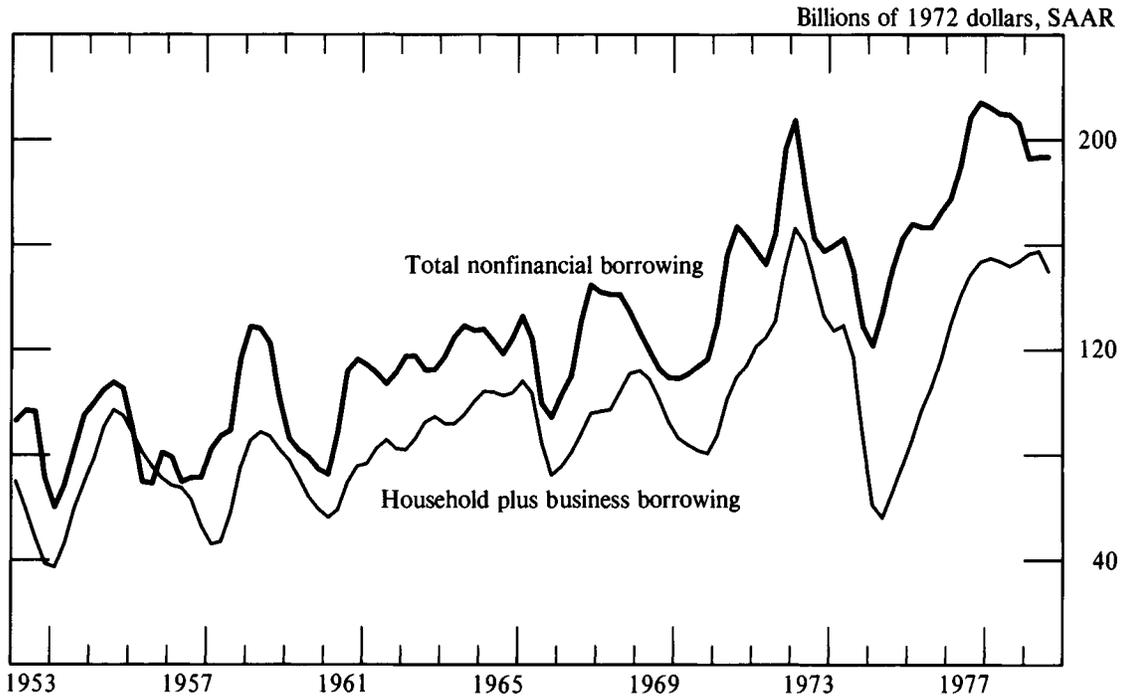
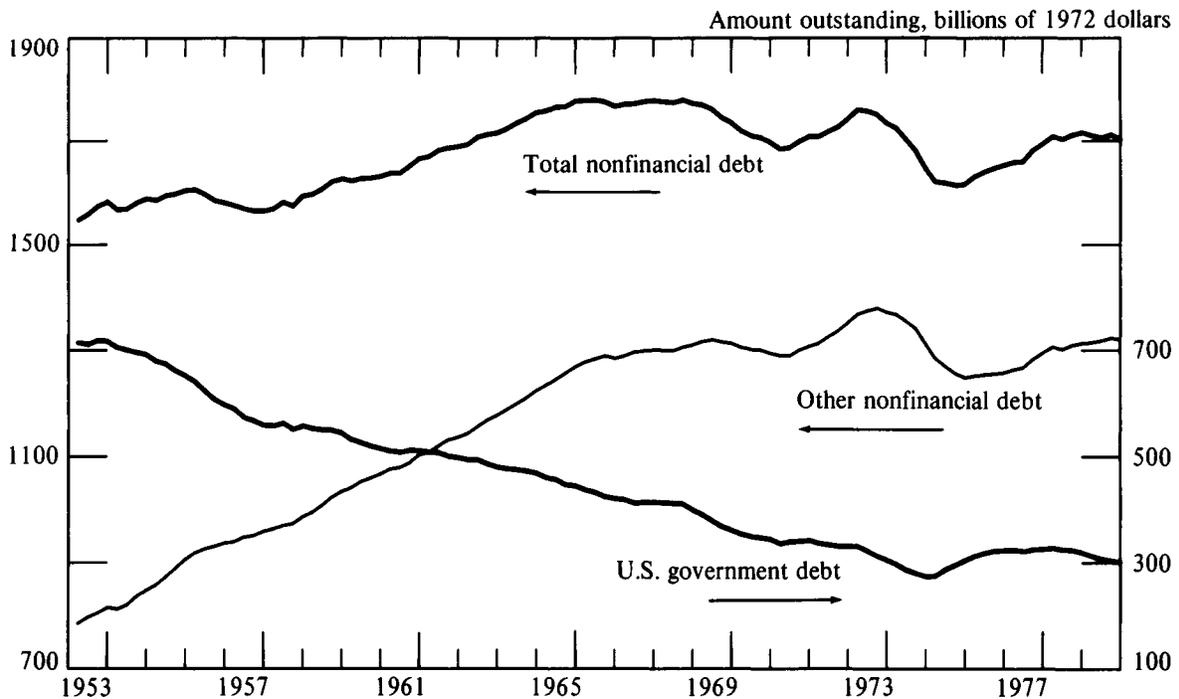


Chart 5



from 47 percent of the total in 1952 to 17 percent at the end of 1974.¹⁴ The explanation for the shift lies in a combination of circumstances: the legacy still remaining from depression and war at the beginning of the period in the form of high public (and low private) debt, the strength of private investment demand stemming partly from the same cause and tending to generate private debt, and the favorable government budget position that reflected strong private demand for goods and services.

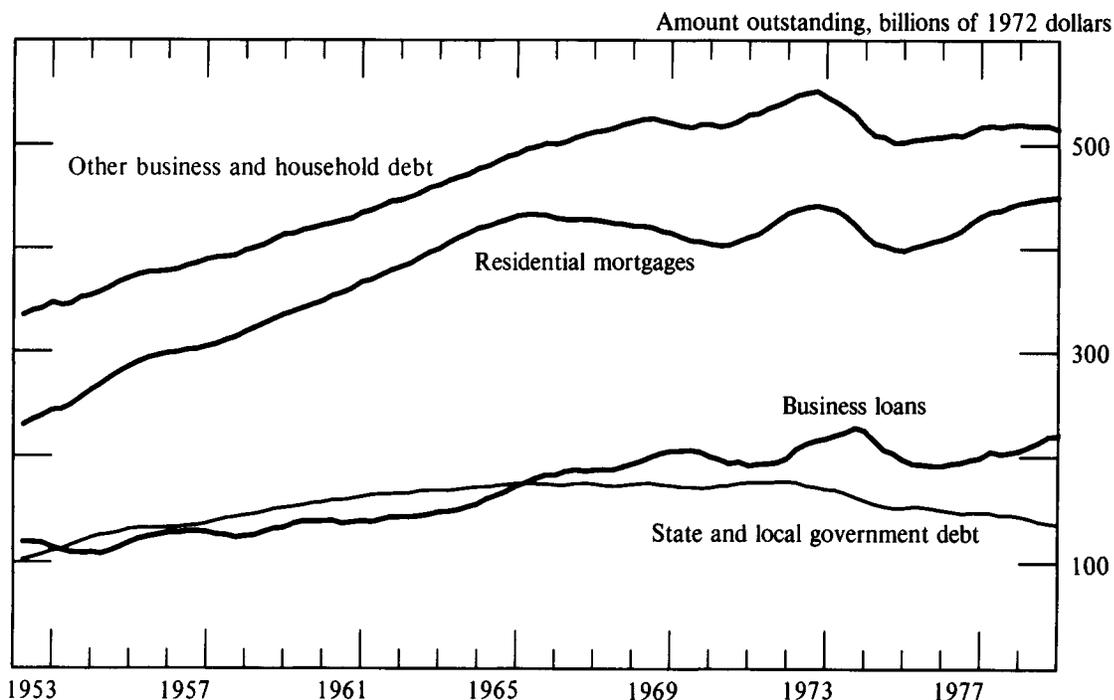
The resulting trends in debt structure were strong but could not be expected to continue indefinitely. Growth of private debt, particularly that of households and state and local governments, slowed markedly after 1965 and has been roughly on a plateau relative to GNP trends since then. A sharp burst of private borrowing in 1972–73 was followed

14. Deflating flows and levels by a single index of growth and prices for the charts creates a special relation between the deflated figures for net borrowing and changes in debt outstanding. If the deflator increases 5 percent a year, borrowing must equal 5 percent of outstanding debt merely to keep deflated debt constant. A borrowing rate of more than 5 percent will raise the debt level, but if the rate is less than 5 percent, deflated debt goes down even with positive borrowing. In the data used for the charts, average growth in the deflator was 6.8 percent per year from 1952 to 1974. U.S. government debt was growing in absolute terms by only 2.2 percent, however, which deflation converted to a 4.5 percent rate of decrease. Private debt, on the other hand, was growing at a 9.4 percent annual rate, well above the deflator. These figures exclude corporate equity issues from both debt and borrowing.

by an equally sharp correction in 1974–75, and while those were turbulent years burdened by food production problems, oil price increases, and an episode of price controls, they also saw a strong runup in capital outlays (charts 1 and 2), and an equally strong reversal in capital spending during the 1974–75 recession. The downtrend of federal debt appears to have come to an end in 1975 and, after a short-run compensation for the drop in private debt, federal debt maintained a fairly stable relation to GNP trends. In the most recent years shown in chart 5 there is some tendency toward resumed growth of private debt offset by decreases in federal debt, and the chart suggests that if private capital formation is to be maintained at adequate rates financing may have to shift from heavy reliance on debt toward greater use of internal or external equity funds.

Chart 6 divides private debt into four types, including state and local government securities. All of these forms were growing relative to GNP trends until 1965, but from then to 1974 only business debt continued an upward tendency. After the 1974–75 correction residential and business loans were the sources of strength that underlay the upward tendency of the total in chart 5. Growth in these debt forms was less than charts 1 and 2 might suggest, however, because much of the flow in those charts was offset by the high inflation rates of

Chart 6



the period and is removed by deflation in chart 6. State and local government debt shows a steady declining trend even after the sizable advance refundings of 1977–78 that are included in the total.

Charts 7 through 12 shift to the supply side of credit markets and summarize aspects of private nonfinancial sectors as lenders rather than as borrowers. As diagram D-1 and table 2 illustrate, most of the total borrowing by nonfinancial sectors that appears in chart 4 has a counterpart in accumulation of financial assets by private domestic nonfinancial sectors, either directly through security purchases in markets or indirectly through investment in deposits or other claims on intermediaries that are lending directly. The relationship is presented in amounts outstanding in chart 7, in which the top line is total debt of nonfinancial sectors, the middle line is holdings of such debt by private domestic sectors including intermediaries, and the bottom line is deposits and security holdings by households, nonfinancial business, and state and local governments.¹⁵

In terms of the model table 2, these are respectively item 5, items 8 plus 12, and item 14. The gap between total debt and the middle line consists of federally related and foreign direct holdings, and the increase in that gap after 1975 reflects mainly the large increases in foreign official holdings of U.S. government securities related to international trade deficits. The gap between the middle and bottom lines consists of net holdings by intermediaries financed by sources other than private domestic deposits and securities: mainly insurance and pension reserves, federal and foreign deposits, and the equity funds of intermediaries. That gap also widened markedly after 1975 as a result of an accelerated flow of funds into pension reserves and the shift of those flows into investments in credit instruments. These developments produced a clear contrast in the chart between the definite upward trend of total debt after 1975 and the essential flatness in private nonfinancial assets, reflecting a strong growth in these other sources of credit market funds.

15. Insurance and pension reserves appear as assets of households in the total accounting structure and on that basis could be included in the bottom line as assets of the nonfinancial group. Such reserves are, however, more remote from day-to-day in-

vestment decisions of households than are their deposit and security portfolios and on that basis are set aside in summary tables and in these charts as a separate financial relationship in the system.

Chart 7

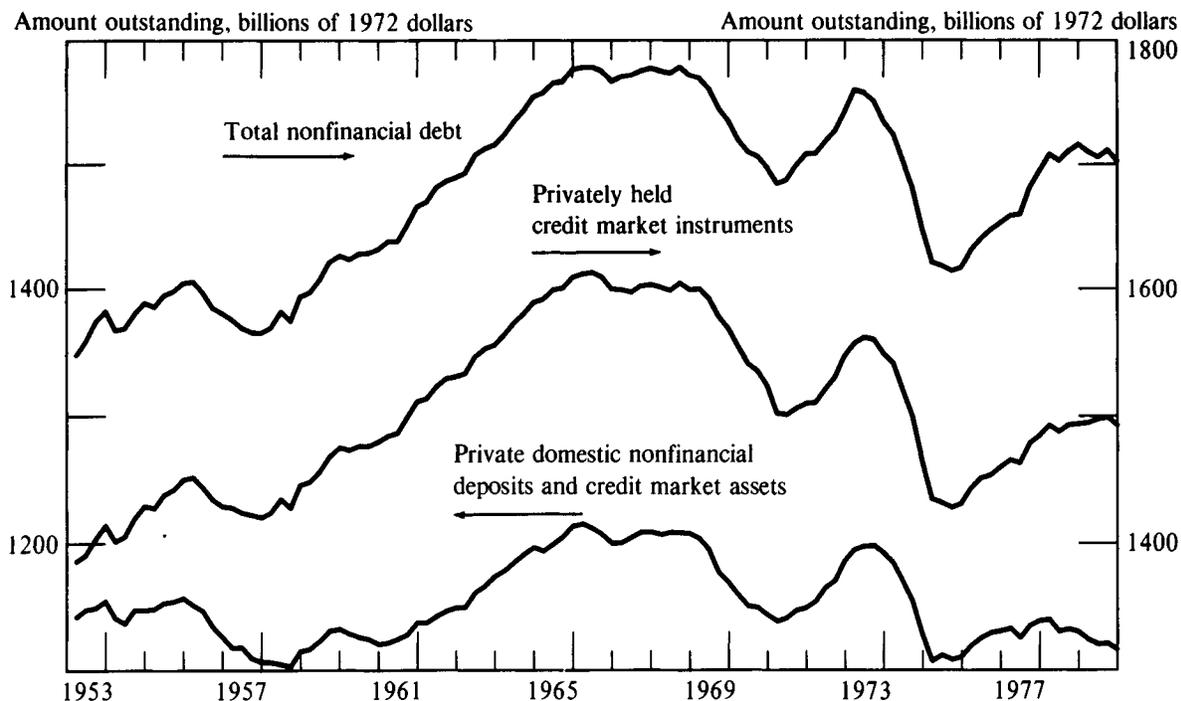


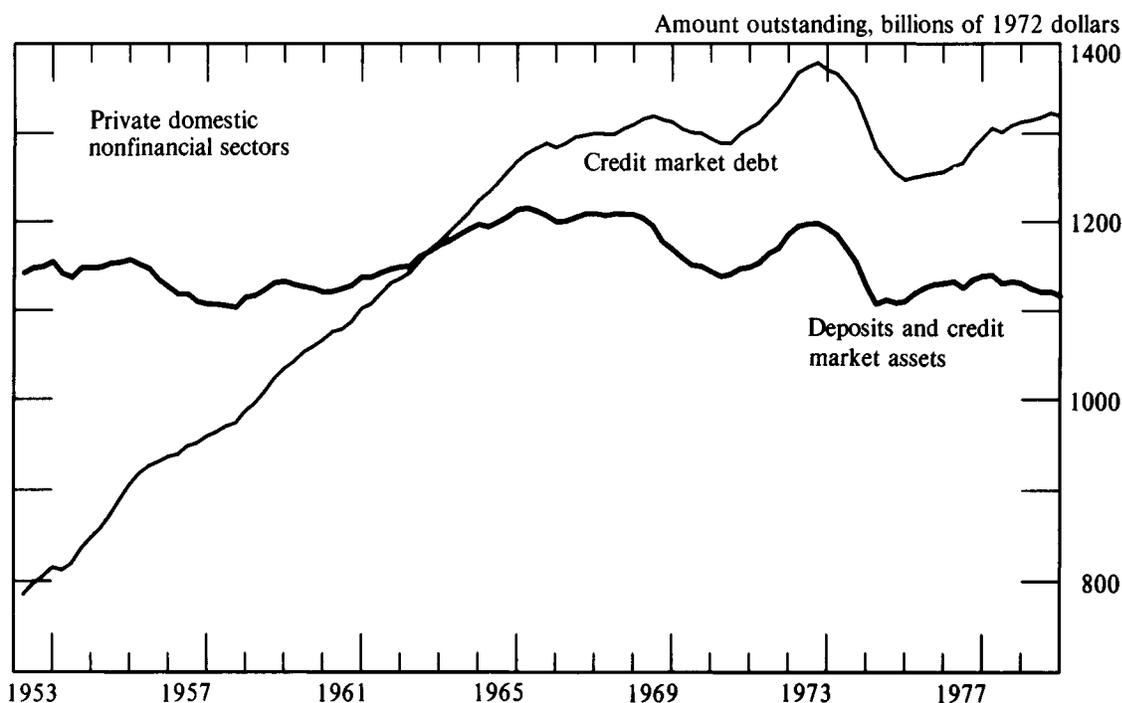
Chart 8 shows the marked shift over 25 years in the relative positions of private financial assets and debt in the economy. This shift combines the relation in chart 7 between private assets and total debt, which had little trend over the last 20 years relative to activity, with the shift in chart 5 from federal to private debt outstanding. The chart illustrates that, to an increasing extent since the early 1950s, the financial assets that private investors hold have come to be based directly or indirectly on claims owed by themselves rather than by others. For the most recent years the widening gap between the two lines in the chart reflects primarily the accelerated flow of pension reserve funds into debt securities mentioned earlier.

Paralleling this change in asset and debt structure has been a sizable increase in the degree of intermediation in financial markets. Private sectors as borrowers must look mainly to financial institutions for mortgages, consumer credit, and business loans, all of which are usually too specialized and too small in individual loan size to be broadly marketable; and even for their marketable debt, such as municipal and corporate bonds, the institutions are important suppliers of funds. As their debts have grown, private sectors as lenders also have turned increasingly to institutional deposits as an investment alternative to the diminishing supply of fed-

eral securities outstanding. Over the period covered in the charts, institutional holdings of credit instruments increased from 68 percent of the total held privately in 1953—the middle line of chart 7—to 84 percent at the end of 1979. Most of this growth was financed by the shift of private investment away from direct market instruments and toward deposits in intermediaries, which increased from 58 percent of private portfolios in 1953—the bottom line of chart 7—to 70 percent in 1979.

That shift in private investment is broadly indicated in chart 9, which divides the private asset total in chart 8 (and chart 7) into its deposit and credit instrument components. The two components have been rather more volatile over the short run than their total has been, reflecting the sizable short-run changes in yield relationships between deposits and market instruments and the shifts of funds in response to changes in the yield spread. Interest rates on most deposits have been much more stable cyclically than have market rates, partly because of regulatory ceilings that have restrained those rates from following market rates upward when credit has been tight. In the sequence of tight financial conditions covered by the chart—principally 1959, 1966, 1969, and 1973–74—high rates on market instruments drew increasing amounts of funds out of institutions and into direct

Chart 8



investment, reflecting widened yield spreads and heightened investor sensitivity to those spreads. Some of the deposit growth in the first half of the 1960s resulted from the development of large negotiable certificates of deposit by commercial banks, which introduced the CDs as money market instruments to attract funds from large investors, such as major corporations, that had been holding liquidity mainly in Treasury bills. With the diminishing position of Treasury debt in the market, the CD became a major investment medium and an important conduit for converting liquidity holdings into bank credit for the growing volume of private debt.

The effect of rate ceilings on deposits was most extreme in 1969, as chart 9 indicates, when CDs in particular fell from \$23 billion at the beginning of the year to \$9 billion at the end (in actual dollars). Following that episode ceilings were lifted on CD rates, and in the 1973 tight-credit period the effect of yield spreads was much more moderate than in 1969.

In 1973 there was also a marked increase in security repurchase agreements held by nonfinancial investors and included in the deposit total. RPs are a short-term form of bank liability that have never

been subject to rate ceilings and that can yield the investor money market rates of return on maturities as short as one day. They are included in the deposit total in chart 9 and are another reason why deposits held up fairly well during 1973–74. After 1977 the introduction of six-month money market certificates of deposit, the growth of money market mutual funds, and other new channels opened access to market yields to much smaller deposits, as little as \$1,000 in some cases; and by the end of the charted period most of the yield-spread incentives toward disintermediation had vanished from credit markets. The effect was to give deposit institutions resilient lending positions during tight credit conditions but at the same time to put an increased part of their liabilities at market rates of interest. This change in their cost of funds was carried through to the rates that institutions charged, which also became more volatile and more market related for all types of loans, including mortgages and consumer credit. The shift toward stronger and more market-related lending positions for intermediaries fitted closely as a structural change with the reduced supply of federal debt as a liquidity instrument for private investment.

Chart 9

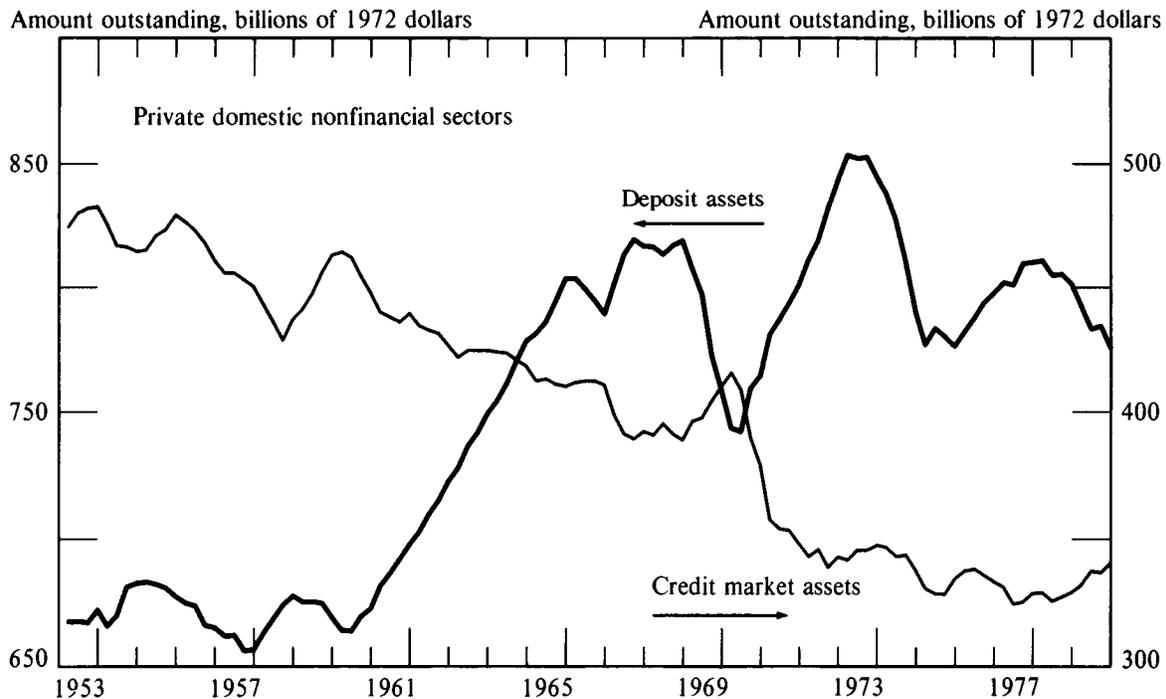


Chart 10 combines again the deposits and credit instruments from chart 9 to compare the total holding—the same total that is in chart 7 and chart 8—with GNP. In spite of the shifts in composition of total assets, the relationship to GNP is unusually close over most of the chart in both movement and—in what is presumably only a coincidence—absolute value. The asset total tends to have somewhat smaller cyclical movements than GNP and shows a slight leading tendency. These differences are small within the total relation, however, and over the span of years covered no significant drift in trend is apparent. The relation is closer than that between GNP and debt totals, with the differences absorbed in connective elements of credit supply, such as government, foreign, and pension reserve sources of supply, that constitute the gaps between the three lines in chart 7.

This connection between private financial assets and activity is, like the rest of the material in the charts, an empirical “black box” in that it neither supports nor is explained by any broadly accepted

analytical system. Without analytic support there is no basis for predicting whether it will continue under other economic circumstances, such as chronically higher inflation rates or slower economic growth rates. The persistence of the relation on a quarterly basis nevertheless suggests a connection between activity and asset holdings that may be a macroeconomic constraint of importance both to forecasting and to policy. That it is closer than the debt relation to GNP suggests further that changes in other forms of credit supply may be the source of changes in the debt relation and whatever consequences follow from the debt movements. During 1976–79, when a marked increase occurred in both net foreign and pension reserve supply, private borrowing was high (chart 3), and private debt rose faster than trend (chart 5), with very little effect on the asset connection in chart 10. A continuance of such conditions could lead into dangerously burdensome levels of private debt without the corresponding rise in private liquidity that accompanied the 1972–73 debt increase.

Chart 10

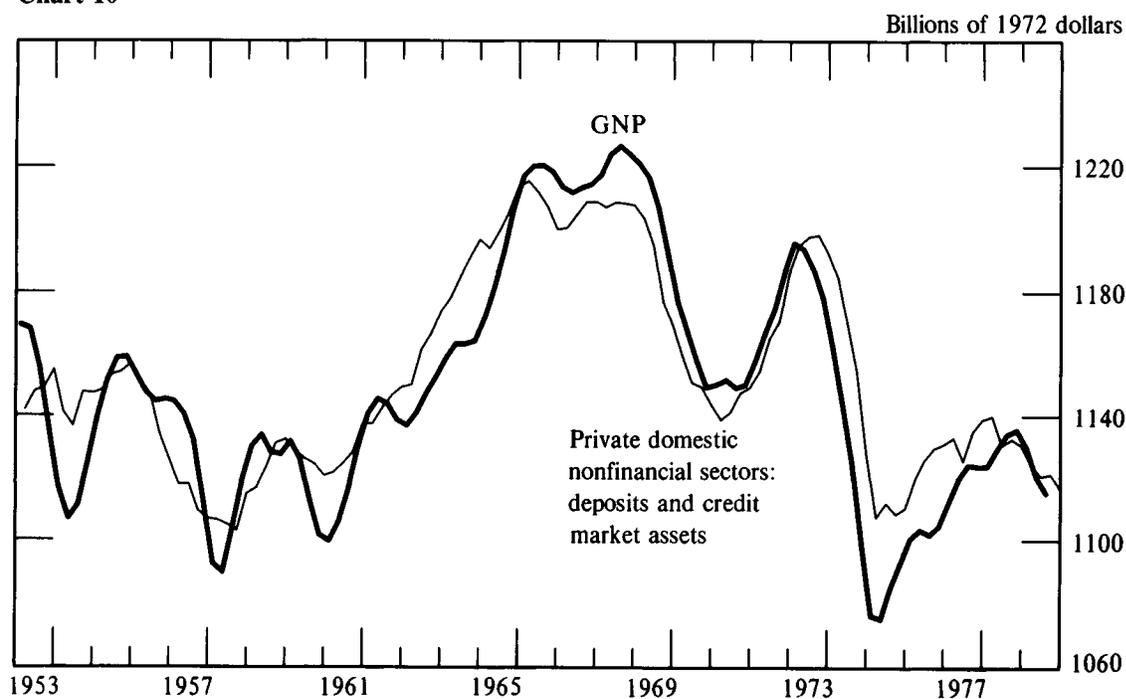


Chart 11 breaks out the household component of private assets to illustrate the drift in sector distribution of holdings within the total. Over the period of the chart the household share increased from 71 percent of the total to 82 percent, with an offsetting decrease, from 19 to 10 percent, in holdings by nonfinancial business—mainly business liquid assets. State and local government holdings rose from 6 percent of the total to 8 percent, even with a declining trend in their debt outstanding. Statistically, the total is more reliable than its parts, particularly the distribution between household and business assets, and the shift may be weaker than source data suggest. For corporations, however, a drop in liquid asset position from the early 1950s is fairly well supported, and there is little question that over 25 years corporations have held diminishing amounts of a total that has stayed almost constant relative to GNP.

Chart 12, finally, introduces corporate equity holdings into the picture. The preceding charts have focused on debt instruments, both as liabilities and as assets, and the relationships have appeared for this total of claims. Equities have a separate position in the financial system in that as liabilities they are only residual claims and, in a legal sense at least, are not burdens on issuers. In the flow tables net new stock issues appear as external sources of funds to business and as net financial uses of funds

by investors. In tables on outstanding assets and liabilities, however, they appear only as assets valued by market prices, and no specific liability for them is attributed to issuers. While net purchases of equities are a small component of household financial investment, holdings valued at market are a major part of household assets, as large as all deposits and debt securities over much of the period of the chart. Chart 12 illustrates that such holdings are also far more volatile in amount than other financial assets because of movements in stock market prices.

There is a mild correlation between changes in the two that is obscured by the compression of the vertical scale of chart 12 needed to cover movements in stock values. In the deflated dollars of the chart, equity values have moved by roughly \$7 for each \$1 change in holdings of deposits and credit instruments, neglecting the many short-term perturbations in the equity series and some irregularities in the timing of movements. There may be interaction between the two totals that is exaggerated for equity values because of the lack of net flows of new issues, but to some extent the two series are probably also responding in parallel to other conditions in the economy.

The shift in credit structure from directly held central government debt to intermediated private debt, which is a dominant feature of the charts, is put into another perspective in table 3. This table

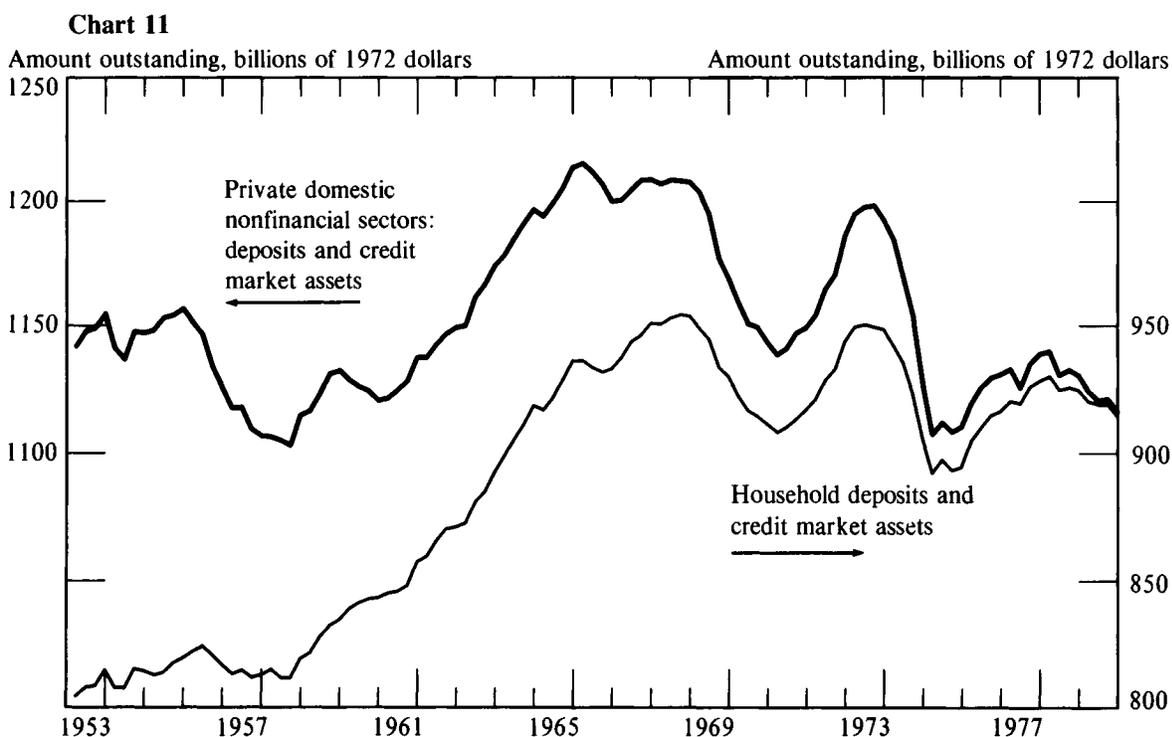


Table 3. Private claims on U.S. government institutions
Amounts outstanding at year end in 1972 dollars, trend removed

Item	1952	1965	1974	1978	1979
1. Total claims, by type	807	500	362	423	418
2. Currency in circulation	98	71	60	58	57
3. Member bank reserves	64	31	20	16	14
4. Foreign deposits at Federal Reserve Banks	2	*	*	*	*
5. U.S. government securities	643	397	282	348	346
6. Holdings, by group	807	500	362	423	418
7. Foreign	15	23	45	71	57
8. Private domestic	792	477	317	352	361
9. Financial	399	220	136	166	165
10. Nonfinancial	393	257	181	186	196
11. Currency outside banks	89	63	52	51	49
12. U.S. government securities	304	194	130	136	147
MEMO: Private domestic nonfinancial sector					
13. Total deposits at financial institutions	571	740	738	751	731
14. Total money, deposits, and credit instruments	1,134	1,213	1,128	1,131	1,121
MEMO: Financial business holdings of reserves and credit instruments					
	1,149	1,648	1,493	1,518	1,528

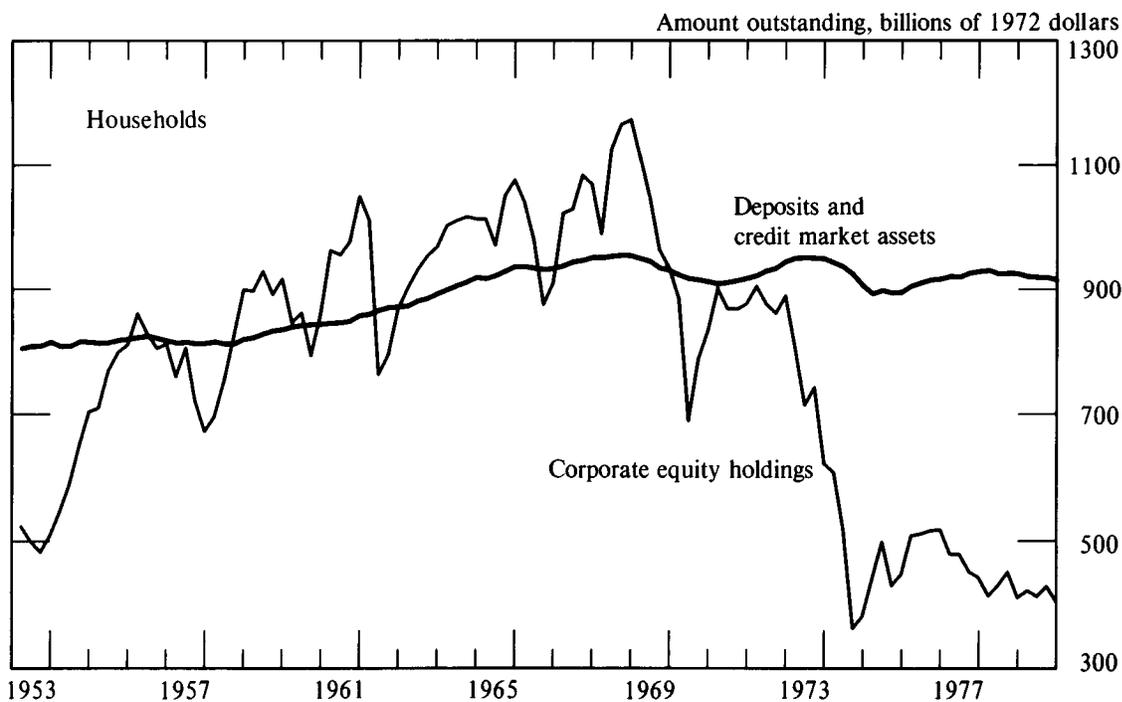
*Amount insignificant.

pulls together, again in detrended and deflated dollars, a set of claims on the U.S. government and closely related institutions as a proxy for a total of basic reserve assets that are available for private investment. The set of claims is broader than government debt in chart 5 in that it includes reserve money and also the debt of federally sponsored

credit agencies and mortgage pools; these have played a greatly expanded role in recent years as government-related intermediaries, lending housing and farm credit on the basis of public issues of their own debt.¹⁶

16. The total is also a little narrower than that in chart 5 in that it omits government debt held by the Federal Reserve.

Chart 12



The total of these reserves fell sharply from the 1950s to 1974 but then moved upward again with the reversal in trend of U.S. government debt. Part of the rise after 1974 was absorbed by foreign intervention operations in international exchange markets. Domestic holdings, on row 8, also went up, however, in both Treasury and federally sponsored securities. The rise in domestic holdings of Treasury securities beginning in 1975 was mainly in financial institutions, which for various reasons had gone into extended and illiquid positions by the end of 1974. Much of the increase reflected a shift of pension fund and insurance investment flows away from equities and toward high-grade debt instruments. That shift was prompted by legislation and may have been a one-time adjustment toward an asset structure that will be maintained in the future with a smaller current demand for Treasury securities. Banks almost doubled their Treasury security holdings in 1975–76 as part of a recovery from a heavily loaned position at the end of 1974 that was the counterpart of the high private debt that appears in chart 5. The picture here is of an unstable financial condition at the end of 1974 that was followed by abrupt but interrelated corrections by both financial and nonfinancial sectors in both assets and liabilities. These corrections were followed after 1976, however, by a return to many of the earlier trends that had led into 1974, with the possibility of an early repetition of the 1974 experience.

One of the effects of the increasing exposure of private finance in credit markets has been the burgeoning of the federally sponsored credit activities mentioned earlier. While operating in specialized credit markets—mainly housing and farm credit—the sponsored agencies expanded their debt on row 5 of table 3 from \$7 billion in 1952 to \$102 billion at the end of 1978 (in the deflated dollars of the table) to finance an almost equal increase in their holdings of private credit. If private debt continues

to grow relative to activity, these agencies will probably absorb a rapidly increasing share of the total growth accompanied by growth in a variety of government guarantee programs for private credit. Direct lending and loan guarantee operations by the government have focused on particular kinds of credit that have been in difficulty, and they are seen mainly as a method by which the government can help those loan markets to compete against other kinds of demand. While the agencies appear sometimes to be “draining” loanable funds from private markets and creating credit tightness that would not exist otherwise, they also perform an important function in supplying an investment and liquidity instrument—in the form of their own debt—of a kind that has become increasingly scarce.

This review of the historical data has not tried to explain analytically the cycles and trends of postwar financial developments or to point up trends with alarm. Its purpose has been rather to illustrate main connections within the flow of funds accounts among lending, borrowing, balance sheet positions, and nonfinancial activities—connections that are close over the period covered and that are basic data for analysis of the economy as a whole. Some of the connections have shown tendencies to shift over the period, and financial markets have responded with facility and speed in adapting to new practices and new financial instruments. These changes in financial flow structure usually appear in individual markets or sectors and can be explained to some extent by detailed analysis of those markets or sectors. They occur within the frame of the whole, however, and are in part reactions to changes in that frame. Whether as a framework that constrains particular markets or as elements acting on one another within a system, the main members of the structure appear to have an empirical existence that should be recognized explicitly in the data and in analysis of the data. □

Notes to charts

All data in charts 1 through 12 have been deflated by a single compound index (1972 = 100) that is the product of (1) the U.S. nonfinancial population 16 years of age and over, (2) the GNP price deflator, and (3) an exponential growth trend in deflated GNP per capita found by least-squares regression to be 1.8 percent per year for the period 1952-79. After deflation, all flow data are plotted as centered two-quarter moving averages (three quarters weighted 1-2-1), with 1953 Q1 and 1979 Q4 omitted from the charts. Assets and liabilities outstanding are deflated by

the same index, but they are plotted directly, not as moving averages. To eliminate quarterly seasonality of outstandings the year-end levels were incremented to other quarters of each year by the seasonally adjusted quarterly flows. Corporate stocks are omitted from all data in the charts both as assets and as liabilities except in chart 12.

Data for the charts are derived from tables at the back of this publication (pp. S.1-S.10) and are identified in the following list:

Chart	Item	Table	Line
1	Net change in inventories	S.10	9, upper section. Book value = line 9 less total IVA
	Business loans	S.10	18 + 19, upper section
2	Private net fixed investment	...	Table S.8, 13 - 10 + Table S.10, 5 less capital consumption
	Households + business borrowing except business loans	S.4	27 + 28 upper section less business loans in chart 1
3	Private net capital outlays	...	From charts 1 and 2
	Households + business borrowing	S.4	27 + 28 upper section
4	Total nonfinancial borrowing	S.4	2, upper section
	Households + business borrowing	S.4	27 + 28 upper section
5	U.S. government debt	S.6	2
	Other nonfinancial debt	S.6	5
6	Business loans	S.10	12 + 13, lower section
	Residential mortgages	S.6	10 + 11
	Other business + household debt	S.6	21 + 22 less business loans and residential mortgages
	State & local government debt	S.6	20
7	Total debt	S.6 & S.7	1, total credit market debt owed by nonfinancial sectors
	Privately held credit market instruments	S.7	12
	Private domestic nonfinancial sector deposits and credit market assets	S.7	48, credit instruments, deposits, and currency
8	Deposits and credit market assets	S.7	48
	Credit market debt	S.6	5
9	Deposit assets	S.7	38
	Credit market assets	S.7	32
10	Deposits and credit market assets holdings	S.7	48
11	Deposits and credit market assets	S.7	48
	Household deposits and credit market assets	S.9	2
12	Deposits and credit market assets	S.9	2
	Corporate equity holdings	S.9	19 (at market value)

Fourth-quarter values of the deflator are presented below in reciprocal form, as multipliers against actual data:

1952	3.233	1959	2.280	1966	1.581	1973	.872
1953	3.136	1960	2.176	1967	1.483	1974	.758
1954	2.995	1961	2.095	1968	1.366	1975	.681
1955	2.833	1962	1.986	1969	1.250	1976	.627
1956	2.661	1963	1.885	1970	1.144	1977	.570
1957	2.516	1964	1.794	1971	1.051	1978	.509
1958	2.408	1965	1.693	1972	.972	1979	.453

Section 2: Organization of Accounts

Section 1, on the concept of flow of funds accounts, describes the system only in broad terms and does not constitute an operating description of the system. Sections 2, 3, and 4 define the accounts in terms of the rules that organize the system, the relation of the accounts to income and product information, and descriptions of individual sector and transaction categories. Statistical derivation procedures for individual items in the accounts and procedures for processing source data are described in a separate publication.

Section 1 emphasizes that the matrix organization of data is fundamental to the calculation, understanding, and analysis of flow of funds information. The matrix is also the organizing principle for the statistical tables in flow of funds publications, each of which is a statement, in time-series form, of one column or one row of the matrix taken as a balanced account of debits and credits. The tables for individual columns are sector statements of sources and uses of funds, while the tables for rows summarize purchases and sales in markets for individual transaction categories. Tables of contents are organized to indicate the matrix structure of the time-series tables as directly as possible. This section describes in more specific terms the organization of the matrix of accounts and hence of the system itself. References to the matrix are to the table on page S.1 of the statistical section.

As a device in social accounting, the flow of funds matrix has the following characteristics:

1. Sectors. The economy is divided into major groups of transactors, such as households, businesses, and governments. These groups are termed sectors in flow of funds discussions and consist of sets of commonly identifiable economic units. The term sector thus always has an institutional meaning in these accounts, contrasted with many other bodies of data, economic models, and analytic discussions in which it sometimes refers to types of activities, as in the investment sector or the financing sector. Investment and financing are forms of activity that any institutional group might undertake and are referred to here as types of transactions (see item 3 below).¹⁷

¹⁷ Noncorporate business is an exception to this principle, as discussed in section 4.

2. Sector uses and sources. A pair of columns, one for payments (U for uses of funds) and one for receipts (S for sources of funds), is established for each sector, and all transactions by the members of the sector are reflected in one or the other of these two columns.

3. Financial transaction categories. All payments and receipts of each sector are classified into standard categories, which constitute the rows of the matrix. Just as each family, firm, or governmental unit is classified entirely in one or another column, so each individual financial claim—such as a savings account passbook or a single Treasury bill—is exclusively in one or another row, and all transactions in that claim are recorded in that row. Summation of all uses of funds along a row and across the sectors of the matrix gives a total of outlays made to acquire a particular kind of asset, whereas summation of sources along a row yields a total of funds raised in that particular manner.

4. Financial sources and uses. Financial claims are shown in the S column of a sector only to the extent that members of the sector issued such claims as liabilities to raise funds. Correspondingly, transactions in the U columns refer only to dealings in the claim as an asset. Sale of the claim as an asset is a negative offset against acquisitions of claims in the U columns, and debt repayment is an offset to borrowing in the S columns.

Gold and special drawing rights (SDRs) are treated as financial assets but not as liabilities. Gold is a metal widely used as a monetary reserve, but it is not owed by anyone to the holder, and SDRs are of the same nature. All transactions in these items appear as purchases and sales of assets in the U columns of the matrix.

Net new issues of corporate equities appear as sources of funds to issuing sectors, but in tables on outstanding assets and liabilities most corporate equities, like gold and SDRs, are shown only as assets. As residual claims on corporate net worth, equity securities do not constitute specific liabilities of business that can be stated in the accounts.

5. Financial market summaries. Each purchase of a claim is always someone else's sale of that same claim. Hence, taking the economy as a whole

and including transactions with foreigners, total funds raised by issuing a particular type of claim are necessarily equal to total funds used to acquire that claim as an asset.

Total borrowing then equals total lending in any type of claim and for any set of claims taken together. Each row or set of rows for financial claims therefore is a summary of all funds coming into and going out of a particular financial market or set of markets.

6. Floats in financial transactions. Because in many instances a single transaction is not entered into the books of the buyer and seller on the same day, there are many discrepancies in the basic accounting records of the economy between total assets and liabilities outstanding. The result is a certain amount of floating supply of claims as assets or liabilities that is an exception to item 5 above. In the flow of funds accounts, the floats that can be estimated appear in the Discrepancy column of the matrix (discussed under item 10 below).

7. Nonfinancial transactions. The first ten rows of the matrix are for each sector a condensed summary of all nonfinancial transactions—payments and receipts for wages, goods and services, taxes, and transfers. Current receipts and payments are netted into a sector total of saving, while purchases of physical capital are shown separately.

Cumulated across the columns for *domestic* sectors, the row for saving adds to total saving in the U.S. economy, which is shown in a memo column (National saving and investment). The physical investment rows add across in a similar way to total capital formation in the economy.

8. Sector balances—saving and investment. As an accounting matter, every receipt of funds by an individual or a sector is reflected in one or more uses of funds, if only to increase cash balances.¹⁸

18. In the flow of funds context the terms source of funds and use of funds mean no more than the standard terms credit and debit in double-entry bookkeeping. The sector statement is not a traditional sources and uses of funds aimed at explaining movements in a single item such as working capital, bank reserves, Treasury cash, or gold and foreign exchange. Any such single item in the accounts is a concept of funds special to one or another activity in the economy. When parallel statements are set up for all sectors, there is no one concept of funds that can be useful uniformly across the matrix. Even cash loses its generality in this setting, because cash of the public is different from cash of a bank or monetary reserves of a central bank. Hence the flow of funds statement evolves to a generalized form in which the funds themselves vanish, and there remains only the balance between total debits and total credits.

For each sector, then, a balance exists (except for statistical discrepancies) between total sources and total uses of funds. This balance can be shown in a variety of ways, but in the matrix presented on page S.1 sector-account balances are shown as an equality between gross saving of each sector and its gross investment (rows 1 and 4 of the matrix). The concepts of saving and investment used here for sectors are the same as those applied to national aggregates, and for each sector saving equals investment in the same sense as for the total economy. For each sector saving equals that sector's physical capital formation plus a net financial investment that measures the sector's excess of lending to other sectors over its borrowing from other sectors. At the national level, similarly, total saving equals capital formation plus net foreign investment, where the latter is the excess of lending abroad over borrowing from abroad.

With this accounting structure, the particular types of financial transactions by a sector, both borrowing and lending, are subcategories under net financial investment. The totals shown for financial sources and uses of funds by a sector in general include financial flows within as well as between sectors. It is only in the net of the two totals, where intrasector flows are canceled out, that the financial figures become intersector flows. This netting is carried across to the national total of net financial investment, where all domestic flows are washed out and where net financial investment of the economy becomes identically equal to net foreign investment.¹⁹

9. Balance of the matrix as a whole. The effect of the preceding eight items is to produce in the matrix a severely constrained accounting system that undertakes to place every transaction of the economy into direct juxtaposition to its counterparts, both vertically in sector accounts and horizontally in transaction or market-summary accounts. Horizontally the matrix is constrained by the equalities between saving and investment, between total nonfinancial sources and nonfinancial

19. Net foreign investment is measured in flow of funds accounts from capital flows (that is, the net of financial flows) in the international transactions statement, whereas net foreign investment in the national income and product accounts is measured from the current account—exports less imports and net transfer payments. The difference between the two measures is the statistical discrepancy in the international statement, shown in the matrix as the sector discrepancy (row 44) for the rest-of-the-world sector.

uses of funds, between net financial investment and net foreign investment, and between total borrowing and total lending in each financial market. Vertically it is constrained by the equality between saving and investment by each sector and for the economy as a whole.

The upshot of these constraints is that in using this organization of data as a framework for analysis—construction of models, simulation exercises, forecasting, or estimation of the data—no one cell of the matrix can be altered without changing at least three others: one in another row of the same sector column, one in another column of the same row, and at least one other for the second column and second row.

10. Discrepancies. The matrix includes a Discrepancy column and a Discrepancy row to absorb unaccounted entries in transaction rows and sector columns. The Discrepancy column carries the net sums of sources of funds less uses of funds across rows, and the sector-discrepancy row carries correspondingly the net sums vertically. Because all elements of the matrix are reflected in both of the two accounts, they add to identical net totals in the corner of the matrix.

While they are net totals in the matrix, the two discrepancy accounts can also be viewed as a final sector and a final transaction account in a matrix that identically adds to zero in both directions. With that viewpoint, the statements in item 9 on constraints take on added generality, since one option in changing the matrix is to alter sector or transaction discrepancies. Indeed, if any single cell within the matrix is altered without explicit offsetting adjustments, the three other changes will automatically be in a sector discrepancy, a transaction discrepancy, and the joint sum of sector-transaction discrepancies.

All discrepancy entries have the sign of net uses of funds (the net sum of all sources minus allocated uses in an account). This is an arbitrary convention; it happens to be the same as that used in international transactions statements and the opposite of the convention in the national income and product accounts, in which the statistical discrepancy is on the saving side of the capital account as a net source.

11. Matrix as capital account. The most general and most important characteristic of the matrix is that it constitutes a capital account for the economy as a whole deconsolidated among a number of institutional sectors. It is a capital account in the sense that it is a statement of acquisition of assets—both physical and financial—together with the sources of funds used to acquire those assets. For each sector the entry for gross saving is the net sum of internal sources of funds—a residuum of current receipts less current outlays—and constitutes in the matrix an addition to sector net worth plus capital consumption reserves. Investment is stated gross of capital consumption and net of borrowing and is thus a use of funds consistent with the saving concept as a source.

The matrix deconsolidates among sectors the capital account of the national income and product statistics. The nature of the matrix as an expansion of that capital account into individual sectors, and into individual financial markets, is central to the concept of flow of funds accounting and analysis. The position of the income and product capital account in flow of funds is discussed in section 3.

As already mentioned, each table in the sector and transaction accounts is a statement in time-series form of one column or one row of the matrix. The sector tables are statements of sources and uses of funds, and the transaction tables cut across sectors to summarize flows into and out of individual markets. Any one cell of the matrix appears in both a sector table and a transaction table and is a link between the two.

This simple matrix organization of flow of funds tables allows flexibility in grouping of the data for specific purposes. Flow of funds data lend themselves to many views of economic activity, and each view characteristically needs its own summary structure, with particular items or relationships emphasized. The matrix itself provides a map from which more condensed systems can be designed with explicit indication of where each cell will fall and with assurance that balance of the accounts as a whole can be maintained to the degree necessary. □

Section 3: Relation to National Income and Product Accounts

As stated earlier, a major purpose of the flow of funds accounts is to relate developments in financial markets directly to the nonfinancial activities of the economy. For that purpose, the nonfinancial economy is taken to be measured by the scope, definitions, and data of the U.S. national income and product accounts (NIPA) published by the Bureau of Economic Analysis (BEA) in the Department of Commerce. The capital accounts for individual sectors of the economy that are pictured in the matrix on page S.1 are in accounting form essentially a deconsolidation of the single capital account published by the Commerce Department in, for example, the July 1979 *Survey of Current Business* (SCB), as table A-5, "Gross Saving and Investment," on page 25 and as table 5.1 on page 47. The account appears in quarterly income and product estimates in SCB as table 15. In that account all financial claims within the United States are offset against one another in a national consolidation of all capital account activity. There is thus no recording of financial flows within the economy or of financial investment by individual sectors. The consolidation leaves a measure of net financial investment for the economy as a whole that is conceptually the same as net foreign investment—the excess of U.S. lending abroad over U.S. borrowing abroad.

The flow of funds deconsolidation distributes the national totals of saving and tangible investment

among domestic sectors. It introduces explicit recording of financial flows among sectors, detailed by type of instrument, that indicates the routes—direct or through intermediaries—by which sectors, such as households that have excesses of saving over physical investment, lend to sectors, such as business and governments that may have an excess of spending.

The position of the Commerce Department capital account in the flow of funds system is described in tables 4 and 5, by using data for the year 1972. These tables refer to Commerce Department categories of saving and investment as presented in *The National Income and Product Accounts of the United States, 1929-74*, published as a supplement to SCB in 1977.

Saving and investment totals

Table 4 gives the relationship between the national totals of saving and investment in the two systems of accounts. Total gross national saving (line D) in the flow of funds accounts is equal to the Commerce Department total, with the major exception that purchases of consumer durables have been treated in the flow of funds accounts as capital expenditures rather than as consumption. This shift produces a smaller amount of current outlays and a

Table 4. Gross saving and investment, comparison of two systems, 1972¹

Millions of dollars

Item	Income and product accounts	Flow of funds accounts	Difference	Source of difference
A. Gross private saving	180,354	303,560	123,206	Rows B, E, and I
B. Government surplus	-3,516	-15,152	-11,636	Insurance and pension reserves
C. Capital grants to the United States	710	—	-710	Omitted in F/F flows
D. Gross national saving	177,548	288,408	110,860	Rows C, E, and I
E. Gross private domestic investment	188,275	299,516	111,241	Consumer durables
F. Net foreign investment	-9,046	-11,676	-2,630	Rows C and J
G. Gross national investment	179,229	287,840	108,611	Rows E and F
H. Statistical discrepancy (D minus G)	-1,681	568	2,249	Rows I + J
I. Wage disbursements less accruals	...	...	329	Omitted in F/F flows
J. Statistical discrepancy in international transactions	...	...	1,920	F/F row F is based on capital flows rather than current-account balance

1. F/F = Flow of funds.

larger amount of saving' in flow of funds accounts than in NIPA.²⁰

This treatment of consumer durable goods is based on the consideration that expenditures on those goods are, in a financing context, closely similar to those on producers' durables: (1) a household purchase of durables typically represents an investment in a product that will be useful over a period of several years; (2) consumer durable goods substitute to a significant degree for related business capital equipment; and (3) purchases of durable goods are debt-financed to a large extent. To bring consumer durable goods into the complex of saving and investment, a total for household saving is taken before deduction for these purchases, and total saving and investment are correspondingly higher.

A second, smaller difference in the two totals of saving is in the treatment of allocations to the United States of special drawing rights when these are created and distributed by the International Monetary Fund. Such allocations occurred in 1970, 1971, 1972, and 1978, and in the Commerce accounts they appear as capital transfers from abroad, a component of saving that offsets the rise in SDR holdings included in net foreign investment. SDR allocations are reflected in asset holdings in flow of funds accounts, but they are omitted from flows as not actually transactions.

Flow of funds accounts have a somewhat different distribution from Commerce accounts between private and public saving. This difference arises from the treatment of government life insurance and retirement fund activities. In the Commerce accounts transactions of government life insurance and retirement funds with households are treated as social insurance contributions and transfer payments in the current account, both part of personal income. In flow of funds, however, life insurance and pension claims by households are established as part of household assets, and claims of these types against government funds are treated the same as claims on private insurance and retirement funds. Growth of government reserves is thus taken to reflect not a current surplus in government accounts but rather an increase in liabilities owed to households. This difference in distribution shifts saving from governments to households relative to the

20. The shift includes introducing capital consumption allowances for consumer durables but is made without imputing income from use of durables to total income or services from durables to product.

Commerce Department accounts but has no effect on total saving.²¹

Federal government insurance funds are consolidated directly into the flow of funds sector account for the U.S. government, where net growth in insurance reserves is deducted from current surplus and appears as a financial source of funds under liabilities. State and local employee retirement funds, however, are shown as a financial sector separate from the operating accounts of these governments. The treatment there is to transfer saving from general government (in the flow of funds state and local governments—General funds sector) to households, and to impute a lending from households to the retirement funds (in the flow of funds state and local government employee retirement funds sector). The amount of both transactions is measured by total net growth in the funds' assets.

An occasional minor difference between the two totals of national saving occurs when there is an excess of wage accruals over disbursements, usually arising from retroactive wage rate changes and entered in the accounts *ex post*. While these could be shown in the household statement as a nonfinancial source offset by a receivable as a financial use, the added complication would not contribute to analysis, and such adjustments are merged with the nonfinancial discrepancy, as shown in table 4, row I.

The only difference in table 4 between the measures of gross private domestic investment (row E) in the two systems is the presence of consumer durables in the flow of funds total, as discussed above. In the total of national investment another difference arises in the measurement of net foreign investment. In the Commerce Department accounts, net foreign investment is measured as the net of current-account transactions in balance of payments—imports, exports, and unilateral transfers.²² In flow of funds accounts, on the other hand, net foreign investment is measured as the net of capital account transactions, the excess of U.S. funds advanced to foreigners in all financial forms over U.S. funds raised from foreigners. The current and capital balances are conceptually equal, but in practice they differ by the amount of the statistical discrepancy in the international transactions statement, and this discrepancy is thus part of the difference between the two measures of gross national invest-

21. Government retirement funds here cover government employees and persons covered by railroad retirement. Old-age and survivors insurance is treated the same in the two accounting systems; in neither does it give rise to household saving.

22. With the adjustment for SDR allocations mentioned earlier.

ment. The capital account balance is used in flow of funds accounting because it is the foreign counterpart (with sign reversed) of the net financial investment that is measured for domestic sectors from financial transactions and that appears in the model matrix in table 1 as row 3. Table 4 shows on row J that this difference in foreign investment totals is reflected in a difference between the national income and product statistical discrepancy and flow of funds discrepancy between saving and investment (row 44, last column of the matrix, page S.1).²³

Distribution of totals among sectors

Table 5 spells out the allocation of national saving and tangible capital formation among flow of funds sectors. Part A.1 shows the allocation among the flow of funds of each component of total saving as published in the national income and product accounts (total column). Part A.2 shows the changes in the total and their distribution in the flow of funds accounts occasioned by differences in treatment of specific transactions. Part A.1 is based entirely on Commerce Department data underlying the national income and product accounts, whereas A.2 is based on flow of funds estimates except for consumer durables. In A.1 a few specific points of allocation should be mentioned. Corporate farms are in the farm sector, and household capital consumption on row 8 is on owner-occupied housing and nonprofit facilities.

Gross saving of nonfarm nonfinancial corporations in the flow of funds is different from the Commerce Department nonfinancial corporate total (for example, SCB, July 1979, page 32) only in that the flow of funds total includes net receipts from foreign branches and excludes farm corporations.

The major differences in transaction treatment between the two accounting systems, recorded in part

23. The discrepancy between saving and investment in the flow of funds is to be distinguished from the nonfinancial discrepancy that appears in the matrix, row 1, discrepancy column. The latter matches total gross saving (the net on current nonfinancial transactions), including that of foreign sectors, with total nonfinancial investment (row 5). In this matching, the foreign component is the balance of payments current-account balance (with opposite sign) used as net foreign investment in the Commerce Department statement. The flow of funds nonfinancial discrepancy is thus equal to the Commerce Department statistical discrepancy, although opposite in sign, plus the excess of wage accruals over disbursements.

A.2 of table 5, have been discussed in relation to table 4: consumer durables (row 12), which affects total saving, and government life insurance and retirement funds (rows 13 and 14), which affect only distribution among sectors. Another adjustment to allocation of saving is capital-gains dividends of open-end investment companies, which are treated in the Commerce Department accounts as a capital transfer rather than as a dividend component of personal income. In the flow of funds these are a current-account payment from investment companies to households in order to avoid using a capital-transfer account in the system for this one item. Saving is reallocated accordingly.

Row 18 introduces capital consumption on consumer durable goods needed to derive net household and national saving in the flow of funds accounts, where such durables are viewed as capital goods rather than as consumption at the time purchased. The estimate is from BEA and like NIPA capital consumption is straight-line depreciation stated in current-year prices.

Part B.1 of table 5 shows sectoring of totals of gross private domestic investment by type. Both totals and details are estimated by BEA. An important part of this section is the allocation of residential construction purchases directly to households. This is the net amount spent by households on owner-occupied dwellings, including new houses, mobile homes, condominiums, brokerage fees, and additions and alterations to those dwellings. The national income and product accounts treat owner-occupied housing as a business activity, in which owners pay imputed gross rents to themselves and then as landlords deduct depreciation, property taxes, mortgage interest, and so forth as business expenses to yield a residual imputed net rental income that is part of personal income.²⁴ The flow of funds accounts continues these imputations in personal income, consumption, and personal saving, which are directly from the national income and product accounts, but in the rest of the household statement consolidate landlord activities of owner occupants directly into other activities: (1) capital consumption allowances are added back to personal saving to get household gross saving (in table 4, row 6) because gross saving is a cash-flow concept, and capital consumption is only a book-entry cost rather than a cash outlay; (2) capital outlays for owner-occupied housing appear directly as a house-

24. Details are shown in, for example, SCB, vol. 59 (July 1979) p. 68, lines 61-68.

Table 5. Saving and physical investment in flow of funds accounts, 1972¹

Item	Total	House holds	Nonfinancial business			Government			Not allocated
			Farm	Non-corporate nonfarm	Corporate	State and local	Federal	Finance	
A.1 Allocation of NIPA saving among F/F sectors									
1. Personal saving	49,370	49,370	...	...	...	...	...	...	...
2. Undistributed corporate profits	30,024	...	114	...	22,483 ²	...	...	7,427	...
3. Corporate IVA	-6,597	...	...	...	-6,597	...	...	...	...
4. Corporate capital consumption adjustment	2,522	...	-8	...	2,695	...	...	-165	...
5. Corporate	65,362	...	410	...	62,195	...	...	2,757	...
6. Noncorporate	40,002	17,504	7,029	15,469	...	...	...	...	...
7. Wage accruals less disbursement	-329	...	...	...	...	...	...	...	-329
8. U.S. government surplus	-17,263	...	...	...	...	...	-17,263	...	...
9. State and local government surplus	13,747	...	...	...	...	13,747	...	...	...
10. Capital grants to the United States	710	...	...	...	...	...	...	...	710
11. Gross national saving (NIPA)	177,548	66,874	7,545	15,469	80,776	13,747	-17,263	10,019	381
A.2 Transactions differences between NIPA and F/F affecting saving									
12. Consumer durables	111,241	111,241	...	...	...	...	...	...	...
13. U.S. government and insurance and pension reserves	...	3,145	...	...	...	...	-3,145	...	...
14. State and local government pension reserves	...	8,491	...	...	...	-8,491	...	...	...
15. Capital gains dividends of investment companies	...	1,420	...	...	...	...	-1,420	...	...
16. Less: not allocated	381	...	...	...	...	...	...	...	381
17. Gross national saving (F/F)	288,408	191,171	7,545	15,469	80,776	5,256	-20,408	8,599	0
18. Depreciation on consumer durables	76,107	76,107	...	...	...	...	...	...	...
19. Net national saving (F/F) (lines 17 - 5 - 6 - 18)	106,937	97,560	106	0	18,581	5,256	-20,408	5,842	0
B.1 Allocation of gross private domestic investment in NIPA among F/F sectors									
20. Residential construction	62,006	40,715	664	15,344	4,911	...	...	372	...
21. Mobile homes	4,049	4,049	...	...	...	...	...	...	...
22. One- to four-family structures	36,783	34,866	664	627 ²	626 ³	...	...	...	...
23. Multifamily	21,174	1,800	...	14,717	4,285	...	...	372	...
24. Nonresidential plant and equipment	116,827	5,541 ⁴	6,629	13,364	86,869	...	...	4,424	...
25. Change in business inventories	9,442	...	610	1,271	7,561	...	...	...	...
26. Gross private domestic investment (NIPA)	188,275	46,256	7,903	29,979	99,341	...	...	4,796	...
B.2 Transaction differences between NIPA and F/F affecting investment									
27. Consumer durables	111,241	111,241	...	...	...	...	...	...	...
28. Mineral rights from U.S. government	...	...	...	...	912	...	-912	...	...
29. Gross private domestic investment (F/F)	299,516	157,497	7,903	29,979	100,253	...	-912	4,796	...

1. NIPA = National income and product accounts published by Department of Commerce, Bureau of Economic Analysis.
F/F = Flow of funds accounts.
IVA = Inventory valuation adjustment.

2. Includes foreign branch profits.
3. Change in builders' work in process.
4. Nonprofit organizations.

hold investment expenditure; and (3) mortgage borrowing against owner-occupied houses appears in credit market funds raised by households. This consolidation of housing activity into the household sector differs from flow of funds accounts in some other countries and must be remembered in international comparisons.

Buying and selling of existing houses within the household sector is netted out of the outlay total except for brokerage fees. Such transactions are both a use and a source of funds in household capital accounts and are not included in gross capital formation in GNP. The dollar volume of trading in existing houses has in recent years been much larger than that for purchases of new houses, however, and with rising average house prices the increase has been accompanied by net growth in mortgage debt unrelated to new capital formation. This is a substantial consideration in comparing household mortgage borrowing with purchases of new homes.

Business investment in one- to four-family units represents only changes in work in process on houses for sale to households and is essentially an inventory-change component of the total residential figure. Multifamily construction allocated to households consists of condominium purchases. Farm residential construction is allocated to farms as purchasers, since it is commingled with other farm expenditures in financing.

Nonresidential plant and equipment (row 20) is allocated as a single figure among sectors rather than separately for construction and producers' du-

table goods. The household allocation is for plant and equipment of schools, churches, and other non-profit organizations.

Like existing-house transactions, purchases and sales of all types of land and existing plant and equipment are omitted from the sector distribution of capital outlays, as are transactions in intangibles such as leaseholds and patents. This omission produces statistical imbalances in the accounts insofar as there are net transfers among sectors in tangible assets, and the basis for omitting such transactions is only the lack of substantial information on the quantities. In general there is probably a net sale of land and intangibles by households and noncorporate business and a net purchase of these assets by corporate business and finance, causing imbalances of opposite sign in the two sets of sector statements. There may have been several billion dollars of such transfers in recent years that are not in the accounts.

Table 5 carries no allocation of net foreign investment among domestic sectors. Each sector's net foreign investment is part of its net financial investment, but not yet entirely identifiable as such. To complete identification would require allocation of miscellaneous financial sources and uses of funds in the balance of payments statements that are occasionally sizable but not specified as to nature. Pending further specification of those items, net foreign investment can be viewed only as the consolidated total of net financial investment for the United States, mixed for individual sectors with similar net investment in domestic claims. □

Section 4: Definition of Sectors and Transaction Categories

Any institutional group for which a complete statement of sources and uses of funds can be estimated in flow of funds accounts may be viewed as a sector for analytic purposes. At the most detailed level there are about 26 such sectors for which data are maintained on a continuing basis. The list changes over time, however, to reflect either new institutional arrangements that appear in markets or expanded availability of data that allow more detailed presentation of activities. The concept of a sector is very general, moreover, and in table presentations and discussions of the data, the elemental sectors are often combined into broader sector groupings that can also be treated as sectors analytically.

The matrix on page S.1 simultaneously shows two levels of sector detail, of which one is a very broad summary of the accounts into four sector groups—private domestic nonfinancial, U.S. government, finance, and foreign—while the other breaks private domestic and finance into three parts

each. Flow of funds publications frequently carry, as on page S.3, a submatrix for nonbank financial sectors at the most detailed level available.

The sector structure from the most detailed level to the broadest groupings used in the sector and transaction accounts tables is shown in table 6.

Sector definitions

Households consists predominantly of individuals as consumers, as owners of houses that they live in, and as personal investors in financial claims and in business activities. Unlike the treatment in some other countries, this sector does not include directly the business activities of noncorporate proprietors, such as investment in producers' capital goods and rental real estate or borrowing directly related to those business activities. Noncorporate business transactions are set off, in this account structure, in

Table 6. Sector structure

Households				
Farm business	} Noncorporate business	} Nonfinancial business	} Private domestic nonfinancial	} Non-financial
Nonfarm noncorporate business				
Corporate nonfinancial business				
State and local governments—General funds				
Rest of the world				
U.S. government				
Federally sponsored credit agencies				
Mortgage pools				
Monetary authorities				
Domestic commercial banks	} Commercial banking			
Domestic affiliates of commercial banks				
Foreign banking offices in the United States				
Banks in U.S. territories and possessions				
Savings and loan associations	} Savings institutions			
Mutual savings banks				
Credit unions				
Life insurance companies	} Insurance	} Private nonbank finance	} Finance	
Other insurance companies				
Private pension funds				
State and local government employee retirement funds	} Finance not elsewhere classified			
Finance companies				
Real estate investment trusts				
Open-end investment companies				
Money market funds				
Security brokers and dealers				

separate business sectors that allow transactions to appear in concise, related form and allow summary sector statements for business as a whole, combining corporate and noncorporate forms. While many business proprietors mix their household and business financing activities in ways that make separate statements artificial for single proprietors, the distinction between household and business positions is generally much sharper for partnerships and large proprietorships; and in the national totals the presence of larger firms gives substantial meaning to the separate business sector statements.

The household sector includes as marginal components of the group all personal trusts and nonprofit organizations serving individuals, such as churches, schools, labor unions, and charitable organizations. Trusts and nonprofit groups are included mainly because the data for separate statements are historically thin and sporadic. Beginning in 1968 there have been systematic tabulations of trust assets that have been administered by insured commercial banks, which include a substantial part of personal trust assets, and insured-bank totals for personal trusts and estates are presented as an appendix to *Flow of Funds Accounts, 1949-78*, page 171. During the 1970s, personal trust assets included about 6 to 7 percent of total financial assets of the household sector, including security holdings in the range of 15 percent of the sector totals. For security market analysis, personal trusts thus appear to be a significant element of household investments but far from a dominant one.

Data on nonprofit organizations are thinner and more scattered. Recent estimates give them about 3 percent of total household financial assets and 5 percent of the sector's corporate equity holdings for the mid-1970s.

Farm business covers all farming activities in the United States including corporate farms. The sector includes farm credit cooperatives consolidated with the farms that own them, and it includes farm housing activities. Consumption activities of farmers are in the household sector. Noncorporate farm income in the accounts is as defined and measured for national income purposes and it includes imputed incomes. Except for retained profits of corporate farms, income is transferred entirely to the household sector and is reflected in household saving. Owner equity investments in noncorporate farming enter the farm sector through the transaction account, "equity in noncorporate business."

To the extent that farmers commingle household

and business activities in their own accounts, this sector departs somewhat from the principle that all activities of a unit are to be in a single sector account. Because the corporate component is small, the farm business sector can be viewed almost as an activity subaccount of the household sector that isolates in a separate statement the investment and business financing of this aspect of household activities.

Nonfarm noncorporate business consists of partnerships and proprietorships in nonfinancial enterprises, including individuals' rental activities and the professions. Like farming, this sector is treated in the accounts as an activity subaccount of the household sector: all current income is transferred to households, net saving is shown as zero, gross saving is equal to capital consumption allowances, and all changes in equity capital appear as net inflows in "proprietors' net investment."

Corporate nonfinancial business comprises all private corporations not specifically covered in financial sectors or farming. It includes holding companies and closed-end investment companies on a consolidated basis, and also includes real estate firms. It is identical with the nonfinancial corporate group shown in Commerce tables except that it excludes farm corporations.

Like the Commerce group this sector covers only the domestic activities of corporations and does not represent worldwide financial position or investment and borrowing by U.S. corporations. Operations of foreign subsidiaries and foreign branches are reflected only in the income items for branch profits received and net dividends paid (which are net of dividends received from foreign subsidiaries) and in the asset item for foreign direct investment, which combines on a net basis all capital-account transactions between domestic head offices and foreign operations. All of these links are on a cash basis of payments and receipts and do not, in particular, include the foreign earnings retained abroad that are part of the international transactions statement as current-account receipts and capital-account investment outflows.²⁵ U.S. operations of foreign corporations are treated symmetrically: they are included

25. Balance-sheet equities in overseas operations that appear in statements of assets and liabilities for the sector include the effect of earnings retained abroad, however, and this difference in treatment between flows and outstandings causes sizable differences between the net flows and changes in the outstandings shown.

in the sector, their earnings payments to foreign parents are positive in net dividends or negative in branch profits received, and all capital-account flows are netted into a single net financial source of funds as "foreign direct investment" in the United States in the corporate business statement.

This treatment of the sector as a domestic consolidation differs markedly from financial statements published by corporations, which are almost always worldwide consolidations. Balance sheet ratios can differ substantially on the two bases, depending on whether foreign operations have been financed heavily by foreign borrowing or by parents' domestic borrowing that has moved abroad through the direct investment outflow item. The two types of consolidation have different purposes, with the domestic oriented toward a view of the U.S. economy as such and the worldwide focused on the condition of companies as such. A national accounting system is by its nature concerned with activities of a country and thus incorporates a domestic statement for business, as in the form used here.

State and local governments—general funds comprises the 50 state governments, their political subdivisions, and all corporations, enterprises, debt-issuing authorities, and trust funds operated by these units other than employee retirement funds; these last are shown separately as a financial sector. The basic data for the sector are the aggregates in the U.S. Census Bureau's *Census of Governments*.

Rest of the world is as defined in the statement of international transactions for the United States, and the data in this sector account are from that statement, with capital-account flows classified into flow of funds financial transaction categories and with nonfinancial transactions as published in the national income and product accounts. The sector discrepancy is conceptually the "statistical discrepancy" from the international transactions statement and differs from that item only by statistical differences between NIPA net foreign investment and the current-account balance in international transactions statements.

U.S. government covers, for all years, the agencies and funds that are in the government's unified budget as of 1969, except the District of Columbia. Included are the Exchange Stabilization Fund, employee retirement funds, life insurance funds, all corporations that are wholly or partly owned by the government, and all "off-budget" activities such as

the Postal Service and the Federal Financing Bank. Many of these agencies operate lending programs, and a few have debt outstanding with the public separate from Treasury securities. The sector does not include the Federal Reserve System and certain Treasury monetary accounts that constitute the monetary-authority sector, and it does not include a set of federally sponsored credit agencies described below. The sector account is consolidated, and transactions and claims among agencies are not shown.

Statistically, this sector has the same coverage of agencies and the same degree of consolidation as the *Monthly Treasury Statement of Receipts and Expenditures* (MTS) with the exception of the District of Columbia, which is included in state and local governments. With that exception, its credit market debt is defined by "net borrowing from the public" as shown in MTS and as tabulated in the *Treasury Bulletin*, table FO-1.

Federally sponsored credit agencies is a financial sector consisting of six specialized lending institutions that have close legal connections with the government but that are now excluded from the government budget accounts as private institutions. In the flow of funds accounts they are separate from the government sector for all years. These agencies finance their lending activities mainly through issues of their own debt securities, and such issues have been closely coordinated with Treasury debt operations. The agencies are as follows:

AGENCY	PRINCIPAL TYPE OF CREDIT
Federal Home Loan Banks	Loans to savings and loan associations
Federal Home Loan Mortgage Corporation	Residential mortgages
Federal National Mortgage Association	Residential mortgages
Federal Land Banks	Farm mortgages
Federal Intermediate Credit Banks	Short-term farm credit
Banks for Cooperatives	Short-term farm credit

Federally sponsored mortgage pools comprises a set of arrangements authorized by the Housing Act of 1968 whereby negotiable securities are issued to the public against collateral of specific pools of mortgages that have been insured or guaranteed by federal agencies. The securities are "pass-through"

in that holders receive periodically scheduled interest and amortization payments related to the pools as well as any prepayments of principal on the mortgages in the specific pools. The securities themselves are guaranteed by the managing agencies, which have so far consisted of the Government National Mortgage Corporation (GNMA), the Federal Home Loan Mortgage Corporation (FHLMC), and the Farmers Home Administration (FmHA). Pooling and security issues have been undertaken both by these three agencies and by private businesses such as mortgage bankers. The FmHA securities—certificates of beneficial ownership—have, since March 1975, been sold only to the Federal Financing Bank and appear in the tables as federal government purchases of U.S. government agency securities.

This sector is unusual in that it consists only of these arrangements, with mortgages as assets and pool securities as liabilities, rather than of a set of institutions in the normal sense. The pooled mortgages do not appear on any lender balance sheets as assets, and the securities appear nowhere as institutional liabilities. The sector thus exists to fill an important role in matching asset and liability positions in the system.

Monetary authorities covers the Federal Reserve System and certain monetary accounts of the Treasury: the gold account, the silver account, and an account constructed to record other currency liabilities of the government and the assets behind those liabilities. The sector is identical with the group of institutions and accounts for which the “Member Bank Reserves, Federal Reserve Bank Credit, and Related Items” table in the *Federal Reserve Bulletin* is a balance sheet. “Factors supplying reserves” in that table are assets, and “Factors absorbing reserves” are liabilities. The principal liabilities are thus bank reserves and currency in circulation, and the principal assets are U.S. government securities, gold, bank borrowings from the Federal Reserve, Federal Reserve float, and Treasury currency—assets that are backing for the reserve money of the economy.²⁶

26. The structure of the sector is described in detail in “Member Bank Reserves and Related Items,” *Banking and Monetary Statistics, 1941–1970*, Section 10 (Board of Governors of the Federal Reserve System, 1976), in particular pp. 522–23. The present form of the published table is somewhat different from that published before the 1970s, and the flow of funds sector conforms to the present version of the table.

Domestic commercial banks comprises all banks that have head offices in the 50 states. It conforms in coverage of institutions to the domestic-bank subset shown in the Federal Reserve’s monthly statistical releases on bank credit. It omits, in particular, U.S. branches of foreign banks, which are in the “foreign banking offices” sector described below. These branches were included in semiannual statements of condition for banks (call reports) as a major component of noninsured banks through June 1978. The presence of foreign branches in the call reports means that the call report totals that are benchmarks for this domestic sector are somewhat lower than published call report totals but are not identifiable separately. Domestic noninsured banks are a small group, however, and benchmarks for this sector are only slightly larger than call reports published for insured commercial banks.

The sector is on a consolidated basis: all deposit and loan relationships among domestic commercial banks have been “washed out.” Interbank items in general add to different totals as assets and as liabilities because of items in transit and classification variances, however, and the net differences are included in the sector account as a residual interbank-claim liability.

As with nonfinancial corporations, foreign branches and foreign subsidiaries of these banks are not included in the consolidation. These offices are classified as foreign in international transaction statements and in the rest-of-the-world sector statement and are linked to the domestic bank statement through a single net interbank liability to foreign. Domestic subsidiaries, other than Edge Act corporations, are consolidated into the sector; but domestic parents such as bank holding companies are not.

Domestic affiliates of commercial banks covers mainly holding-company parents of banks. The data included for the group are at present limited to specific assets and liabilities related directly to banking activity: loans to banks, loans purchased from banks, and commercial paper issued to finance such activities.

Foreign banking offices in the United States is a combination of Edge Act and Agreement corporations, U.S. branches of foreign banks, and U.S. agencies of foreign banks. Edge Act corporations are subsidiaries of American banks that are mainly in international banking under specific laws but that have certain domestic deposit liabilities and money market positions. Branches and agencies of foreign

banks operate in the United States under special bank charters and have substantial domestic positions in business loans and deposits or deposit-like liabilities, but they are not corporate entities separate from their parent banks.

These three groups are included in international transactions statements as banks, and in Federal Reserve bank credit statistics their credit holdings are added to domestic bank credit to arrive at total bank credit. Their deposit-type liabilities are included in the monetary aggregates published by the Federal Reserve.

The group does not include U.S. banks that are subsidiaries of foreign banks. Subsidiary banks are included in the domestic bank sector described earlier.

Banks in U.S. territories and possessions are classified as domestic in international transactions statements and are included in the banking group here. They are not, however, included in bank credit totals or the monetary aggregates published by the Federal Reserve. The group consists of those currently published by the Federal Deposit Insurance Corporation. It includes branches of U.S. and foreign banks in these areas.

Savings and loan associations are mutual and stock institutions chartered by states and federal government to accept share capital and to lend primarily in mortgages. The group consists of associations covered in Federal Home Loan Bank Board statistics, including noninsured associations.

Mutual savings banks are institutions operating under savings bank charters in 19 states with deposit insurance from the FDIC. Data for the group are those published by the National Association of Mutual Savings Banks.

Credit unions are employee organizations related to individual firms or agencies that are organized under state or federal charter to accept share funds from members and to lend consumer credit to members. The group consists of all state and federal credit unions in statistics published by the National Credit Union Administration.

Life insurance companies are those covered in the annual *Fact Book* published by the American Council of Life Insurance but excluding fraternal orders. Government life insurance programs are

also excluded; they are in the U.S. government sector account.

Other insurance companies are the fire, casualty, and other companies covered in *Best's Aggregates and Averages*, a private publication.

Private pension funds are defined in the annual statistics on self-administered pension funds published by the Securities and Exchange Commission. They include retirement funds of nonprofit organizations and multiemployer plans shown in those data. Their total assets are treated as a holding in trust for the household sector and are the measure of a pension reserve liability to households. By this treatment pension funds have zero saving by definition. The current-account transactions that affect pension fund assets are imputed to households and are reflected in personal saving. This money is then advanced by households to pension funds in the financial accounts.

State and local government employee retirement funds are the group of such funds reported in the *Census of Governments*. They have the same position in the accounts as private pension funds, with zero saving and a liability to households equal to their assets. A current-account transfer of saving from governments to households is required to finance this household investment, however, because in the national income and product accounts the saving is attributed to governments. This NIPA treatment is described in section 3.

Finance companies comprises sales finance, consumer loan, and commercial finance companies covered in the Federal Reserve's five-year survey of finance companies.²⁷ The group also includes mortgage companies.

Real estate investment trusts (REITs) are a recent form of intermediary that, through 1960 legislation, are exempt from federal corporate income tax provided that they distribute most of their ordinary income to shareholders and that most of their investments and gross income are from real estate or mortgages. They can be either open end or closed end, but in practice all trusts created have been closed-end companies. Their investments have been mainly in construction and development loans, and

27. The 1975 survey was published in the *Federal Reserve Bulletin*, vol. 62 (March 1976), pp. 197-207.

their funds have been raised through diversified patterns of bond and share issues, bank loans, and commercial paper issues.

Open-end investment companies (mutual funds) are the group reported by the Investment Company Institute, other than money market funds and municipal bond funds. Money market funds are a separate sector described below, and municipal bond funds are consolidated into the household sector. Mutual funds issue shares on a continuing basis and redeem shares on demand at values based on current market values of net assets. Their capital is invested in a variety of debt and equity instruments, with wide differences among funds in investment objectives. Closed-end companies are consolidated with the nonfinancial corporate business sector.

Money market funds are a form of mutual fund that became prominent during the 1970s. They are open-end investment companies that invest primarily in short-term money market claims and offer to small investors the yields that are available from commercial paper, large CDs, and other instruments that typically come in minimum denominations of \$100,000 or more. The group covered is that reporting to the Investment Company Institute.

Security brokers and dealers data are based on aggregates published by the Securities and Exchange Commission in its annual reports and covering all such firms registered with the commission.

Discrepancy, the last column in the matrix, records the residual excess of total sources over total uses of funds along transaction rows of the matrix. These discrepancies have the sign of a net use of funds. In an accounting sense the discrepancy column is the last sector account needed to complete the matrix. As indicated in the descriptions of transaction accounts below, many of these discrepancies have substantive meaning and are not solely the result of statistical deficiencies. The discrepancy for nonfinancial transactions is equal to the statistical discrepancy in the national income and product accounts (with sign reversed), reflecting the integration of Commerce data into the system discussed in section 3. Transaction accounts with zero discrepancies have residual estimates along the row for transactions of some actual sector in the account. Frequently the residual is in the household account, but not always. The discrepancy column is discussed

on page 26 in its relation to the discrepancy transaction row.

Transaction categories

Transactions in the flow of funds accounts fall into three major groups: current nonfinancial, capital nonfinancial, and financial. In addition, there are several internal entries, subtotals, and transfers between current and capital subaccounts, such as capital consumption charges, current surplus, saving, investment, corporate profits, and unincorporated business net income. Many sectors also have a residual discrepancy item—the excess of saving over investment in the data.

Flow of funds accounting, as sketched in table 1, is not directly concerned with current transactions—income, transfers, current spending—except through the gross-saving measure of excess current receipts flowing into capital account. Current transactions yielding that surplus are covered systematically in the national income and product accounts and are not repeated or paralleled in this system. Some of the sector tables include a few current items from NIPA data as a convenience in analyzing relationships with capital account activities, but not on a systematic basis across sectors. The household statement includes a derivation of gross saving from NIPA personal saving, and the statement of nonfinancial corporate business includes the distribution of profits, the position of inventory valuation and capital consumption adjustments, and the relation of NIPA gross saving and investment to counterparts on company books. Statements on the government sectors include some detail on taxes, purchases, and transfers, and the rest-of-the-world statement summarizes exports, imports, and transfers. The first table in most flow of funds presentations gives the NIPA data needed to show the sector distributions of the gross saving totals published in NIPA.

Capital nonfinancial

Sector gross saving is a direct accounting link between the current account, where it is a residual use of funds that clears the account, and the capital account, where it enters as a source of capital funds. Other capital nonfinancial components of the matrix are the purchases of capital goods that are discussed in section 3, in their sectoring and their relation to the national income and product accounts. The flow

of funds table mentioned earlier that presents sectoring of gross saving includes as well a sectoral distribution of capital outlays on a time series basis.

Financial

For flow of funds accounting the term “financial transaction” refers broadly to transfers of claims among transactors, mainly debt claims—promises to pay—but also money, which is a claim on the banking system, and business equities. Common examples are borrowing, in which the lender’s cash (or sometimes deposit liability) is exchanged for the borrower’s debt instrument; security trading, in which lenders exchange cash and securities; and debt restructuring, in which a lender accepts a new debt instrument from a borrower in exchange for an old one. In each of these cases the balance sheet of each transactor has offsetting entries among liabilities, among assets, or in assets matched against liabilities, and the transaction is entirely in financial accounts.

Beyond these are transactions in which a financial claim is transferred in exchange for goods and services. Such a transfer occurs, for example, when the seller of a house accepts a mortgage from the buyer in exchange for title to the house, when deferred payment for a purchase results in a trade-credit claim of the seller on a buyer, or finally when a purchase is immediately paid in cash. These transactions also affect balance sheets, but the offsets to the changes in claims are in physical assets or in net worth if the transaction is in the current account for the buyer or seller.

A third type of financial transaction included in the system consists of accrual of claims, which are bookkeeping entries within single balance sheets that usually offset current-account entries and thus net worth. These are not transfers in the plain sense, but the sector statements contain many of them in the “miscellaneous” category described below. Tax liabilities are a specific accrual item that appears as a separate category. The reasons for including accruals in transactions statements are mentioned in the discussion of those categories.

All financial transactions are entered from the accounts in a particular form of net basis: asset sales by a sector are entered as a negative use of funds—deductions from purchases of the same kind of asset—whereas debt repayments are entered under sources as deductions from new borrowing of the same type. There are in the matrix no deductions of liabilities against assets either within a type (for ex-

ample, household mortgage assets and liabilities are entered separately), nor in different types (such as a deduction of security credit from security holdings).²⁸ Certain time-series tables of the accounts show such deductions, but they are within special formulations and not part of the general structure of the accounts.

Net financial investment for each sector is the excess of net acquisitions of financial assets over net increases in liabilities. It measures net funds advanced by each sector to all other sectors. Net financial investment for each sector plus the statistical discrepancy for that sector equals the sector net surplus on all nonfinancial transactions.

Table 7 lists the types of financial claims for which separate transaction accounts are maintained in the flow of funds accounts. The items listed are categories normally shown in the published tables. Some are sums of subcategories for which accounts are also maintained; subcategories are indented. The groupings are those frequently used to summarize transaction accounts.

Gold and special drawing rights consists of gold held as a monetary reserve and SDR holdings. Transactions in these assets are recorded only for monetary authorities, the Exchange Stabilization Fund in the U.S. government sector, and the rest of the world. All transactions are treated as uses of funds, and no liability is imputed for not holding gold or for SDRs. All monetary gold is in assets of the monetary authorities, while gold held by the Exchange Stabilization Fund is in U.S. government assets together with all SDR holdings. As mentioned in section 3, SDR allocations to the United States, which began in 1970, are included in asset holdings but not in flows. Revaluations of the U.S. dollar also appear as changes in gold and SDR holdings not reflected in flows. The flow data include only purchases and sales of these assets.

Official foreign exchange position is defined as in international transactions accounts: convertible foreign currencies and the net IMF gold tranche position. This is a liability of the rest of the world and a net asset distributed between the U.S. government (Treasury holdings of currencies plus IMF subscription less IMF notes and letters of credit) and monetary authorities (Federal Reserve holdings of currencies less certain deposits of the IMF).

28. The one exception to this rule in the matrix is the net International Monetary Fund position (capital subscription less certain IMF claims on the United States), which is counted in the U.S. foreign exchanged position as an asset on a net basis.

Table 7. Financial transaction categories

Gold and special drawing rights	}	Monetary reserves
Official foreign exchange position		
IMF gold tranche position		
Convertible foreign exchange		
Treasury currency		
Demand deposits and currency	}	Deposit claims on financial institutions
Private domestic		
U.S. government		
Foreign		
Time deposits at commercial banks		
Savings accounts at savings institutions		
Money market fund shares		
Federal funds and security repurchase agreements		
Interbank claims		Interbank claims
Life insurance reserves	}	Insurance and pension reserves
Pension fund reserves		
Corporate equities		Corporate equities
U.S. government securities	}	Credit market instruments
Treasury issues		
Short-term		
Other marketable		
Savings bonds		
Federal agency issues		
Loan participation certificates		
Sponsored agency issues		
Mortgage pool securities		
State and local government obligations		
Corporate and foreign bonds		
Mortgages		
Home (one- to four-family) mortgages		
Multifamily residential		
Commercial		
Farm		
Consumer credit		
Installment		
Noninstallment		
Bank loans not elsewhere classified		
Other loans		
Open market paper		
Finance company loans to business		
U.S. government loans		
Sponsored credit agency loans		
Loans on insurance policies		
Security credit	}	Other claims
Owed by brokers and dealers		
Owed by others		
Taxes payable		
Trade credit		
Equity in noncorporate business		
Miscellaneous		
Foreign claims		
U.S. government claims		
Insurance claims		
Unallocated claims		
Sector discrepancies		

Treasury currency consists of silver held as monetary reserves by the domestic economy and certain asset-debt relationships between the banking system and the federal government in connection with the monetary system—seigniorage on silver, deposits with the U.S. government for redemption of Federal Reserve Bank notes and national bank notes, and the liability of the U.S. government in connection with minor coin and United States notes backed by gold reserves.²⁹ Transaction flows for this category occur only between the Treasury and the monetary authorities. Beginning with 1970, this account also includes SDR certificates as an asset of monetary authorities and a Treasury liability. SDR certificates are a domestic claim, separate from SDRs themselves, through which some of the Treasury's SDR holdings become part of the asset backing for the monetary base.

The large difference between total assets and total liabilities in the estimates of amounts outstanding reflects the fact that gold and silver are shown in the accounts as assets but not as liabilities (except seigniorage revaluations on silver, which are treated as a U.S. government liability). Gold and silver are treated as tangible assets rather than as claims.

Demand deposits and currency covers demand deposits at commercial banks in the United States, government and foreign deposits at Federal Reserve Banks, and U.S. currency outside banks. The concepts and estimating methods used to calculate these monetary liabilities are the same as those in M-1A data published by the Federal Reserve in treatment of floats, interbank deposits, and so forth. There is a substantial statistical difference, however, in that the flow of funds accounts are calculated for the single last day of each quarter rather than for weekly, monthly, or quarterly averages. The one-day numbers are needed for consistency with all other information entering the system and are frequently very different from the averages because of specific events or even the day of the week that ends a quarter.³⁰

29. For a detailed discussion of these relationships, see *Flow of Funds in the United States, 1939–1953* (Board of Governors of the Federal Reserve System, 1955), chap. 17. The form of Treasury accounting for these relationships has changed over the years, in particular in the elimination of the gold and silver accounts, and the flow of funds scope of the monetary authority sector has changed. The general principles described these nevertheless still hold.

30. A series on ownership of demand deposits was introduced in *Federal Reserve Bulletin*, vol. 57 (June 1971). For the relation between those data and flow of funds estimates, see that *Bulletin*, table 8, p. 463.

The totals used here also differ from M-1A in that they include deposits held by foreign banks and foreign governments as part of rest-of-world holdings, while these are omitted from the M-1 that was introduced in early 1980. The item excludes all forms of checkable time deposits at banks and savings institutions such as NOW and ATS accounts, which are included in M-1B but are not in M-1A.

The matrix on page S.1 indicates in the discrepancy column differences in this category between liabilities as seen in bank records and assets as recorded in holder-sector accounts. These differences are mail float, representing checks in the mail that are moneys no longer on the books of senders but not yet on the books of receivers. Mail float relates to checks that have not yet entered the banking system's clearing procedure. It exists in parallel with and separate from cash items in process of collection and Federal Reserve float. Cash items and Federal Reserve float are deducted from gross demand deposits liabilities of banks to consolidate the bank liability down to an amount owed to non-banks.³¹ Mail float is a further deduction taken to arrive at holder records of money balances.

This deduction of mail float is necessary to bring holder entries for cash into consistent timing with the other entries in nonbank accounts. It is mainly an accounting requirement, however, and does not imply that holder records are analytically more important than bank records. In general the public looks at the bank record of its deposits as more relevant in managing cash than the balance on its own books. Were it possible statistically to shift timing of all noncash entries in sector accounts to a basis consistent with bank records of money supply liability, the entire body of accounts would perhaps be improved for analysis. Short of this, the deduction of mail float is necessary.³²

31. The role of these items in the money stock is described in *Federal Reserve Bulletin*, vol. 46 (October 1960), pp. 1108–12. The money stock as published by the Federal Reserve is a banking-system liability record.

32. Statistically, mail float is estimated directly and used in calculating household cash as a residual. The nature and meaning of household cash as an "other-party" record are discussed in George Garvy, "The Float in Flow of Funds Accounts," in *The Flow of Funds Approach to Social Accounting, Studies in Income and Wealth*, vol. 26 (National Bureau of Economic Research, 1962), pp. 431–61.

A further note on the meaning of the bank-record liability: If all check-writing were to cease for a fortnight and all checks in the clearance system to reach their final destination, both the bank gross records of liabilities and holder record of assets would settle at the level of demand deposits shown in money supply statistics—that is, net of cash items and Federal Reserve float. Bank records would come down and holder records would come up. It is this ultimate view of the present state of balances plus checks in transit that in general has most meaning to the public as a cash balance.

Mail floats are shown in the matrix for private domestic and for U.S. government deposits. Foreign deposits are on a bank-record basis in international transactions statements (and hence here), consistent in timing with at least the large bulk of capital-account transactions.

A mail float in demand deposits implies corresponding floats in many if not all other transaction categories. As a general matter, records of sales and purchases and of lending and borrowing are not timed simultaneously, and it is not possible to balance both sector accounts and transaction accounts without float items. Statistically, most of these floats cannot be estimated. The largest volume of transactions generating float is undoubtedly in trade credit, however, and as noted below, a float exists in the system for that account.

Time deposits and savings accounts consists of all time deposits at commercial banks (including negotiable certificates of deposit) and all deposit and share accounts at mutual savings banks, savings and loan associations, and credit unions. The item includes all checkable savings deposits such as NOW and ATS accounts. Flows include crediting of interest and dividends as well as deposits and withdrawals. Postal Savings System deposits are in the miscellaneous category, and savings bonds are in U.S. government securities.

Money market fund shares are the highly liquid claims that investors hold against money market mutual funds (q.v.). Payments into and out of these shares are typically at no cost to the investor, and withdrawals in particular can be very fast, through telegraphic transfers and special checking accounts. The funds require minimum balances and minimum amounts for withdrawal, but these requirements are fairly low, such as \$2,000 and \$500 respectively. These shares are included in the M-2 introduced by the Federal Reserve in 1980.

Federal funds and security repurchase agreements represents net borrowings by the banking system and other finance from nonbank lenders. A large proportion of these loans have one-day maturity and they are thus highly liquid investments, but minimum denominations are typically large, a million dollars or more. Overnight security RPs are included in the Federal Reserve's M-2, and longer-term RPs are in M-3. Federal funds are excluded from these monetary aggregates altogether as assets either of deposit institutions or of federally related agencies. This flow of funds category has broader

scope than the M components in that, while interbank lending has been netted out, the quantities do include federal funds and RP lending by savings institutions and by federally related agencies.

Federal funds loans are unsecured borrowings of today's balances at Federal Reserve Banks, and Federal Reserve regulations limit the range of participants in the market to banks, savings institutions, and federally related financial institutions. The market is dominated by interbank lending that is consolidated out in the flow of funds accounts. The amounts included are thus net borrowings by banks from nonbanks.

Security repurchase agreements are loans that from the borrower's viewpoint consist of a security sale out of portfolio with an agreement to repurchase the security at a named future date at a named higher price. For the lender the loan is collateralized by title to the security. The RP market has a wide range of both borrowers and lenders, but the claims included here, limited by data availability, are only those against banks and savings institutions.

The net liability of banks to nonbanks in these instruments is measured by the excess of their reported borrowings over their reported lending to U.S. banks, and because the data combine federal funds and RPs the two types of claim are combined in this category. The implicit net borrowing by banks is statistically much larger than the amounts of lending reported by nonbanks in recent years, and the excess is included in the category as a discrepancy. Further development of data sources on lending can be expected to reduce this discrepancy.

Interbank claims are a set of relationships between the Federal Reserve and commercial banks, among the several subsectors of commercial banking, and between domestic and foreign banks. The item pulls together several kinds of claim among these sectors and combines them in forms that are consistent with the standard statement for monetary authorities, with a consolidated statement for domestic banking as a whole, and with an item for net international capital inflows. The table below lists the types of claim that are combined into this category and their treatment for each sector as an asset (A), a negative asset ($-A$), a liability (L), or a negative liability ($-L$). Claims among the commercial banking subsectors appear explicitly on a net basis in the subsector statements but for the group as a whole are washed out in a process similar to consolidation. For several reasons, including timing discrepancies, domestic interbank claims come to somewhat different to-

tals statistically as tabulated on the asset and liability sides of balance sheets, and the net difference is included in this category as an unallocated net liability of the commercial banking sector. This item can be interpreted mainly as a float in interbank transactions.

ITEM	FEDERAL RESERVE	COMMERCIAL BANKING	REST OF WORLD
Loans to member banks	A	L	
Federal Reserve float	A	L	
Member bank reserves	L	A	
Vault cash	L	A	
Due to foreign affiliates		L	A
Due from foreign affiliates		-L	-A
Deposits at foreign banks		-L	-A
Due to domestic affiliates		L, -L	
Domestic interbank deposits		L, -L	
Domestic interbank loans		L, -L	
Unallocated interbank claims		L	
Total interbank claims	A, L	L	A

The amounts due to and due from foreign affiliates—branches, subsidiaries, and foreign head offices—are reported by banks in published statements on a net basis, as either an “other” asset or an “other” liability, depending on the sign of the balance for all types of claim and all types of affiliate. Because the totals of the reported items have no separate significance, they are further netted here to a liability item for the total banking system, as in the Federal Reserve’s statistical series on non-deposit sources of bank funds. Statements on international transactions use the separate gross flows of claims on and liabilities to affiliates for individual banks as capital outflows and inflows respectively. For consistency with banking, the rest of the world sector statement combines these into a single net capital inflow to the United States and in this respect shows smaller total inflows and outflows than Commerce Department statements on international transactions. Deposits at unaffiliated foreign banks are in published statements for domestic banks as a component of cash balances.

Life insurance reserves are established in the accounts as a claim by households as policyholders against life insurance companies and U.S. government insurance programs. Statistically, the category is estimated to be equal to policy reserves against private and U.S. government life insurance policies, including individual and group annuities and sup-

plementary contracts. Borrowing by policyholders on policies from insurance companies and from government insurance programs is a positive liability of households in the “Other loans” category rather than as a deduction from policy reserves. Changes in policy dividend accumulations and accident and health reserves are in the miscellaneous transactions category as liabilities to policyholders.³³

Pension fund reserves are in the accounts as a claim of households as beneficiaries against retirement programs. They cover private pension plans (both those administered by insurance companies and other private plans, and both vested and unvested plans), government employee retirement funds, and the Railroad Retirement Fund. They do not cover the OASI social insurance programs. Statistically, the category is estimated as equal to reserves of private plans administered by insurance companies and total assets of other private plans, government employee retirement funds, and the Railroad Retirement Fund.³⁴

Corporate equities represent net issues of and transactions in equity securities of private domestic corporations and U.S. net purchases of stocks of foreign corporations. The category includes shares issued by the open-end investment company sector and covers both common and preferred stock. Figures for asset levels of sector holdings are stated at market value, and annual changes in levels differ from net purchases because of fluctuations in market price. No estimates of liabilities for corporate stock are attributed to issuing sectors except open-end investment companies. These companies differ from other corporations in that they undertake to redeem shares on demand at values based on current values of portfolio assets.

Credit market instruments is a core group of debt claims that is the principal medium used by nonfinancial sectors in raising funds through formal

33. Measurement of life insurance claims is discussed in *Federal Reserve Bulletin*, vol. 45 (August 1959), p. 837.

34. Treatment of pension funds claims is discussed in *Federal Reserve Bulletin* (August 1959), p. 838. With corporate equities valued at market prices in pension fund assets, year-to-year changes in stock market prices can cause substantial differences between movements in total reserves shown as outstandings and the net flows into reserves shown in flow tables. The net flows represent premium receipts and investment income less benefit payments and operating costs.

credit channels. It excludes trade credit arising in the normal course of business, tax liabilities, security credit, and proprietors' equities in noncorporate business. It also excludes miscellaneous claims, which are mainly accruals for private sectors and various trust deposits for the U.S. government.

Credit market instruments are used by financial as well as nonfinancial sectors as a source of funds but to a much smaller extent relative both to borrowing in this form by nonfinancial sectors and to borrowing in other forms by financial sectors. In the matrix borrowing by financial sectors in credit markets is included in the credit market rows, but the principal summary tables on credit flows, discussed in section 1 and illustrated in table 2, focus on the use of these markets by nonfinancial sectors.

U.S. government securities consist mainly of what security markets refer to as Treasury and federal agency securities. Following market usage, the category includes issues by sponsored credit agencies that are not direct liabilities of the U.S. government and not guaranteed by the government. The group also includes mortgage pool securities, which are federally guaranteed, and several kinds of nonmarketable Treasury debt held by the public. More specifically, the types of security included are the following.

1. All Treasury issues, both marketable and nonmarketable, including savings bonds, foreign series, and foreign-currency series. Excluded are special issues to government agencies and trust funds, on the basis that these are intra-sectoral claims to be eliminated in a consolidated sector statement, but the total includes special issues to sponsored agencies that arise from earlier periods when such agencies were part of the government.³⁵
2. Securities issued by agencies of the government other than Treasury, such as the Tennessee Valley Authority, Postal Service, and Export-Import Bank.
3. Loan participation certificates issued by the Government National Mortgage Association, the Export-Import Bank, and several other agencies. Most of these issues were floated during the 1960s and at the time were treated in government accounts as sales of loan assets. Because of firm government guarantees, however, they are treated here as government borrowing collateralized by the loans held.

35. Where maturity detail is shown, "short-term marketable" consists of all bills, certificates, notes, and bonds due within a year of the date shown, regardless of original maturity. The amounts also include part of issues due within two years on a sliding-scale basis. "Other" issues are marketable issues not classified as short-term and all nonmarketable issues.

4. Commodity Credit Corporation certificates of interest and CCC-guaranteed bank loans. CCC price-support operations for farm commodities have changed form somewhat over the years, but in the national income and product accounts most farm inventories that are placed under CCC loan programs are treated as federal government purchases in GNP, and the CCC loans are here treated as federal borrowing to finance those purchases.
5. Security issues by the sponsored credit agencies sector (q.v.). As mentioned above, most of these are not guaranteed by the government, but they are closely associated in markets and in debt-management operations.
6. Securities issued by the mortgage pool sector (q.v.). These "pass-through mortgage-backed" securities are collateralized by pools of mortgages and are further guaranteed by the Government National Mortgage Association or the Farmers Home Administration (both government agencies) or by the Federal Home Loan Mortgage Corporation (a sponsored agency). As mentioned in the sector description, the securities are separate from the mortgage pools and are not directly the liability of any other sector. Federally related guarantees are the basis for including them in U.S. government securities. An important feature of "pass-through" securities is that all amortization and prepayment of debt principal on the underlying mortgages is paid out immediately to security holders. This feature gives the effect that the maturity of the securities conforms to the maturity characteristics of mortgages, with an element of unpredictability caused by early retirement of mortgages.

For each of these types of securities the amounts included are those held outside the issuing sector. The Treasury debt that appears in the accounts is exactly the Treasury figure for "public debt securities held by the public" as published, for example, in the *Treasury Bulletin*, table FD-1, where "the public" includes Federal Reserve Banks. Government agency debt in the accounts is the amount of agency securities held by the public that appears in table FD-1 with the exception of a small amount of mortgage debt that has been transferred to the mortgage category. Totals for sponsored credit agencies are as published in the *Treasury Bulletin*, table TSO-5, and for mortgage pools as published in the *Federal Reserve Bulletin*, table 1.56, "Mortgage debt outstanding." In recent years mortgage pool securities based on Farmers Home Administration mortgages have been purchased entirely by the Federal Financing Bank, a U.S. government agency, and in the accounts this appears as sizable purchases of agency securities by the government sector.

Liabilities of the U.S. government not covered by this category are shown in the following list:

U.S. GOVERNMENT LIABILITY

Special notes issued to the IMF
 Defense Department and Coast Guard housing mortgages
 Trust and deposit liabilities
 Certain accrued interest (beginning fiscal year 1956)
 Postal Savings System deposits
 Currency items in the public debt
 Other Treasury currency liabilities
 Certain accounts payable

State and local government securities cover the total debt of all state and local government units, except loans from the U.S. government (which are in the other loans category) and trade debt. State and local obligations held by the state and local government sector are included in both assets and liabilities of that sector. Both short-term and long-term securities are included, conforming in amount and maturity division to data shown in the Census Bureau's annual *Survey of Government Finances*. Interest income from all of these securities is exempt from federal income taxation.

Some of the debt in this category is shown as owed by the nonfinancial corporate business sector. These are tax-exempt issues by state and local government agencies that finance projects for specific private corporations, mainly to improve pollution control, and the corporations guarantee payment of both interest and principal. Although these securities are legally government liabilities, the treatment here gives more directly the relation of business to the securities.

Corporate and foreign bonds consist of the funded debt of U.S. private corporations and foreign (private, governmental, and international agency) bonds held in the United States. The domestic liability has the coverage reflected in the Securities and Exchange Commission series on bonds and notes in "Net Change in Outstanding Corporate Securities" as published before 1974. It thus includes convertible issues until converted into equities. Conversions appear as debt retirements and equity issues.

Mortgages consist of loans secured by real estate collateral and are divided into four categories according to type of collateral. Home mortgages are those secured by one- to four-family residential properties, and as long-term loans they are assumed to be owed entirely by households; they include

TRANSACTION CATEGORY

Negative in official foreign exchange position
 Multifamily residential mortgages
 } Miscellaneous financial
 } Treasury currency
 Trade debt

loans on individual units of condominium structures. Business liabilities for home mortgages are estimated construction loans on work in process, while the savings and loan association liability is "loans in process" in their balance sheets, which is an offset against mortgages already in their assets that have not yet been disbursed. "Commercial" mortgages consist of all nonfarm nonresidential mortgages, including those of nonprofit organizations such as churches and schools. Mortgage data are statistically the same as those published in the *Federal Reserve Bulletin*, table 1.56, "Mortgage Debt Outstanding."

Consumer credit comprises short- and intermediate-term consumer installment and noninstallment credit and is statistically the same as the consumer credit series published monthly in the *Federal Reserve Bulletin*, table 1.57 and in separate statistical releases.

Bank loans n.e.c. (not elsewhere classified) covers the following types of bank loans:

1. By the commercial banking sector (in terms of call report classifications):
 - a. Business loans, except open market paper (in the other loans category)
 - b. Farm loans, except CCC-guaranteed loans and CCC certificates of interest (included as a government liability in the U.S. government securities category)
 - c. Loans to foreign banks (loans to domestic commercial banks are in the interbank claims category)
 - d. Loans to other financial institutions except commercial paper (in the other loans category)
 - e. All other loans (mainly to foreign official institutions, nonprofit organizations, and individuals).
2. By Federal Reserve Banks:
 - a. Foreign loans on gold
 - b. Industrial loans.

Real estate and security loans are excluded entirely from bank loans n.e.c. as credit in the flow of funds mortgage and security credit categories. Consumer credit is also excluded from this category.

Both the asset and liability sides of the category are measured gross of valuation reserves.

Other loans is the final grouping within credit market instruments and consists of the following types:

1. Directly placed finance company paper.
2. Dealer-placed commercial paper.
3. Bankers acceptances.
4. Finance company loans to business mainly for financing of equipment purchases or to carry inventories of receivables.
5. Loans from U.S. government (other than mortgages and trade credit, both included in other financial categories, and cost CCC loans, treated as government purchases of inventories),³⁶ such as student loans, small business loans, and foreign aid loans.
6. Loans other than mortgages by federally sponsored credit agencies.
7. Policy loans on life insurance policies.

The first three of these types have in common that they are short-term money market investments from the lender's view and are combined in tables as "open market paper." Sector holdings are shown only for the combination of the three types of instrument, in absence of data for further breakdown of holdings. It is thus as a combination that the three instruments constitute a transaction category.

Security credit consists of loans subject to Federal Reserve regulation for the purpose of purchasing or carrying securities. It includes loans to security dealers from the banking sector and customer debit and credit balances with brokers and dealers. This credit is, in the first instance, an indirect form of supply of funds to credit markets, rather than a credit market demand for funds. On the main stem of the relationship, banks finance private security holdings through direct security loans and loans covered by broker and dealer credit to customers; in addition banks finance dealer direct holdings of securities. It does not include all loans with security collateral, many of which are in bank loans n.e.c.

Taxes payable is the excess of taxes accrued from past operations, as measured in NIPA, over taxes that have been paid. Both U.S. government and

state and local taxes are included. At present the item covers only corporate profits taxes, but it would be useful and relevant to include parallel liabilities for personal income, social insurance, and indirect taxes. Unlike most other financial items in the accounts, this is not a claim that has been formally recognized by both debtors and creditors. Until final settlement on a year's liability, each party makes his own estimate of the amount involved. Taxes payable are nevertheless recognized in financial planning by both business and governments and in business accounting.

Because estimates of the amount of claim can differ, the discrepancy in this transaction account is different in concept from the mail floats discussed above. Statistically, the liability side is estimated from corporate balance sheets, whereas the asset side is the excess of Commerce Department estimates of accruals over governmental reports of actual receipts. While part of the discrepancy between the two arises from data problems, a conceptual element remains.

The data discrepancy in taxes appears in the account for the corporate business sector. Algebraically, accruals less payments of profit taxes should equal the change in the sector's profits tax liability, but in the statistics this is not the case. Accruals, receipts, and balance-sheet liabilities are taken from independent data sources, derived from separate tabulations of profit estimates, governmental receipts data, and corporate balance sheets; and there are inevitable inconsistencies in timing, coverage, and estimating procedures among the three. In addition there is always some amount of payments or refunds in tax settlement cases that has not been entered into either balance sheets or accrual estimates. For these reasons the three tax items shown in the corporate sector table typically do not balance exactly in the statistics.

Trade credit is an approach to a book credit category; it consists broadly of receivables and payables, other than consumer credit, arising from sales of goods and services. It covers mainly claims among domestic businesses, but it includes corresponding claims to and from foreign buyers and sellers and claims on governments and nonprofit organizations. The trade credit asset of the U.S. government arises from prepayments to business on items not yet delivered, while its liability includes, for recent years, similar prepayments by foreign governments on items not yet delivered by the U.S. government. These foreign prepayments are in rest-

36. CCC loans to cooperatives for tobacco and CCC storage facility loans are treated as loans and included in the other loans category.

of-world trade credit. In the flow tables noncorporate receivables are netted against payables, but in tables on outstandings they are shown separately.

A large mail float exists between receivables and payables in trade credit for two reasons: receivables are recorded by sellers before buyers have received and recorded amounts payable, and buyers write down payables when checks are mailed and before sellers have received them. This float is in the transaction discrepancy along with statistical inconsistencies of the estimates.

Equity in noncorporate business represents net flows of equity funds invested by proprietors in unincorporated businesses, both farm and nonfarm. Statistically, however, this business source of funds is measured as a residual in noncorporate sector statements, the amount necessary to balance sources and uses of funds. As a residual its interpretation depends on the treatment of all other items in the noncorporate statements, and its meaning as an equity flow is specific to the structure of the statements.

As mentioned in the sector descriptions, noncorporate business sectoring in these accounts is actually a segregation into separate statements of certain household transactions that are plainly business related. The purpose of the sectoring is to present as fully as possible statements for nonfinancial business as a whole, but the segregation cannot include all flows that have a business element because many of them are mingled with household financing and liquidity management. A business bank loan that is used to finance higher education results statistically in a withdrawal of proprietors' equity in this item, while a house mortgage loan to pay for business construction is reflected as an equity inflow. Both of these are appropriate representations; on the other hand noncorporate business liquid assets are left mainly in the household sector account, and any business-related transactions for liquidity management may produce equity flows in the data that are more obscure. Because segregation of noncorporate business activities is artificial to some extent, there is no "correct" procedure but rather a selection of items to segregate that minimizes the artificiality of both the statement and the residual net equity item. The two noncorporate statements in the system are constructed with this purpose.

An important determinant of the meaning of the proprietors' net equity flow is the amount of saving that is shown for the noncorporate business sectors, since segregation of saving is one of the more arti-

ficial elements of the sectoring. For the annual estimates in the present treatment, all net income of noncorporate business is shown as withdrawn by proprietors and becomes part of household income, while net saving (retained income) of the firms is arbitrarily put at zero. Gross saving, by this device, becomes identically equal to capital consumption allowances. This means that all investment in physical and financial assets by noncorporate sectors beyond the amount of capital consumption is to be viewed as financed externally in the accounts. Such funds as are not raised from credit markets or trade debt enter the sectors as net equity investment by proprietors in the household sector. To the extent that noncorporate business has in fact an identifiable retained income, this treatment overstates household saving as a source of funds (by overstating income receipts); but it also overstates household equity flows to business as a use of funds by the same amount. Discrepancies in household or other accounts are thus unaffected by the treatment.

For the quarterly estimates, it is assumed that income withdrawals and equity inflows are more uniform over the year than business income and that in unadjusted quarterly accounts there are positive and negative retained earnings that add to zero over the year. In seasonally adjusted accounts, retained earnings are zero quarterly as well as annually.³⁷

Miscellaneous financial claims consists of several forms of specific claims together with a variety of unallocated sources and uses of funds in sector statistics. Among identified claims the largest types in recent years have been business direct foreign investment and customers' claims on insurance companies.

Nonbank direct investment by business in foreign affiliates appears separately in the foreign-claims section of the tables on miscellaneous claims. As amounts outstanding such direct investments are as defined and reported in international investment positions of the United States published annually by the Commerce Department, and they include both U.S. investments abroad and foreign investments in the United States. As flows however, they conform to NIPA treatment in that they exclude earnings retained abroad both from investment income in the current account and from net foreign investment in the capital account; only actual net investment payments to foreign affiliates are included in direct in-

37. These remarks apply to noncorporate farms, but it should be noted that the farm business sector has a small net saving representing retained income of corporate firms.

vestment flows. The effect is that year-to-year changes in outstanding direct investment positions have typically been much larger than the net flows because of growth in equity in retained incomes.

Other specific items in this category are foreign deposits held by business and government, equity and deposit claims on U.S. government-related agencies, and accrual items arising in the course of insurance business such as dividend accumulations and accident and health reserves in life insurance, and prepaid premiums and benefits payable in fire and casualty insurance.

The unallocated items arise in the course of sector accounting, when known totals of financial sources or uses of funds are adopted as controls for the sector's financial accounts. Any component of the totals that cannot be attributed to one of the specific transaction accounts then falls residually into the unallocated items. As a social-accounting practice this is arbitrary, since an alternative procedure is to leave unknown items in a sector's discrepancy. Treating them as miscellaneous claims, however, keeps them within the bounds of financial transactions and sharpens the meaning of most sector discrepancies.

At the simplest level, the principle is illustrated by sector accounts for commercial banks, life insurance companies, savings and loan associations, and mutual savings banks. There exists an established universe estimate of the balance sheet and financial transactions for each of these industries as a whole.³⁸ For each, the bulk of financial assets and liabilities is clearly identifiable in terms of flow of funds transaction types, but for each there is a minor remainder of assets and liabilities—mainly income receivable and expenses payable—that is left unspecified. These claims are generated by the calculation of income on an accrual basis and must be included in financial accounts to maintain consistency with income statistics. When they are included, the sector discrepancy for each of the groups then becomes a measure of the statistical inconsistency between, on the one hand, the body of the income and product data from which saving and physical investment are derived and, on the other hand, the body of balance-sheet data that constitutes financial accounts. That some of the balance sheet is of an unknown nature can be approached within the framework of financial statistics.

³⁸. Each, in fact, is defined operationally in terms of universe data available.

Unallocated claims for the rest of the world are only slightly different. Here the control totals are from international transactions data, and preserving them maintains the discrepancy in the statement.

Sector discrepancies is the last row of the matrix, the final transaction account that closes the matrix vertically. A few sector accounts have no discrepancy entry because data are lacking to put together independently estimated totals of saving and investment. For such sectors—noncorporate business, pension funds, and most elements of finance n.e.c.—one or another source or use of funds is derived residually in the sector account as the amount needed to balance saving and investment. The effect is to shift whatever discrepancy actually exists in the sector's column of data into some other account—first, in the transaction-account row that the residual is taken in and then, perhaps, into another sector through further residuals. In any social-accounting system, the designer in effect chooses where to show discrepancies or indeed whether to show them at all. For this and other reasons there may be a low correlation between actual data errors and discrepancies as recorded in the system.

For the sectors mentioned in the discussion of unallocated claims, sector discrepancies represent inconsistencies among a few major bodies of data for the sector. For governments and nonlife insurance, discrepancies are more complex because totals of financial sources and uses were built up for these sectors from identifiable components rather than broken down from clearly demarked totals with unallocated residuals.

The discrepancy in the household sector is the most complex in the system and in general the largest. Statistically, every transaction of households is a residual, since all items in the account are derived from the books of other sectors, including wages and personal taxes. The household discrepancy is thus a final resting place for data inconsistencies throughout the system. Because a good deal of the data in the system becomes available as coherent sector information—for example, balance sheets of financial institutions—data inconsistencies are to a large extent between sector columns of the structure and consist of such problems as differences between borrower and lender records on the timing of credit flows. For transaction types in which households are either borrowers or lenders, most of these inconsistencies are carried directly into the residual household estimates and thence to the household discrepancy. □

Section 5: Publications of Flow of Funds Data

The principal publication of current data for the flow of funds accounts consists of quarterly tables of both seasonally adjusted and unadjusted flows. These current tables are extensions for up to five or six quarters of base data that are produced each year by a review and revision process. The base data are published as tables of year-total flows from 1946 to the present and year-end outstanding claims from 1945 to date. The base data exist in quarterly form from 1952, and these quarterly data are made available to the public as computer data tapes; they are not published as quarterly tables because of the amount of paper required. As an alternative to the computer tapes, computer printouts are supplied on request for quarterly data in selected sections of the accounts that are of particular interest to individual users.

The current quarterly tables are a separate publication of the Board of Governors that is available on request, and a mailing list is maintained for quarterly distribution. Complete historical tables of year-total flows and year-end outstandings, beginning in the late 1940s, are published approximately every three years and are for sale by the Board of Governors. In both types of publications the tables include a full set of sector statements of saving and investment and a full set of transaction account tables that give net borrowing and lending in individual types of claims. They also include the two summary financial tables described in section 1, as well as a table showing the sectoral distribution of data from the national income and product accounts used in the system. Estimates of outstanding assets and liabilities are maintained on a quarterly basis and are on the computer data tapes; but they are printed only in year-end amounts in the annual publications, where they parallel the flow tables in cover-

age of summaries, sectors, and transaction types. The two summary tables of flows appear monthly in the *Federal Reserve Bulletin*.

Current quarterly tables become available about six weeks after the end of the most current quarter included in the data, but the data for that most recent quarter are preliminary and tentative. Each issue of the quarterly tables includes revisions for the next to last quarter that result from the large amount of data that has become available since the quarter's first preliminary tabulation. The tables may also include revisions in earlier quarters of the current calendar year to conform to revisions in source data resulting from new benchmarks such as the quarterly call report for commercial banks. On a current quarterly basis, however, revisions are not carried back to earlier years that have already appeared in the annual publication mentioned previously, even when source data are revised for several preceding years. Such longer-run revisions are postponed until the annual revision.

Annual revisions are intended to introduce all of the new information that has become available in the preceding year. The revision includes as a routine matter new benchmarks for earlier years or—as in the case of NIPA—revisions of source data based on new benchmarks; but it can also include shifts to new data sources, changes in derivation methods, improvements in table formats, or even changes in sectoring and transaction categories. Such changes can affect the accounts back to the earliest years covered, even when no new data have appeared for those periods. Annual revisions thus have more potential scope in the flow of funds accounts than in the national income and product accounts, for which revisions are usually limited to three years. □

Section 6: Data Sources

While a full derivation statement is outside the scope of this publication, it is possible and useful to list the principal bodies of data that go into flow of funds calculations at present and to indicate briefly the schedules on which these data are available.³⁹ The summary list in table 8 omits many peripheral and occasional sources of information, but it sketches the statistical skeleton of the system. For some areas both benchmark and current sources are listed; where no such distinction is shown, the sources used for current information are not subject to revision except as indicated.

These source descriptions are relevant only to the last two or three years as a group. Some of the sources are available for most of the period since 1945 covered by the accounts, but others are very recent. Statistical sources change continually in both scope and detail, and one of the problems in establishing a long continuous history is in transferring procedures from older to newer sources. A description of those transfers would go beyond the scope of table 8 and of this section.

Table 8 has two conspicuous omissions. The first is in sources of nonfinancial data such as saving, corporate cash flows, government surplus, and capital outlays. These data come directly from the Commerce Department's national income and product accounts, and while the sectoring in flow of funds requires detail that does not appear in the published NIPA, the Commerce Department makes all the necessary breakdowns and supplies them to the Federal Reserve. For the first preliminary calculation of a quarter, the 15-day NIPA estimates are used. These figures omit corporate profits and profit tax accruals, which must therefore be estimated by the Federal Reserve for that first run.

The other major omission from the table is the household sector. Data for this sector are almost entirely residuals from the rest of the calculation in that virtually all of the transactions and balances are measured from reports by other parties to their transactions. (The exceptions consist only of mortgage and trade debt liabilities of nonprofit organizations included in the sector.) The residual status of the sector means that a listing of data sources for

all other sectors together is implicitly a listing of sources for households. Some of the chains of relationships are extremely long, but a discussion of their nature belongs in a description of the derivation methods rather than in a listing of sources.

None of the inputs listed in table 8 are compiled explicitly or exclusively for the flow of funds accounts, although the needs of the accounts have been one consideration in the design of many of the reporting forms. Rather, flow of funds accounting consists of absorbing and digesting a wide variety of financial information, both flows and balances, each part of which has been constructed in isolation from others with its own accounting procedures, timing classifications, and institutional coverage. The digestion process is intended to standardize the accounting as far as possible, so that a transaction in a financial claim appears consistently in the seller's and buyer's statements in the same transaction category, at the same value, and in the same period.

Problems of consistency can be illustrated in certain areas. One is in federally related securities—over \$200 billion outstanding at the end of 1978—which are known collectively as the agency-issue market. These issues receive widely varying treatment in holders' balance sheets and are frequently combined with bonds of the World Bank and the Inter-American Development Bank that are unrelated to the government in any direct sense. The problem was exacerbated by the growth of federally related mortgage pool securities during the 1970s and, in the later years of the decade, by private mortgage pool securities that are similar in form. These securities are, on the one hand, not the liability of any specific issuing institution and, on the other, are frequently treated by lenders directly as mortgages. As a result there is statistical uncertainty in tracking both the volume outstanding and their ownership.

In consistency of timing, there are major problems in commercial banking, where certain balance sheet items are highly volatile on a day-to-day basis, including money supply liabilities. The dating of bank balance sheets is frequently not coincident with those of the other parties to the transactions, and the differences can generate sizable discrepancies in the data.

These are a few illustrations of the statistical problems that arise in combining a variety of sepa-

39. The most recent description of methods of calculation is "Flow of Funds Accounts—Data Sources and Derivations" (October 1971). This publication is available on request from the Board of Governors of the Federal Reserve System, Flow of Funds Section, Washington, D.C. 20551.

rate accounting systems into an integrated structure that matches payments and receipts throughout the economy. The process of adjustment unavoidably produces sector and market statements that differ to varying extents from the conventional statements used by specialists in particular financial activities. This is part of the price of constructing the broader system. One direction for development of the sys-

tem is a deepening of the detail in financial accounts in ways that show continuously the relationships to other presentations of the same information. However, the principal uses of the data are in studies of intersectoral and intermarket relationships, and for these the standard categories of the accounts are unavoidable even when they are somewhat unfamiliar to individual activities.

Table 8. Sources of financial data for flow of funds accounts

Area	Source	Availability
Federal government	Monthly Treasury statement of receipts and expenditures, <i>Treasury Bulletin</i>	Monthly, about 30 days after month-end
Federally sponsored credit agencies	Statements of condition for five groups	Monthly, quarterly, or semiannual; 25 days
State and local governments		
Benchmark	Census Bureau, <i>Governmental Finances</i>	Annual, about 17 months lag
Current	Gross offerings of securities, Public Securities Association Banking data <i>Treasury Bulletin</i>	Monthly, 30 days Weekly, 10 days revised by quarterly call reports Monthly, 60 days
Commercial banking		
Benchmark	Call reports	Quarterly, about 4 months,
Current	Several weekly and monthly reporting systems	10 to 20 days after period end, revised quarterly
Savings and loan associations	Federal Home Loan Bank Board	Monthly reports, 25 days Seviannual call reports Semiannual surveys of liquid assets
Mutual savings banks	National Association of Mutual Savings Banks Call reports	Monthly reports, 45 days Semiannual, 8 months
Credit unions	National Credit Union Administration	Monthly reports, 24 days
Life insurance		
Benchmark	<i>Life Insurance Fact Book</i>	Annual, 8 months
Current	American Council of Life Insurance	Monthly, 50 days, revised after 12 months
Private pension funds	SEC <i>Statistical Bulletin</i>	Quarterly, 10 weeks, revisions annually
State and local government retirement systems		
Benchmark	Census Bureau, <i>Governmental Finances</i>	Annual, 12 months
Current	Census Bureau	Quarterly, 10 weeks
Other insurance		
Benchmark	<i>Best's Aggregates & Averages</i>	Annual, 9 months
Current	<i>Treasury Bulletin</i> SEC	Monthly, 60 days Quarterly, 10 weeks

Area	Source	Availability
Finance companies		
Benchmark	Federal Reserve, survey of finance companies	Quinquennial, 28 months
Current	Federal Reserve monthly survey	Monthly, 35 days
Real estate investment trusts	National Association of Real Estate Investment Trusts	Quarterly, 3 months
Security brokers and dealers		
Benchmark	SEC <i>Annual Report</i>	Annual, 12 months
Current	Banking data	Weekly, 10 days and monthly, 20 days
Investment companies, money market funds	Investment Company Institute	Quarterly, 6 weeks and monthly, 30 days
Rest of world		
Benchmark	BEA (Commerce Department), International Transactions, and International Investment Position	Annual, 6 to 9 months
Current	BEA, International Transactions Treasury Department Banking data	Quarterly, 10 weeks Monthly, 6 weeks Weekly, 10 days
Nonfinancial corporate business		
Manufacturing, mining, trade Regulated industries	FTC, Quarterly Financial Report	Quarterly, 10 weeks
Benchmark	Financial reports to regulatory commissions	Annual, 1 to 2 years
Current	FTC, mail surveys, regulatory commissions	
Other industries		
Benchmark	IRS, <i>Statistics of Income</i>	Annual, 3 to 4 years
Current	Averages for other industries	
Nonfarm noncorporate business		
Benchmark	IRS, <i>Business Tax Returns;</i> <i>Partnership Tax Returns;</i> <i>Corporate Income Tax Returns</i>	Annual or biennial, 3 to 4 years
Current	Census Bureau, <i>Census of Housing</i> Banking data (q.v.) Corporate data (q.v.) Consumer credit statistics	Approximately decennial, 2 years
Farm business		
Benchmark	USDA, Balance Sheet of the Farming Sector	Annual, 9 months
Current	Banking data (q.v.) Federally sponsored agency data (q.v.) Mortgage data (q.v.)	
Mortgages	Federal Reserve	Quarterly, with preliminary in 30 days; revisions from institu- tional data
Consumer credit	Federal Reserve	Monthly, 35 days, revised at various intervals
Open-market paper	Federal Reserve Bank of New York	Monthly, 20 days, revised occasionally

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Summary of flow of funds accounts for the year 1978

Billions of dollars

Transaction category	Private domestic nonfinancial sectors				Rest of the world		U.S. government		Financial sectors					All sectors		Discrepancy	National saving and investment										
	Households		Business						State and local governments		Total		Sponsored agency and mtg. pools					Monetary authority		Commercial banking		Private nonbank finance					
	U	S	U	S	U	S	U	S	L	S	U	S	U	S	U	S	U	S									
1 Gross saving	338.3		195.6		7.6		541.5		23.5		-34.9		18.4		1.0		.7		3.4		13.3		548.5		524.9		
2 Capital consumption	181.0		172.7				353.7						6.0						2.7		3.3		359.7		359.7		
3 Net saving (1-2)	157.3		22.9		7.6		187.7		23.5		-34.9		12.4		1.0		.7		.7		10.0		188.7		165.2		
4 Gross investment (5+11)	380.1		174.1		.5		554.8		12.7		-36.6		20.7		.5		.7		9.6		9.8		551.6		539.0		
5 Private capital expenditures	298.2		249.9				548.1				-2.0		5.6						4.2		1.4		551.8		551.8		
6 Consumer durables	200.3						200.3																200.3		200.3		
7 Residential construction	92.0		16.3				108.3						-3								-3		108.0		108.0		
8 Plant and equipment	5.9		209.3				215.2						5.9						4.2		1.7		221.1		221.1		
9 Inventory change			22.3				22.3															22.3		22.3			
10 Mineral rights			2.0				2.0				-2.0																
11 Net financial investment (12-13)	81.9		-75.7		.5		6.7		12.7		-34.7		15.0		.5		.7		5.4		8.4		-2		.2	-12.7	
12 Financial uses	248.3		84.6		25.1		358.0		55.7		28.9		400.8		46.7		13.3		141.2		199.6		843.4		.2	43.0	
13 Financial sources	166.4		160.4		24.6		351.4		43.0		63.5		385.7		46.2		12.6		135.8		191.2		843.6			55.7	
14 Gold and official foreign exchange								1.2	.2		-2.6		1.6				1.6					.2	.2				
15 Treasury currency . . . . .										.5			6				.6					.6	.5		*		
16 Demand deposits and currency	18.2		5.4		-1.1		22.5		-2		4.0		2.6	28.2	*		6.3	.3	22.0		2.3		28.9	28.2		-7	
17 Private domestic	18.2		5.4		-1.1		22.5						2.6	24.8	*		9.3	.3	15.5		2.3		25.1	24.8		-3	
18 Foreign								-2						-2			.1		.3				-2	-2			
19 U.S. government									4.0					3.7				-3.1		6.8		4.0	3.7		-3		
20 Time and savings accounts	105.2		2.0		8.1		115.2		1.1	.1			7.8	124.2						65.0		7.8	59.2	124.2	124.2		
21 At commercial banks	44.1		2.0		8.1		54.1		1.1	.1			9.7	65.0						65.0		9.7	65.0	65.0	65.0		
22 At savings institutions	61.1						61.1						-2.0	59.2						65.0		-2.0	59.2	59.2	59.2		
23 Fed funds and security RPs			5.5		2.0		7.5						4.0	20.9	1.4					18.8		2.6	2.1	11.5	20.9		9.4
24 Money market fund shares	6.9						6.9						6.9									6.9	6.9	6.9			
25 Life insurance reserves	12.0						12.0			.3			11.7										11.7	12.0	12.0		
26 Pension fund reserves	65.8						65.8			6.9			58.9										58.9	65.8	65.8		
27 Net interbank claims								5.4					9.5	15.6				3.6	5.9	5.9	9.7		14.9	15.6		.7	
28 Corporate equities	-6.2		2.6				-6.2	2.6	2.4	-5			7.6	1.7					*	1.1		7.5	.5	3.7	3.7		
29 Credit market instruments	58.0	162.6	-1.2	125.6	14.6	23.6	71.4	311.8	37.7	32.8	20.4	53.7	348.4	79.8	44.6	41.4	7.0		128.7	6.9	168.1	31.5	478.0	478.0			
30 U.S. Treasury securities	17.3		-7.1		9.8		20.0		28.2		55.1		6.9		.5		7.7		-6.5		5.2		55.1	55.1			
31 Federal agency securities	9.7		.7		2.8		13.3				7.7	-1.3	19.1	41.4	.1	41.4	-4				12.3		40.1	40.1			
32 State and local govt. securities	3.3		.2	3.2	1.0	25.1	4.5	28.3					23.8							9.6		14.2		28.3	28.3		
33 Corporate and foreign bonds	-1.4			20.1			-1.4	20.1	1.6	4.0			31.3	7.5						-3	.2	31.6	7.3	31.6	31.6		
34 Mortgages	14.5	104.8		43.3	1.0		15.5	148.2			-4	-1	133.9	.9	30.6					35.0		68.3	.9	149.0	149.0		
35 Consumer credit		50.6		3.2			3.2	50.6					47.3							26.9		20.4		50.6	50.6		
36 Bank loans n.e.c.		3.4		33.9				37.3					58.4	2.8						58.4		2.8		58.4	58.4		
37 Open-market paper	14.6		1.7	5.2			16.3	5.2	7.9	6.6			2.2	14.6	-1.2		-4		-1.3	6.7		5.1	7.9	26.4	26.4		
38 Other loans		3.8		19.9		-1.6		22.2		3.9	13.0		25.5	12.5	14.6	0						10.9	12.5	38.6	38.6		
39 Security credit	1.4	1.4					1.4	1.4	0	0			-1.1	-1.0							1.8	-1.0	.4	.4			
40 Trade credit		1.4	54.9	45.5		1.0	54.9	47.9	3.4	-3	2.7	2.4	1.3								1.3		62.3	50.0		-12.3	
41 Taxes payable				3.4	1.6		1.6	3.4			3.5		1.7									1.4	5.2	5.2		*	
42 Equity in noncorporate business	-20.8			-20.8			-20.8	-20.8															-20.8	-20.8			
43 Miscellaneous	7.6	1.1	18.1	4.0			25.7	5.0	4.7	10.8	.7	-3	18.5	37.1	.6	4.8	.5	.5	9.1	11.9	8.2	19.9	49.6	52.6		3.0	
44 Sector discrepancies (1-4)	-41.8		21.4		7.0		-13.3		10.8		1.7		-2.3		.5		0		-6.3		3.5		-3.1			-3.1	-14.1

Financial assets and liabilities, December 31, 1978

Amounts outstanding in billions of dollars

S.2

Transaction category	Private domestic nonfinancial sectors				Rest of the world	U.S. government		Financial sectors					All sectors ¹		Floats and discrepancies											
	Households		Business			State and local governments		Total		Total	Sponsored agencies and mortgage pools	Monetary authority				Commercial banking		Private nonbank finance								
	A	L	A	L		A	L	A	L							A	L	A	L	A	L					
1 Total financial assets	3422.0		825.6		184.2		4431.8		358.0		185.5		3349.1		222.1		156.2		1129.9		1840.9		8324.4		8.6	
2 Total liabilities		1210.0		1466.1		296.3		2972.5		363.3		719.5		3173.8		218.7		156.2		1065.0		1733.8		7229.0		
3 Gold ²									37.6		0		11.7				11.7						49.3			
4 SDRs ²									9.7		1.6												11.2			
5 I.M.F. position										1.0	1.1		*				*						1.0	1.0		
6 Official foreign exchange										4.4	2.8		1.6				1.6						4.4	4.4		
7 Treasury currency												10.7	13.1										13.1	10.7	-2.5	
8 Demand deposits and currency	222.1		81.3		13.9		317.3		19.0		18.7		22.1	405.3	.3		104.3		1.5	301.0	20.3		377.1	405.3	28.2	
9 Private domestic	222.1		81.3		13.9		317.3				18.7		22.1	367.8	.3		99.2		1.5	268.6	20.3		339.4	367.8	28.4	
10 U.S. government														18.5			4.4						18.7	18.5	-1	
11 Foreign									19.0					19.0			.7						19.0	19.0		
12 Time and savings accounts	1096.3		31.2		65.3		1192.7		22.2		.9		26.5	1242.3						615.6	26.5	626.7	1242.3	1242.3		
13 At commercial banks	471.7		31.2		65.3		568.1		22.2		.9		24.3	615.6						615.6	24.3		615.6	615.6		
14 At savings institutions	624.6						624.6						2.1	626.7							2.1	626.7	626.7	626.7		
15 Fed funds and security RPs			13.7		10.0		23.7						15.6	79.0	3.6						73.1	12.0	5.9	39.4	79.0	39.7
16 Money market fund shares	10.8						10.8							10.8								10.8	10.8	10.8		
17 Life insurance reserves	198.5						198.5				8.7			189.8								189.8	198.5	198.5		
18 Pension fund reserves	530.8						530.5				59.8			470.7								470.7	530.5	530.5		
19 Net interbank claims ³									-7.2				54.4	38.1			7.7	46.7			46.7	-8.6	47.1	38.1	-9.0	
20 Corporate equities ⁴	808.5						808.5		42.0				235.6	42.6							.1	235.5	42.6	1086.1	42.6	
21 Credit market instruments	486.0	1164.8	77.6	1129.8	82.5	282.1	646.2	2576.8	171.8	165.5	129.5	626.2	2820.3	399.3	215.6	199.9	119.2		1025.0	21.7	1460.6	177.7	3767.8	3767.8		
22 U.S. Treasury securities ⁵	166.7		.6		42.4		209.7		137.8			619.2	271.7		1.4		110.6		95.2		64.5		619.2	619.2		
23 Federal agency securities ⁶	37.1		3.5		16.3		56.9			23.8	6.2	125.4	199.9		.2	199.9	8.0		43.8		73.3		206.1	206.1		
24 State and local government securities	75.0		3.7	15.8	8.3	275.6	86.9	291.4				204.5							126.2		78.3		291.4	291.4		
25 Corporate and foreign bonds	64.8			318.3			64.8	318.3	10.6	42.9		346.6	60.8						7.4	5.9	339.1	54.9	422.0	422.0		
26 Mortgages	106.2	766.1		392.4	15.6		121.8	1158.5			9.9	.8	1040.8	13.3	160.6				214.0		666.2	13.3	1172.5	1172.5		
27 Consumer credit		340.0	43.6				43.6	340.0					296.4						167.2		129.1		340.0	340.0		
28 Bank loans n.e.c.		19.2		260.2				279.4			49.9		358.2	28.8			0		358.2				358.2	358.2		
29 Open-market paper	36.1		26.3	25.4			62.4	25.4	23.3	26.6			30.2	63.9	.2		.6		13.0	15.8	16.4	48.0	115.9	115.9		
30 Other loans		39.5		117.6		6.5		163.8		46.0	95.8		146.6	32.7	53.1	0						93.5	32.7	242.5	242.5	
31 Security credit	8.8	21.7					8.8	21.7	0	0			38.8	25.9					21.0		17.8	25.9	47.6	47.6		
32 Trade credit ⁷		13.2	355.5	271.5		14.2	355.5	299.0	20.3	12.7	8.9	14.1	11.3									11.3		396.0	325.8	-70.2
33 Taxes payable				23.9	12.5		12.5	23.9			13.6			5.4							9		4.5	26.1	29.3	3.2
34 Miscellaneous	60.5	10.3	266.2	40.8			326.7	51.2	42.8	179.6	8.5	*	98.1	264.6	2.5	18.8	3.0	5.2	35.5	61.2	57.1	179.3	476.2	495.4	19.2	

For notes see facing page.

Introduction to Flow of Funds

Financial assets and liabilities, December 31, 1978 — continued

Amounts outstanding in billions of dollars

Sector	Total		Savings and loan assns.		Mutual savings banks		Credit unions		Life insurance companies		Private pension funds		State and local govt. retirement funds		Other insurance companies		Finance companies		Real estate investment trusts		Open-end investment companies		Money market funds		Security brokers and dealers	
	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L
1 Total financial assets	1840.9		523.6		161.2		58.4		378.3		198.6		153.0		133.3		145.7		6.8		42.6		10.8		28.6	
2 Total liabilities		1733.8		494.6		147.3		53.0		359.2		198.6		153.0		96.1		141.1		11.5		42.6		10.8		26.0
3 Demand deposits and currency	20.3		1.6		2.2		1.0		2.4		1.8		2.8		2.6		4.4				.7		.1		.9	
4 Time and savings accounts	26.5	626.7	7.2	431.0	.7	142.6	3.0	53.0			10.3												5.3			
5 At commercial banks	24.3		7.2		.7		.9				10.3												5.3			
6 At savings institutions	2.1	626.7		431.0		142.6	2.1	53.0																		
7 Fed funds and security RPs	12.0	5.9	9.0	5.9	3.0																					
8 Money market fund shares		10.8																					10.8			
9 Life insurance reserves		189.8						189.8																		
10 Pension fund reserves		470.7						119.1		198.6		153.0														
11 Corporate equities ⁴	235.5	42.6			4.8				35.5		107.9		33.3	19.4							31.4	42.6			3.2	
12 Credit market instruments	1460.6	177.7	485.0	48.5	142.6		54.5		318.7		73.3		116.9	100.0		141.3	119.6	5.9	9.7	10.5		1.6		5.1	6.7	
13 U.S. Treasury securities ⁵	64.5		8.6		5.0		1.4		4.8		17.5		10.5	10.7							1.6		1.5		3.1	
14 Federal agency securities ⁶	73.3		27.4		13.4		3.8		6.5		4.7		12.4	5.1												
15 State and local government securities	78.3		1.3		3.3				6.4				4.0	62.5											.9	
16 Corporate and foreign bonds	339.1	54.9		2.0	21.6				158.5		48.0		81.4	21.4		51.3		1.6	5.5						2.8	
17 Mortgages	666.2	13.3	432.9	10.7	95.2		3.3		105.9		.1		8.7	.4		10.8	51.3	5.9	2.5							
18 Consumer credit	129.1		12.2		3.8		45.9									67.1				4.9						
19 Bank loans n.e.c.		28.8		3.1												20.8										
20 Open-market paper	16.4	48.0	2.7		.4				6.3											.6	3.4		3.7			
21 Other loans	93.5	32.7		32.7					30.1							63.3	47.4									
22 Security credit	17.8	25.9																						17.8	25.9	
23 Trade credit ⁷	11.3													11.3												
24 Taxes payable		4.5		1.3					1.9							.7		.5								
25 Miscellaneous	57.1	179.3	20.9	7.9	7.9	4.7			21.7	48.5	5.4				95.4		21.0	.8	1.8				.3			

¹ Excess of total assets (line 1) over total liabilities (line 2) consists of gold, special drawing rights, and corporate equities not included in liabilities minus total floats and discrepancies on line 1 in adjacent column.
² Rest of world total holdings of gold and special drawing rights appear as assets and are included in totals, because in flow tables transactions in these categories are treated as purchases and sales of existing assets without associated liabilities.
³ Rest of world asset is net of liabilities, and commercial banking liability is net of claims on rest of world. Banking liability also reflects discrepancy in the far right column.
⁴ Assets are shown at market value; nonbank finance liability is redemption value of shares of open-end investment companies. No specific liability is attributed to issuers of stocks other than open-end investment companies for amounts outstanding.

⁵ Includes savings bonds and other nonmarketable debt held by the public. Postal savings system deposits are included in line 34 of Part A, All Sectors.
⁶ Issues by agencies in the budget (CCC, Export-Import Bank, GNMA, TVA, FHA) and by sponsored credit agencies in Financial sectors. Includes loan participation certificates.
⁷ Business asset is corporate only. Noncorporate trade credit is deducted in liability total to conform to quarterly flow tables.

FEBRUARY 1980
FUNDS RAISED IN CREDIT MARKETS

FUNDS RAISED IN CREDIT MARKETS

SUMMARY OF FUNDS RAISED IN CREDIT MARKETS

4

ANNUAL NET FLOWS

ANNUAL NET FLOWS

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
CREDIT MARKET FUNDS RAISED BY NONFINANCIAL SECTORS														
1	94.1	101.1	153.9	176.8	203.1	191.6	210.8	271.9	338.5	400.3	394.6		TOTAL FUNDS RAISED BY NONFINANCIAL SECTORS	1
2	90.2	95.3	142.5	166.3	195.4	187.7	200.7	261.1	335.4	398.2	390.5		EXCLUDING EQUITIES	2
3	-3.7	11.9	24.9	15.1	8.3	11.8	85.4	69.0	56.8	53.7	37.4		U.S. GOVERNMENT	3
4	-1.3	12.9	26.0	14.3	7.9	12.0	85.8	69.1	57.6	55.1	38.8		TREASURY ISSUES	4
5	-2.4	-1.0	-1.1	.8	.4	-2	-4	-1	-9	-1.4	-1.4		AGENCY ISSUES + MORTGAGES	5
6	97.8	89.2	129.0	161.7	194.9	179.8	125.4	202.9	281.8	346.6	357.2		ALL OTHER NONFINANCIAL SECTORS	6
7	3.9	5.8	11.5	10.5	7.7	3.8	10.1	10.8	3.1	2.1	4.1		CORPORATE EQUITIES	7
8	93.9	83.5	117.6	151.2	187.2	175.9	115.3	192.0	278.6	344.5	353.1		DEBT INSTRUMENTS	8
PRIVATE DOMESTIC NONFINANCIAL SECTORS														
9	94.1	86.4	124.0	157.7	188.8	164.4	112.1	182.0	267.9	314.4	334.4		NONFINANCIAL SECTORS	9
10	3.4	5.7	11.4	10.9	7.9	4.1	9.9	10.5	2.7	2.6	3.2		CORPORATE EQUITIES	10
11	90.7	80.7	112.5	146.8	180.9	160.3	102.1	171.5	265.1	311.8	331.1		DEBT INSTRUMENTS	11
DEBT CAPITAL INSTRUMENTS														
12	52.5	60.2	86.7	102.1	105.1	98.0	98.4	123.5	175.6	196.6	203.8		DEBT CAPITAL INSTRUMENTS	12
13	9.9	11.2	17.4	14.7	14.7	16.5	16.1	15.7	23.7	28.3	21.3		ST.+LOC. OBLIGATIONS	13
14	12.0	19.8	18.8	12.2	9.2	19.7	27.2	22.8	21.0	20.1	21.8		CORPORATE BONDS	14
15	30.6	29.2	50.5	75.2	81.2	61.9	55.0	85.0	131.0	148.2	160.8		MORTGAGES	15
16	18.1	14.8	28.0	42.5	46.4	34.8	39.5	63.7	96.4	104.5	106.1		HOME MORTGAGES	16
17	4.9	6.9	9.9	12.7	10.4	6.9	*	1.8	7.4	10.2	10.1		MULTI-FAMILY RESID.	17
18	5.7	7.1	10.2	16.4	18.9	15.1	11.0	13.4	18.4	23.3	27.2		COMMERCIAL	18
19	1.8	.8	2.4	3.6	5.5	5.0	4.6	6.1	8.8	10.2	17.2		FARM	19
OTHER DEBT INSTRUMENTS														
20	38.3	20.4	25.8	44.7	75.8	62.3	3.8	48.0	89.5	115.2	127.3		OTHER DEBT INSTRUMENTS	20
21	10.8	5.4	14.7	19.8	26.0	9.9	9.7	25.6	40.6	50.6	42.3		CONSUMER CREDIT	21
22	15.8	7.6	7.1	17.1	37.1	32.0	-12.3	4.0	27.0	37.3	47.1		BANK LOANS N.E.C.	22
23	1.8	2.6	-4	.8	2.5	6.6	-2.6	4.0	2.9	5.2	10.9		OPEN-MARKET PAPER	23
24	9.9	4.8	4.4	6.9	10.3	13.7	9.0	14.4	15.0	22.2	27.0		OTHER	24
BY BORROWING SECTOR:														
25	94.1	86.4	124.0	157.7	188.8	164.4	112.1	182.0	267.9	314.4	334.4		BY BORROWING SECTOR:	25
26	10.7	11.3	17.7	14.5	13.2	15.5	13.7	15.2	20.4	23.6	18.0		ST.+LOC. GOVERNMENTS	26
27	34.5	25.2	44.9	65.1	80.1	51.3	49.7	90.5	139.9	162.6	160.4		HOUSEHOLDS	27
NONFINANCIAL BUSINESS														
28	49.0	49.9	61.4	78.1	95.5	97.6	48.6	76.3	107.6	128.2	156.0		NONFINANCIAL BUSINESS	28
29	3.0	2.3	4.5	5.8	9.6	8.0	8.8	10.9	14.7	18.1	26.8		FARM	29
30	7.4	6.9	11.7	14.1	12.9	7.4	2.0	4.7	12.9	15.4	16.1		NONFARM NONCORPORATE	30
31	38.6	40.7	45.2	58.2	73.0	82.1	37.9	60.7	79.9	94.7	113.1		CORPORATE	31
32	35.2	35.0	33.8	47.2	65.2	78.0	28.0	50.2	77.2	92.2	109.8		DEBT INSTRUMENTS	32
33	3.4	5.7	11.4	10.9	7.9	4.1	9.9	10.5	2.7	2.6	3.2		EQUITIES	33
FOREIGN														
34	3.7	2.9	5.1	4.0	6.1	15.4	13.3	20.8	13.9	32.3	22.9		FOREIGN	34
35	.5	.1	*	-4	-2	-2	.2	.3	.4	-5	.9		CORPORATE EQUITIES	35
36	3.2	2.8	5.1	4.4	6.3	15.7	13.2	20.5	13.5	32.8	22.0		DEBT INSTRUMENTS	36
37	1.0	.9	1.0	1.0	1.0	2.1	6.2	8.6	5.1	4.0	5.0		BONDS	37
38	-3	-2	2.0	3.0	2.7	4.7	3.9	6.8	3.1	18.3	2.8		BANK LOANS N.E.C.	38
39	-3	.8	-3	-1.0	.9	7.3	-3	1.9	2.4	6.6	11.2		OPEN-MARKET PAPER	39
40	2.1	1.3	1.8	1.5	1.7	1.6	2.8	3.3	3.0	3.9	3.0		U.S. GOVERNMENT LOANS	40
41	.5	2.8	3.2	-.3	-1.7	-4.6	2.9	3.2	1.1	3.8	.1		MEMO: U.S. GOVT. CASH BALANCE	41
42	93.7	98.3	150.8	177.1	204.8	196.1	207.9	268.8	337.4	396.6	394.6		TOTALS NET OF CHANGES IN U.S. GOVT. CASH BALANCES--	42
43	-4.1	9.1	21.7	15.4	9.9	16.4	82.5	65.9	55.7	49.9	37.3		TOTAL FUNDS RAISED BY U.S. GOVERNMENT	43

CREDIT MARKET FUNDS RAISED BY FINANCIAL SECTORS

1	32.5	17.9	14.4	25.8	44.8	39.2	12.7	24.1	54.0	81.4	86.9		TOTAL FUNDS RAISED BY FINANCIAL SECTORS	1
2	9.5	9.8	5.9	8.4	19.9	23.1	13.5	18.6	26.3	41.4	52.4		U.S. GOVT. RELATED	2
3	9.1	8.2	1.1	3.5	16.3	16.6	2.3	3.3	7.0	23.1	24.6		SPONSORED CR. AG. SEC.	3
4	.7	1.6	4.8	4.9	3.6	5.8	10.3	15.7	20.5	18.3	27.8		MORTGAGE POOL SECURITIES	4
5	-.3	-	-	-	-	.7	.9	-4	-1.2	-	-		LOANS FROM U.S. GOVERNMENT	5
6	23.0	8.1	9.5	17.4	24.9	16.2	-8	5.5	27.7	40.0	34.5		PRIVATE FINANCIAL SECTORS	6
7	6.3	4.8	3.5	2.8	1.5	.3	.6	1.0	.9	1.7	1.6		CORPORATE EQUITIES	7
8	16.7	3.3	5.0	14.7	23.4	15.9	-1.4	4.4	26.9	38.3	32.9		DEBT INSTRUMENTS	8
9	.8	2.7	3.8	5.1	3.5	2.1	2.9	5.8	10.1	7.5	7.0		CORPORATE BONDS	9
10	.2	.7	2.1	1.7	-1.2	-1.3	2.3	2.1	3.1	.9	-1.2		MORTGAGES	10
11	1.3	-1	1.9	6.0	9.0	4.6	-3.7	-3.7	-3	2.8	-5		BANK LOANS N.E.C.	11
12	10.3	-1.3	-1	1.9	4.9	3.8	1.1	2.2	9.6	14.6	18.4		OPEN-MARKET PAPER	12
13	4.0	1.3	-2.7	*	7.2	6.7	-4.0	-2.0	4.3	12.5	9.2		LOANS FROM FHLB'S	13
14	32.5	17.9	14.4	25.8	44.8	39.2	12.7	24.1	54.0	81.4	86.9		TOTAL, BY SECTOR	14
15	8.8	8.2	1.1	3.5	16.3	17.3	3.2	2.9	5.8	23.1	24.6		SPONSORED CREDIT AGENCIES	15
16	.7	1.6	4.8	4.9	3.6	5.8	10.3	15.7	20.5	18.3	27.8		MORTGAGE POOLS	16
17	23.0	8.1	9.5	17.4	24.9	16.2	-8	5.5	27.7	40.0	34.5		PRIVATE FINANCIAL SECTORS	17
18	-2	.2	1.5	2.3	1.2	1.2	1.2	2.3	1.1	1.3	1.1		COMMERCIAL BANKS	18
19	4.3	-1.9	-4	1.7	2.2	3.5	-3	-8	1.3	6.7	4.5		BANK AFFILIATES	19
20	4.1	1.8	-1	1.7	6.0	4.8	-2.3	-1	9.9	14.3	9.8		SAVINGS + LOAN ASSNS.	20
21	.5	.4	.6	.5	.5	.9	1.0	.9	.9	1.1	1.0		OTHER INSURANCE COMPANIES	21
22	7.8	2.6	2.7	6.6	9.5	6.0	.5	6.4	17.6	18.6	19.5		FINANCE COMPANIES	22
23	1.5	2.2	2.9	6.3	6.5	.6	-1.4	-2.4	-2.2	-1.0	-.6		RRITS	23
24	4.9	2.8	1.3	-.5	-1.2	-.7	-1	-1.0	-.9	-1.0	-.9		OPEN-END INVESTMENT COS.	24

TOTAL CREDIT MARKET FUNDS RAISED, ALL SECTORS, BY TYPE

1	126.6	119.0	168.4	202.6	248.0	230.8	223.5	296.0	392.5	481.7	481.5		TOTAL FUNDS RAISED	1
2	4.9	2.8	1.3	-.5	-1.2	-.7	-.1	-1.0	-.9	-1.0	-.9		INVESTMENT COMPANY SHARES	2
3	5.2	7.7	13.7	13.8	10.4	4.8	10.8	12.9	4.9	4.7	6.6		OTHER CORPORATE EQUITIES	3
4	116.4	108.4	153.4	199.3	238.8	226.7	212.8	284.1	388.5	478.0	475.8		DEBT INSTRUMENTS	4
5	6.2	21.7	30.9	23.6	28.3	34.3	98.2	88.1	84.3	95.2	89.9		U.S. GOVERNMENT SECURITIES	5
6	9.9	11.2	17.4	14.7	14.7	16.5	16.1	15.7	23.7	28.3	21.3		STATE + LOCAL OBLIGATIONS	6
7	13.8	23.3	23.5	18.4	13.6	23.9	36.4	37.2	36.1	31.6	33.7		CORPORATE + FOREIGN BONDS	7
8	30.7	29.9	52.5	76.8	79.9	60.5	57.2	87.1	134.0	149.0	159.5		MORTGAGES	8
9	10.8	5.4	14.7	19.8	26.0	9.9	9.7	25.6	40.6	50.6	42.3		CONSUMER CREDIT	9
10	16.8	7.3	11.0	26.1	48.8	41.3	-12.2	7.0	29.8	58.4	49.5		BANK LOANS N.E.C.	10
11	12.5	2.1	-1	1.6	8.3	17.7	-1.2	8.1	15.0	26.4	40.5		OPEN-MARKET PAPER	11
12	15.8	7.5	3.5	8.4	19.1	22.7	8.7	15.3	25.2	38.6	39.2		OTHER LOANS	12

FEBRUARY 1980
CREDIT MARKET SUPPLY OF FUNDS

CREDIT MARKET SUPPLY OF FUNDS

DIRECT AND INDIRECT SOURCES OF FUNDS TO CREDIT MARKETS

5

ANNUAL NET FLOWS												ANNUAL NET FLOWS	
1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
1	90.2	95.3	142.5	166.3	195.4	187.7	200.7	261.1	335.4	398.2	390.5	TOTAL FUNDS ADVANCED IN CREDIT MARKETS TO NONFINANCIAL SECTORS	1
												BY PUBLIC AGENCIES + FOREIGN	
2	16.1	28.6	44.0	19.4	31.8	53.7	44.6	54.3	85.1	109.7	81.0	TOTAL NET ADVANCES, BY TYPE	2
3	-3	15.3	34.4	7.6	9.5	11.9	22.5	26.8	40.2	43.9	2.6	U.S. GOVERNMENT SECURITIES	3
4	5.1	6.5	7.0	7.0	8.2	14.7	16.2	12.8	20.4	26.5	35.5	RESIDENTIAL MORTGAGES	4
5	4.0	1.3	-2.7	*	7.2	6.7	-4.0	-2.0	4.3	12.5	9.2	FLB ADVANCES TO S+L'S	5
6	6.7	5.4	5.2	4.7	6.9	20.5	9.8	16.6	20.2	26.9	33.8	OTHER LOANS + SECURITIES	6
7	3.1	2.8	2.8	1.8	2.8	9.8	15.1	8.9	11.8	20.4	23.0	TOTALS ADVANCED, BY SECTOR	
8	9.3	10.4	5.9	8.8	19.1	26.5	14.8	20.3	26.8	44.6	57.5	U.S. GOVERNMENT	7
9	4.2	5.0	8.9	.3	9.2	6.2	8.5	9.8	7.1	7.0	7.7	GOVT. RELATED AG. + POOLS	8
10	-5	10.5	26.4	8.4	.6	11.2	6.1	15.2	39.4	37.7	-7.2	CORPORATE + FOREIGN BONDS	9
												FOREIGN	10
11	9.5	9.8	5.9	8.4	19.9	23.1	13.5	18.6	26.3	41.4	52.4	AGENCY BORROWING AND POOL SECURITY ISSUES NOT INCLUDED IN LINE 1	11
												PRIVATE DOMESTIC FUNDS ADVANCED	
12	83.6	76.5	104.4	155.3	183.6	157.1	169.7	225.4	276.5	330.0	361.9	TOTAL NET ADVANCES	12
13	5.8	6.4	-3.6	16.0	18.8	22.4	75.7	61.3	44.1	51.3	87.3	U.S. GOVERNMENT SECURITIES	13
14	9.9	11.2	17.4	14.7	14.7	16.5	16.1	15.7	23.7	28.3	21.3	STATE + LOCAL OBLIGATIONS	14
15	12.5	20.0	19.5	13.1	10.0	20.9	32.8	30.5	22.5	22.5	27.2	CORPORATE + FOREIGN BONDS	15
16	17.9	14.7	30.8	48.1	48.4	26.9	23.2	52.7	83.3	88.2	80.7	RESIDENTIAL MORTGAGES	16
17	41.5	25.5	37.6	63.4	98.8	77.1	17.9	63.3	107.3	152.2	154.6	OTHER MORTGAGES + LOANS	17
18	4.0	1.3	-2.7	*	7.2	6.7	-4.0	-2.0	4.3	12.5	9.2	LESS: FLB ADVANCES	18
												PRIVATE FINANCIAL INTERMEDIATION	
19	57.5	77.0	109.4	148.3	161.3	125.7	122.5	190.1	257.0	296.9	297.0	CREDIT MARKET FUNDS ADVANCED BY PRIVATE FINANCIAL INSTS.	19
20	19.0	35.7	50.4	70.3	84.6	66.8	29.4	59.6	87.6	128.7	120.6	COMMERCIAL BANKING	20
21	14.6	17.4	39.4	47.3	35.1	24.2	53.5	70.8	82.0	75.9	54.4	SAVINGS INSTITUTIONS	21
22	13.2	17.0	13.6	16.9	23.7	29.8	40.6	49.9	67.9	73.5	76.8	INSURANCE + PENSION FUNDS	22
23	10.8	6.9	6.1	13.9	17.9	4.8	-1.0	9.8	19.6	18.7	45.3	OTHER FINANCE	23
24	57.5	77.0	109.4	148.3	161.3	125.7	122.5	190.1	257.0	296.9	297.0	SOURCES OF FUNDS	24
25	4.5	57.6	90.3	102.3	97.3	67.5	92.0	124.6	141.2	142.5	129.5	PRIVATE DOMESTIC DEP. + RP'S	25
26	16.7	3.3	5.0	14.7	23.4	15.9	-1.4	4.4	26.9	38.3	32.9	CREDIT MARKET BORROWING	26
27	36.2	16.0	14.1	31.4	40.6	42.3	32.0	61.0	89.0	116.0	134.6	OTHER SOURCES	27
28	14.0	-7.5	-4.5	3.8	3.0	10.3	-8.7	-4.6	1.2	6.3	26.8	FOREIGN FUNDS	28
29	*	2.9	2.2	.7	-1.0	-5.1	-1.7	-1.1	4.3	6.8	-1.1	TREASURY BALANCES	29
30	11.0	12.7	8.8	11.8	18.4	26.2	29.7	34.5	49.4	62.7	57.8	INSURANCE + PENSION RES.	30
31	11.2	7.9	7.6	15.1	20.2	10.8	12.7	31.2	34.1	40.3	50.0	OTHER, NET	31
												PRIVATE DOMESTIC NONFINANCIAL INVESTORS	
32	42.8	2.9	*	21.6	45.7	47.3	45.8	39.8	46.4	71.4	97.8	DIRECT LENDING IN CR. MARKETS	32
33	17.7	-7.3	-10.9	4.2	18.8	18.9	24.1	16.1	23.0	33.2	56.0	U.S. GOVERNMENT SECURITIES	33
34	8.4	-1.3	.8	3.0	5.4	9.4	8.4	3.8	2.6	4.5	-6	STATE + LOCAL OBLIGATIONS	34
35	5.4	9.5	8.8	5.0	2.0	5.1	8.4	5.8	-3.3	-1.4	3.3	CORPORATE + FOREIGN BONDS	35
36	7.9	-2.0	-1.9	1.3	9.8	5.8	-1.3	1.9	9.5	16.3	11.4	OPEN-MARKET PAPER	36
37	3.6	4.1	3.2	8.2	9.7	8.0	6.2	12.1	14.6	18.7	27.6	OTHER	37
38	7.3	61.1	93.7	106.7	101.2	73.8	98.1	131.9	149.5	151.8	137.2	DEPOSITS + CURRENCY	38
39	2.2	-3.1	.8	1.6	11.0	-2.2	1.2	2.3	2.2	7.5	4.1	SECURITY RP'S	39
40	-	-	-	-	-	2.4	1.3	*	.2	6.9	34.4	MONEY MARKET FUND SHARES	40
41	-2.2	55.3	79.1	83.6	75.7	65.4	84.0	113.5	121.0	115.2	84.5	TIME + SAVINGS ACCOUNTS	41
42	-17.2	26.7	12.2	14.0	37.5	32.4	-15.8	-13.2	23.0	45.9	2.7	LARGE AT BANKS	42
43	6.6	11.9	27.3	24.2	9.8	11.3	40.3	57.6	29.0	8.2	38.0	OTHER AT BANKS	43
44	8.4	16.6	39.6	45.4	28.5	21.8	59.4	69.1	69.0	61.1	43.8	AT SAVINGS INSTITUTIONS	44
45	7.3	8.9	13.7	21.5	14.5	8.2	12.6	16.1	26.1	22.2	14.2	MONEY	45
46	4.5	5.4	10.4	17.1	10.6	1.9	6.4	8.8	17.8	12.9	6.5	DEMAND DEPOSITS	46
47	2.8	3.5	3.4	4.4	3.9	6.3	6.2	7.3	8.3	9.3	7.7	CURRENCY	47
48	50.1	64.0	93.7	128.3	146.9	121.1	143.9	171.7	195.9	223.2	235.0	TOTAL OF CREDIT MARKET INSTRUMENTS, DEPOSITS + CURRENCY	48
49	17.9	30.0	30.9	11.6	16.3	28.6	22.2	20.8	25.4	27.5	20.8	PUBLIC HOLDINGS AS % OF TOTAL	49
50	68.8	100.6	104.8	95.5	87.9	80.0	72.2	84.3	93.0	90.0	82.1	PRV. FINAN. INTERMEDIATION (%)	50
51	13.5	2.9	22.0	12.2	3.6	21.5	-2.6	10.6	40.5	44.0	19.6	TOTAL FOREIGN FUNDS	51
												CORPORATE EQUITIES NOT INCLUDED ABOVE	
1	10.1	10.5	15.0	13.3	9.2	4.1	10.7	11.9	4.0	3.7	5.6	TOTAL NET ISSUES	1
2	4.9	2.8	1.3	-5	-1.2	-7	-1	-1.0	-9	-1.0	-9	MUTUAL FUND SHARES	2
3	5.2	7.7	13.7	13.8	10.4	4.8	10.8	12.9	4.9	4.7	6.6	OTHER EQUITIES	3
4	12.2	11.3	19.3	16.4	13.1	5.8	9.6	12.3	7.4	7.6	16.8	ACQ. BY FINANCIAL INSTITUTIONS	4
5	-2.0	-8	-4.3	-3.2	-3.9	-1.7	1.1	-4	-3.4	-3.8	-11.2	OTHER NET PURCHASES	5

Line 1. Page 2, line 2. 30. Excludes net investment of these reserves in corporate equities.

2. Sum of lines 3-6 or 7-10. 31. Mainly retained earnings and net miscellaneous liabilities.

6. Includes farm and commercial mortgages. 32. Line 12 less line 19 plus line 26.

11. Credit market funds raised by Federally sponsored credit agencies. Includes all GMAA-guaranteed security issues backed by mortgage pools. 33-37. Lines 13-17 less amounts acquired by private finance. Line 37 includes mortgages.

12. Line 1 less line 2 plus line 11. Also line 19 less line 26 plus line 32. Also sum of lines 27, 32, and 38 less 47. 39-46. See line 25.

17. Includes farm and commercial mortgages. 47. Mainly an offset to line 9.

25. Lines 39 + 40 + 41 + 46 or line 38 less line 47. 48. Lines 32 + 38 or line 12 less line 27 plus line 47.

26. Excludes equity issues and investment company shares. Includes line 18. 49. Line 2/line 12.

28. Foreign deposits at commercial banks, bank borrowings from foreign branches, and liabilities of foreign banking offices to foreign affiliates, net of claims on foreign affiliates and deposits by banking in foreign banks. 50. Line 19/line 12.

29. Demand deposits at commercial banks. 51. Line 10 plus line 28.

Corporate Equities
Line 1 and 3. Includes issues by financial institutions.

FEBRUARY 1980
CREDIT MARKET DEBT

CREDIT MARKET DEBT
6

SUMMARY OF CREDIT MARKET DEBT OUTSTANDING

YEAR-END OUTSTANDINGS

YEAR-END OUTSTANDINGS

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
CREDIT MARKET DEBT OWED BY NONFINANCIAL SECTORS														
1	1387.8	1482.9	1624.7	1791.6	1987.3	2172.6	2374.9	2636.1	2971.8	3368.5	3759.9		TOTAL CREDIT MARKET DEBT OWED BY NONFINANCIAL SECTORS	1
2	289.0	300.8	325.7	340.8	349.1	360.8	446.3	515.8	572.5	626.2	663.6		U.S. GOVERNMENT	2
3	278.4	291.2	317.3	331.5	339.4	351.5	437.3	506.4	564.1	619.2	658.0		TREASURY ISSUES	3
4	10.6	9.6	8.5	9.3	9.6	9.4	8.9	9.3	8.4	7.0	5.6		AGENCY ISSUES + MORTGAGES	4
5	1049.9	1130.4	1242.8	1389.4	1570.5	1730.6	1834.3	2005.4	2270.8	2576.8	2912.5		PRIVATE DOMESTIC NONFINANCIAL SECTORS	5
6	719.5	779.7	866.4	968.5	1073.6	1171.3	1271.5	1395.6	1571.6	1769.2	1973.7		DEBT CAPITAL INSTRUMENTS	6
7	133.1	144.4	161.8	176.5	191.2	207.7	223.8	239.5	263.2	291.4	312.7		STATE + LOCAL OBLIGATIONS	7
8	147.6	167.3	186.1	198.3	207.5	227.1	254.3	277.2	298.1	318.3	340.0		CORPORATE BONDS	8
9	438.8	468.0	518.5	593.7	674.9	736.5	793.3	879.0	1010.3	1158.5	1321.0		MORTGAGES	9
10	280.2	294.6	322.6	365.1	411.5	446.1	485.6	549.6	646.2	751.2	858.8		HOME MORTGAGES	10
11	51.5	58.4	68.3	81.0	91.4	98.3	98.9	102.7	110.1	120.4	130.5		MULTI-FAMILY RESID.	11
12	78.1	85.2	95.4	111.8	130.7	145.8	157.9	169.6	188.2	210.9	238.3		COMMERCIAL	12
13	29.0	29.8	32.2	35.8	41.3	46.3	50.9	57.0	65.7	76.0	93.4		FARM	13
14	330.4	350.7	376.4	420.9	496.9	559.3	562.8	609.8	699.2	809.6	938.7		OTHER DEBT INSTRUMENTS	14
15	125.5	133.1	140.7	157.6	194.7	226.8	214.2	217.2	243.9	279.4	329.3		BANK LOANS N.E.C.	15
16	137.7	143.1	157.8	177.6	203.7	213.6	223.3	248.8	289.4	340.0	382.3		CONSUMER CREDIT	16
17	7.6	10.2	9.9	10.6	13.1	19.8	17.2	21.2	24.3	25.4	36.3		OPEN-MARKET PAPER	17
18	59.5	64.3	68.1	75.0	85.5	99.2	108.2	122.6	141.6	163.8	190.8		OTHER	18
19	1049.9	1130.4	1242.8	1389.4	1570.5	1730.6	1834.3	2005.4	2270.8	2576.8	2912.5		BY BORROWING SECTOR:	19
20	137.9	149.2	166.9	181.4	193.7	209.2	222.9	238.2	258.5	282.1	300.1		STATE + LOCAL GOVERNMENTS	20
21	456.1	481.2	526.6	591.5	671.7	722.8	772.3	863.3	1003.4	1164.8	1326.9		HOUSEHOLDS	21
22	455.9	500.1	549.3	616.5	705.1	798.6	839.1	904.0	1008.8	1129.8	1285.5		NONFINANCIAL BUSINESS	22
23	44.6	46.9	51.4	57.2	67.0	75.1	83.9	94.8	109.4	127.6	154.5		FARM	23
24	69.8	76.8	88.5	102.6	116.3	123.7	125.8	130.3	143.3	156.6	172.7		NONFARM NONCORPORATE	24
25	341.4	376.4	409.5	456.7	521.8	599.8	629.5	678.9	756.2	845.7	958.3		CORPORATE	25
FOREIGN CREDIT MARKET DEBT OWED TO U.S.														
26	48.9	51.6	56.2	61.3	67.7	81.1	94.3	114.9	128.5	165.5	183.9		BONDS	26
27	13.2	14.1	15.0	16.0	17.0	19.1	25.3	33.9	38.9	42.9	47.9		BANK LOANS N.E.C.	27
28	6.0	5.8	7.3	10.4	13.1	17.8	21.6	28.4	31.4	49.9	49.2		OPEN-MARKET PAPER	28
29	3.2	4.0	4.3	3.2	4.2	11.4	11.7	13.6	16.1	26.6	37.8		U.S. GOVERNMENT LOANS	29
30	26.5	27.8	29.6	31.7	33.4	32.8	35.7	39.0	42.1	46.0	48.9			30
CREDIT MARKET DEBT OWED BY FINANCIAL SECTORS														
1	103.0	116.1	127.0	150.3	193.6	232.1	284.3	267.5	319.6	399.3	486.1		TOTAL CREDIT MARKET DEBT OWED BY FINANCIAL SECTORS	1
2	33.8	43.6	49.5	57.9	77.9	100.9	114.5	133.1	158.5	199.9	253.8		U.S. GOVT.-RELATED	2
3	30.6	38.9	40.0	43.5	59.8	76.4	78.8	82.1	88.2	111.3	135.9		SPONSORED CR. AG. SEC.	3
4	3.2	4.8	9.5	14.4	18.0	23.8	34.1	49.8	70.3	88.6	118.0		MORTGAGE POOL SECURITIES	4
5	-	-	-	-	-	.7	1.6	1.2	-	-	-		LOANS FROM U.S. GOVERNMENT	5
6	69.1	72.4	77.5	92.3	115.8	131.2	129.8	134.4	161.1	199.4	232.3		PRIVATE FINANCIAL SECTORS	6
7	17.2	19.9	23.7	28.8	32.3	34.4	37.4	43.2	53.3	60.8	67.8		CORPORATE BONDS	7
8	2.9	3.6	5.7	7.4	6.1	4.9	7.2	9.3	12.3	13.3	12.1		MORTGAGES	8
9	12.5	12.4	14.3	20.4	29.5	33.6	29.9	26.4	26.0	28.8	28.3		BANK LOANS N.E.C.	9
10	27.2	25.9	25.9	27.8	32.7	36.5	37.5	39.7	49.2	63.9	82.3		OPEN-MARKET PAPER	10
11	9.3	10.6	7.9	8.0	15.1	21.8	17.8	15.9	20.2	32.7	41.8		LOANS FROM FHLB'S	11
12	103.0	116.1	127.0	150.3	193.6	232.1	284.3	267.5	319.6	399.3	486.1		TOTAL, BY SECTOR	12
13	30.6	38.9	40.0	43.5	59.8	77.1	80.3	83.3	88.2	111.3	135.9		SPONSORED CREDIT AGENCIES	13
14	3.2	4.8	9.5	14.4	18.0	23.8	34.1	49.8	70.3	88.6	118.0		MORTGAGE POOLS	14
15	69.1	72.4	77.5	92.3	115.8	131.2	129.8	134.4	161.1	199.4	232.3		PRIVATE FINANCIAL SECTORS	15
16	2.0	2.1	3.0	4.1	4.1	4.3	4.5	5.2	5.7	5.9	6.1		COMMERCIAL BANKS	16
17	4.3	2.3	2.0	2.6	4.9	8.3	8.7	7.9	9.1	15.8	20.4		BANK AFFILIATES	17
18	12.3	14.1	14.1	15.7	21.7	26.5	24.2	24.3	34.2	48.5	58.3		SAVINGS + LOAN ASSNS.	18
19	49.0	51.7	54.3	61.1	70.7	76.2	76.7	83.4	100.8	119.6	139.0		FINANCE COMPANIES	19
20	1.5	2.2	4.1	8.8	14.4	15.8	15.7	13.8	11.3	9.7	8.4		REITS	20
TOTAL CREDIT MARKET DEBT OUTSTANDING, ALL SECTORS, BY TYPE														
1	1490.7	1599.0	1751.7	1941.8	2180.9	2404.7	2619.2	2903.6	3291.4	3767.8	4246.0		TOTAL CREDIT MARKET DEBT	1
2	321.2	343.0	373.8	397.4	425.7	459.9	558.1	646.7	730.1	825.3	916.7		U.S. GOVERNMENT SECURITIES	2
3	133.1	144.4	161.8	176.5	191.2	207.7	223.8	239.5	263.2	291.4	312.7		STATE + LOCAL OBLIGATIONS	3
4	178.0	201.3	224.8	243.1	256.8	280.6	317.0	354.2	390.4	422.0	455.7		CORPORATE + FOREIGN BONDS	4
5	443.2	473.1	525.7	602.4	682.3	742.5	801.5	889.2	1023.5	1172.5	1333.7		MORTGAGES	5
6	137.7	143.1	157.8	177.6	203.7	213.6	223.3	248.8	289.4	340.0	382.3		CONSUMER CREDIT	6
7	144.0	151.2	162.2	188.5	237.3	278.2	265.7	272.0	301.4	358.2	406.8		BANK LOANS N.E.C.	7
8	38.1	40.1	40.0	41.6	50.0	67.6	66.4	74.6	89.5	115.9	156.4		OPEN-MARKET PAPER	8
9	95.3	102.7	105.6	114.7	134.0	154.5	163.3	178.6	203.9	242.5	281.6		OTHER LOANS	9
SELECTED CLAIMS NOT INCLUDED ABOVE:														
10	25.7	24.9	28.7	37.4	29.5	24.7	28.5	41.1	47.2	47.6	50.7		SECURITY CREDIT	10
11	175.4	185.2	196.7	221.2	263.9	210.9	223.4	246.8	273.8	325.8	394.9		TRADE CREDIT	11
12	48.3	47.6	56.7	59.8	46.5	34.1	42.2	47.0	42.8	42.6	46.2		INVESTMENT COMPANY SHARES	12
13	86.4	85.4	100.3	113.1	90.4	64.7	84.5	105.9	99.6	104.5	119.3		OTHER CORPORATE EQUITIES	13

FEBRUARY 1980
CREDIT MARKET SUPPLY OF FUNDS

CREDIT MARKET SUPPLY OF FUNDS

YEAR-END OUTSTANDINGS		DIRECT AND INDIRECT SOURCES OF FUNDS TO CREDIT MARKETS											YEAR-END OUTSTANDINGS	
1969		1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
1	1387.8	1482.9	1624.7	1791.6	1987.3	2172.6	2374.9	2636.1	2971.8	3368.5	3759.9		TOTAL CREDIT MARKET DEBT CLAIMS AGAINST NONFINANCIAL SECTORS	1

BY PUBLIC AGENCIES + FOREIGN														

2	166.9	195.4	238.7	258.7	290.7	342.2	386.8	441.1	526.4	636.1	718.5		TOTAL HELD	2
3	69.8	85.1	119.6	127.2	136.6	148.5	171.0	197.8	238.0	281.9	284.5		U.S. GOVERNMENT SECURITIES	3
4	21.7	28.3	35.3	42.3	50.6	65.3	81.5	94.3	114.7	141.2	178.1		RESIDENTIAL MORTGAGES	4
5	9.3	10.6	7.9	8.0	15.1	21.8	17.8	15.9	20.2	32.7	41.8		FHLB ADVANCES TO S+L'S	5
6	66.0	71.4	75.9	81.2	88.4	106.6	116.5	133.2	153.5	180.4	214.0		OTHER LOANS + SECURITIES	6

BY AGENCY:														
7	55.1	57.8	59.9	62.4	65.5	73.1	88.2	97.2	109.1	129.5	152.4		U.S. GOVERNMENT	7
8	38.3	48.7	54.5	63.4	82.5	109.0	123.9	144.2	171.0	215.6	274.6		GOVT-RELATED AG. + POOLS	9
9	57.2	62.2	71.1	71.3	80.6	86.7	95.3	112.2	112.2	119.2	126.9		MONETARY AUTHORITIES	9
10	16.3	26.7	53.2	61.6	62.2	73.4	79.5	94.7	134.1	171.8	164.6		FOREIGN	10
11	33.8	43.6	49.5	57.9	77.9	100.9	114.5	133.1	158.5	199.9	253.8		AGENCY DEBT AND MORTGAGE POOL SECURITIES NOT IN LINE 1	11

PRIVATE DOMESTIC HOLDINGS														

12	1254.8	1331.2	1435.6	1590.8	1774.4	1931.3	2102.5	2328.0	2603.9	2932.3	3295.2		TOTAL PRIVATE HOLDINGS	12
13	251.4	257.8	254.3	270.2	289.0	311.4	387.1	448.9	492.1	543.5	632.2		U.S. GOVERNMENT SECURITIES	13
14	133.1	144.4	161.8	176.5	191.2	207.7	223.8	239.5	263.2	291.4	312.7		STATE + LOCAL OBLIGATIONS	14
15	158.7	178.7	198.1	211.3	221.3	242.3	275.1	305.6	328.1	350.6	377.8		CORPORATE + FOREIGN BONDS	15
16	311.5	326.3	357.1	405.2	453.6	480.3	504.1	559.1	642.6	731.2	811.8		RESIDENTIAL MORTGAGES	16
17	409.2	434.6	472.2	535.6	634.4	711.4	730.3	790.9	898.2	1048.3	1202.5		OTHER MORTGAGES + LOANS	17
18	9.3	10.6	7.9	8.0	15.1	21.8	17.8	15.9	20.2	32.7	41.8		LESS: FHLB ADVANCES	18

PRIVATE FINANCIAL INTERMEDIATION														

CREDIT MARKET CLAIMS HELD BY														
19	995.5	1072.4	1182.0	1330.5	1491.8	1617.0	1741.0	1930.9	2188.2	2485.5	2781.5		PRIVATE FINAN. INSTITUTIONS	19
20	411.8	447.4	497.8	568.3	652.9	719.7	749.1	808.7	896.3	1025.0	1144.8		COMMERCIAL BANKING	20
21	237.4	254.8	294.3	341.6	376.7	400.3	453.6	524.2	606.2	682.0	736.4		SAVINGS INSTITUTIONS	21
22	274.7	291.7	305.3	322.2	345.9	375.7	416.3	466.2	535.3	608.9	685.4		INSURANCE + PENSION FUNDS	22
23	71.5	78.5	84.5	98.4	116.3	121.2	122.0	131.8	150.4	169.6	214.9		OTHER FINANCE	23

SOURCES OF FUNDS														
24	995.5	1072.4	1182.0	1330.5	1491.8	1617.0	1741.0	1930.9	2188.2	2485.5	2781.5		PRIVATE DOMESTIC DEP. + RP'S	24
25	560.5	618.2	708.4	809.3	906.5	974.1	1066.0	1190.6	1331.1	1473.7	1600.8		CREDIT MARKET DEBT	25
26	69.1	72.4	77.5	92.3	115.8	131.2	129.8	134.4	161.1	199.4	232.3			26

OTHER SOURCES														
27	365.9	381.8	396.1	428.9	469.5	511.7	545.2	605.9	696.0	812.4	948.4		FOREIGN FUNDS	27
28	31.8	28.3	19.8	25.6	28.7	39.0	30.3	25.7	27.6	33.9	60.5		TREASURY BALANCES	28
29	5.1	7.9	10.2	10.9	9.9	4.8	3.1	3.0	7.3	14.1	14.0		INSURANCE + PENSION RES.	30
30	228.9	242.4	250.2	260.8	282.0	312.8	341.5	374.2	425.9	483.8	535.9		OTHER, NET	31
31	100.1	107.2	115.9	131.6	149.0	155.1	170.3	202.9	235.1	280.6	337.9			31

PRIVATE DOMESTIC NONFINANCIAL INVESTORS														

32	328.4	331.2	331.1	352.7	398.3	445.5	491.3	531.5	576.8	646.2	746.0		CREDIT MARKET CLAIMS	32
33	147.5	140.2	129.3	133.5	152.3	171.3	195.4	212.0	233.7	266.6	321.2		U.S. GOVERNMENT SECURITIES	33
34	51.9	50.6	51.4	54.4	59.8	69.1	77.5	81.4	83.9	86.9	86.4		STATE + LOCAL OBLIGATIONS	34
35	24.8	34.3	43.1	48.0	50.1	55.2	63.5	69.3	66.3	64.8	71.6		CORPORATE + FOREIGN BONDS	35
36	23.1	21.1	19.1	20.4	30.2	36.0	34.7	36.6	46.1	62.4	73.8		OPEN-MARKET PAPER	36
37	81.1	85.1	88.2	96.3	106.0	114.0	120.2	132.3	146.8	165.5	193.1		OTHER	37

38	607.1	668.2	761.9	867.1	968.4	1042.2	1140.3	1272.2	1421.0	1572.9	1707.7		DEPOSITS + CURRENCY	38
39	3.3	-	1.1	2.7	13.7	11.5	11.7	14.0	16.3	23.7	27.9		SECURITY RP'S	39
40	-	-	-	-	-	2.4	3.7	3.7	3.9	10.8	45.2		MONEY MARKET FUND SHARES	40
41	400.0	455.3	534.4	617.9	693.6	759.1	843.0	956.5	1077.5	1192.7	1275.9		TIME + SAVINGS ACCOUNTS	41
42	21.2	47.9	60.1	75.0	112.5	144.8	129.0	109.9	132.9	178.8	173.9		LARGE AT BANKS	42
43	164.1	176.0	203.3	226.5	236.2	248.3	288.6	352.1	381.1	389.3	433.6		OTHER AT BANKS	43
44	214.7	231.4	271.0	316.4	344.9	365.9	425.4	494.5	563.4	624.6	668.4		AT SAVINGS INSTITUTIONS	44

45	203.8	212.7	226.4	246.6	261.1	269.2	281.9	298.0	323.4	345.7	358.8		MONEY	45
46	157.2	162.6	173.0	188.7	199.3	201.1	207.6	216.4	233.5	246.5	251.9		DEMAND DEPOSITS	46
47	46.6	50.0	53.4	57.9	61.8	68.1	74.3	81.6	89.9	99.2	106.9		CURRENCY	47

48	935.4	999.4	1093.0	1219.8	1366.7	1487.7	1631.6	1803.8	1997.8	2219.1	2453.7		TOTAL OF CREDIT MARKET INSTRUMENTS, DEPOSITS + CURRENCY	48

49	12.0	13.2	14.7	14.4	14.6	15.8	16.3	16.7	17.7	18.9	19.1		PUBLIC SUPPORT RATE (%)	49
50	79.3	80.6	82.3	83.6	84.1	83.7	82.8	82.9	84.0	84.8	84.4		PVT. FINAN. INTERMEDIATION (%)	50
51	48.1	51.0	73.0	87.2	90.8	112.4	109.8	120.4	161.7	205.7	225.2		TOTAL FOREIGN FUNDS	51

CORPORATE EQUITIES NOT INCLUDED ABOVE														

1	914.6	907.0	1060.4	1198.0	987.9	675.8	891.7	1106.6	1039.4	1086.1	1244.5		TOTAL MARKET VALUE	1
2	48.3	47.6	56.7	59.8	46.5	34.1	42.2	47.0	42.8	42.6	46.2		INVESTMENT COMPANY SHARES	2
3	866.4	859.4	1003.7	1138.1	901.4	641.7	849.5	1059.7	996.6	1043.5	1198.3		OTHER EQUITIES	3

4	141.0	150.4	195.6	244.8	201.8	146.8	196.7	236.5	222.7	235.6	287.7		ACQ. BY FINANCIAL INSTITUTIONS	4
5	773.6	756.6	864.9	953.1	746.2	529.0	695.0	870.1	816.7	850.5	956.8		OTHER HOLDINGS	5

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HOUSEHOLDS

HOUSEHOLDS

SECTOR STATEMENTS OF SAVING AND INVESTMENT

8

ANNUAL NET FLOWS

ANNUAL NET FLOWS

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
HOUSEHOLDS, PERSONAL TRUSTS, AND NONPROFIT ORGANIZATIONS														
1	745.8	801.3	859.1	942.5	1052.4	1154.9	1255.5	1381.6	1531.6	1717.4	1923.1		PERSONAL INCOME	1
2	115.4	115.3	116.3	141.2	150.8	170.3	168.8	197.1	226.4	259.0	299.9		- PERSONAL TAXES + NONTAXES	2
3	630.4	685.9	742.8	801.3	901.7	984.6	1086.7	1184.5	1305.1	1458.4	1623.2		= DISPOSABLE PERSONAL INCOME	3
4	595.3	635.4	685.5	751.9	831.3	913.0	1003.0	1115.9	1240.2	1386.4	1550.4		- PERSONAL OUTLAYS	4
5	35.1	50.6	57.3	49.4	70.3	71.7	83.6	68.6	65.0	72.0	72.8		= PERSONAL SAVING, NIA BASIS	5
6	7.1	8.9	9.5	11.6	11.8	12.6	15.1	17.9	22.4	27.1	29.8		+ CREDITS FROM GOVT. INSURANCE	6
7	2.5	.9	.8	1.4	.9	.5	.2	.5	.6	.7	.8		+ CAPITAL GAINS DIVIDENDS	7
8	26.2	20.2	26.2	35.1	41.1	28.6	26.6	40.6	50.9	57.5	54.6		+ NET DURABLES IN CONSUMPTION	8
9	70.9	80.6	93.8	97.6	124.2	113.3	125.6	127.5	138.8	157.3	158.1		= NET SAVING	9
10	73.4	79.9	87.1	93.6	102.8	116.8	132.6	145.8	161.0	181.0	202.0		+ CAPITAL CONSUMPTION	10
11	144.3	160.5	180.9	191.2	227.0	230.2	258.2	273.3	299.9	338.3	360.1		= GROSS SAVING	11
12	147.1	166.1	185.9	209.8	240.8	246.0	282.7	310.9	334.6	380.1	393.6		GROSS INVESTMENT	12
13	116.5	114.2	134.7	157.5	174.1	170.3	181.0	220.5	260.8	298.2	314.7		CAPITAL EXPEND.-NET OF SALES	13
14	26.3	24.5	32.4	40.7	45.2	42.9	43.0	57.5	76.3	92.0	95.8		RESIDENTIAL CONSTRUCTION	14
15	85.5	84.9	97.1	111.2	123.7	122.0	132.6	157.4	178.8	200.3	212.8		CONSUMER DURABLE GOODS	15
16	4.7	4.8	5.1	5.5	5.2	5.4	5.4	5.6	5.6	5.9	6.1		NONPROFIT PLANT + EQUIP.	16
17	30.7	51.8	51.2	52.3	66.7	75.7	101.6	90.4	73.8	81.9	78.8		NET FINANCIAL INVESTMENT	17
18	62.7	76.2	99.6	123.1	143.4	126.8	153.8	187.7	219.1	248.3	243.0		NET ACQ. OF FINANCIAL ASSETS	18
19	44.7	52.6	76.0	99.7	116.3	104.3	119.9	146.9	168.6	188.3	192.3		DEP. + CR. MKT. INSTR. (1)	19
20	6.5	52.4	79.8	88.1	77.7	65.5	89.3	124.2	132.0	130.3	127.9		DEPOSITS	20
21	-2.6	8.8	12.1	13.7	13.9	7.2	3.9	14.9	22.6	18.2	7.5		DEMAND DEP. + CURRENCY	21
22	9.1	43.6	67.8	74.5	63.8	55.9	84.0	109.3	109.2	105.2	86.0		TIME + SAVINGS ACCTS.	22
23	.7	27.0	28.1	29.0	35.3	34.1	24.6	40.2	40.2	44.1	42.2		AT COMMERCIAL BANKS	23
24	8.4	16.6	39.6	45.4	28.5	21.8	59.4	69.1	69.0	61.1	43.8		AT SAVINGS INST.	24
25	-	-	-	-	-	2.4	1.3	*	.2	6.9	34.4		MONEY MARKET FUND SHRS	25
26	38.2	.3	-3.8	11.6	38.7	38.8	30.6	22.7	36.6	58.0	64.4		CREDIT MKT. INSTRUMENTS	26
27	16.0	-6.4	-10.2	-4	18.8	19.4	16.8	9.5	15.7	27.0	40.6		U.S. GOVT. SECURITIES	27
28	9.3	-9	.1	2.3	5.3	8.3	6.2	2.5	2.6	3.3	-8		ST.+LOC. OBLIGATIONS	28
29	5.4	9.5	8.0	5.0	2.0	5.1	8.4	5.8	-3.3	-1.4	3.3		CORPORATE + PGM. BONDS	29
30	2.2	1.8	1.3	6.4	3.4	4.3	3.7	8.0	11.9	14.5	16.8		MORTGAGES	30
31	5.3	-3.8	-3.8	-1.7	9.1	1.7	-4.4	-3.1	9.6	14.6	4.4		OPEN-MARKET PAPER	31
32	4.9	2.8	1.3	-5	-1.2	-7	-1	-1.0	-9	-1.0	-9		INVESTMENT COMPANY SHARES	32
33	-8.5	-4.3	-6.4	-5.1	-5.5	-1.5	-3.5	-2.2	-5.2	-5.2	-11.9		OTHER CORPORATE EQUITIES	33
34	5.0	5.5	6.3	6.9	7.6	6.7	8.7	8.4	11.6	12.0	12.2		LIFE INSURANCE RESERVES	34
35	16.5	18.4	21.1	22.6	25.4	29.6	34.9	44.2	53.7	65.8	70.9		PENSION FUND RESERVES	35
36	-2	-6	-1.5	-3.2	-1.9	-13.3	-10.4	-15.6	-16.7	-20.8	-30.6		NET INV. IN NONCORP. BUS.	36
37	-1.8	-9	.5	.1	-2	-1.0	.6	1.5	1.0	1.4	2.6		SECURITY CREDIT	37
38	2.1	2.6	2.3	2.7	2.8	2.7	3.8	5.5	6.9	7.6	8.4		MISCELLANEOUS ASSETS	38
39	32.0	24.4	48.4	70.8	76.7	51.1	52.2	97.3	145.3	166.4	164.1		NET INCREASE IN LIABILITIES	39
40	34.5	25.2	44.9	65.1	80.1	51.3	49.7	90.5	139.9	162.6	160.4		CREDIT MARKET INSTRUMENTS	40
41	18.5	14.1	26.4	41.5	47.1	35.4	38.1	61.3	93.2	103.8	107.3		HOME MORTGAGES	41
42	1.2	1.2	1.2	1.3	1.1	1.1	1.0	1.1	1.0	1.0	1.0		OTHER MORTGAGES	42
43	9.5	4.4	11.1	14.9	21.9	9.5	7.8	21.6	34.3	44.8	35.7		INSTALLMENT CONS. CREDIT	43
44	1.3	1.0	3.6	4.9	4.1	.4	1.9	3.9	6.2	5.8	6.6		OTHER CONSUMER CREDIT	44
45	1.0	1.9	1.2	1.1	3.4	1.6	-1.2	.8	2.8	3.4	3.9		BANK LOANS N.E.C.	45
46	3.0	2.6	1.4	1.3	2.4	3.2	2.2	1.8	2.3	3.8	6.0		OTHER LOANS	46
47	-3.4	-1.8	2.7	4.5	-4.3	-1.8	.7	4.8	3.1	1.4	1.3		SECURITY CREDIT	47
48	.6	.6	.5	.7	.6	.9	1.1	1.4	1.3	1.4	1.4		TRADE DEBT	48
49	.4	.4	.3	.5	.4	.7	.7	.6	.9	1.1	1.1		MISCELLANEOUS	49
50	-2.8	-5.6	-5.0	-18.7	-13.9	-15.8	-24.4	-37.7	-34.7	-41.8	-33.5		DISCREPANCY	50
(1) EXCLUDES CORPORATE EQUITIES.														
MEMORANDA:														
NET PHYSICAL INVESTMENT:														
(A) RESIDENTIAL CONSTRUCTION														
51	26.3	24.5	32.4	40.7	45.2	42.9	43.0	57.5	76.3	92.0	95.8		EXPENDITURES	51
52	2.3	2.5	3.3	4.0	4.4	3.2	2.4	3.1	4.0	4.7	5.2		MOBILE HOMES	52
53	24.0	22.0	29.2	36.7	40.8	39.7	40.6	54.4	72.3	87.4	90.6		OTHER	53
54	12.1	12.8	13.7	14.7	17.1	19.8	22.2	24.4	28.2	32.8	38.0		- CAPITAL CONSUMPTION	54
55	18.5	14.1	26.4	41.5	47.1	35.4	38.1	61.3	93.2	103.8	107.3		- HOME MORTGAGES	55
56	-4.3	-2.5	-7.6	-15.5	-19.0	-12.3	-17.3	-28.2	-45.1	-44.6	-49.5		= EXCESS NET INVESTMENT	56
(B) CONSUMER DURABLES														
57	85.5	84.9	97.1	111.2	123.7	122.0	132.6	157.4	178.8	200.3	212.8		EXPENDITURES	57
58	59.2	64.7	70.9	76.1	82.6	93.4	106.0	116.8	128.0	142.8	158.2		- CAPITAL CONSUMPTION	58
59	26.2	20.2	26.2	35.1	41.1	28.6	26.6	40.6	50.9	57.5	54.6		= NET INVESTMENT	59
60	10.8	5.4	14.7	19.8	26.0	9.9	9.7	25.6	40.6	50.6	42.3		- CONSUMER CREDIT	60
61	15.4	14.8	11.6	15.3	15.1	18.7	17.0	15.0	10.3	6.9	12.4		= EXCESS NET INVESTMENT	61
(C) NONPROFIT PLANT + EQUIP.														
62	4.7	4.8	5.1	5.5	5.2	5.4	5.4	5.6	5.6	5.9	6.1		EXPENDITURES	62
63	2.1	2.3	2.6	2.8	3.1	3.7	4.5	4.6	4.8	5.4	5.8		- CAPITAL CONSUMPTION	63
64	1.2	1.2	1.2	1.3	1.1	1.1	1.0	1.1	1.0	1.0	1.0		- NONPROFIT MORTGAGES	64
65	1.4	1.3	1.4	1.5	1.0	.6	-1	*	-3	-5	-7		= EXCESS NET INVESTMENT	65
PER CENT RATIOS:														
66	15.5	14.4	13.5	15.0	14.3	14.7	13.4	14.3	14.8	15.1	15.6		EFFECTIVE TAX RATE	66
67	5.6	7.4	7.7	6.2	7.8	7.3	7.7	5.8	5.0	4.9	4.5		SAVING RATE, NIA BASIS	67
PER CENT OF DISPOSABLE INCOME ADJ. (2):														
68	22.6	23.1	24.0	23.5	24.8	23.1	23.4	22.7	22.6	22.8	21.8		GROSS SAVING	68
69	18.2	16.4	17.9	19.3	19.0	17.1	16.4	18.3	19.6	20.1	19.0		CAPITAL EXPENDITURES	69
70	9.8	11.0	13.2	15.1	15.7	12.7	14.0	15.6	16.5	16.7	14.7		ACQUISITION OF FINAN. ASSETS	70
71	5.0	3.5	6.4	8.7	8.4	5.1	4.7	8.1	10.9	11.2	9.9		NET INCREASE IN LIABILITIES	71
72	5.4	3.6	6.0	8.0	8.8	5.1	4.5	7.5	10.5	10.9	9.7		CREDIT MARKET BORROWING	72
73	640.0	695.7	753.1	814.4	914.4	997.7	1102.0	1202.8	1328.1	1486.2	1653.8		(2) DISPOSABLE INCOME ADJ.	73
(NIA DISPOSABLE INCOME + GOVT. INSURANCE CREDITS + CAPITAL GAINS DIVID.)														

*FEBRUARY 1980
HOUSEHOLDS

HOUSEHOLDS

SECTOR STATEMENTS OF FINANCIAL ASSETS AND LIABILITIES

YEAR-END OUTSTANDINGS												YEAR-END OUTSTANDINGS	
1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
HOUSEHOLDS, PERSONAL TRUSTS, AND NONPROFIT ORGANIZATIONS													
1	1863.6	1926.6	2152.7	2387.1	2300.5	2200.6	2551.5	2944.4	3118.0	3422.0	3827.1	TOTAL FINANCIAL ASSETS	1
2	744.0	796.5	872.5	970.6	1087.0	1194.6	1314.5	1461.9	1628.7	1815.2	2007.1	DEP. + CR. MKT. INSTR. (1)	2
3	492.1	544.5	624.3	711.0	788.7	853.9	943.2	1067.4	1198.7	1329.1	1454.6	DEPOSITS	3
4	109.0	117.8	129.8	142.2	156.1	163.0	166.9	181.9	203.7	222.1	228.4	DEMAND DEP. + CURRENCY	4
5	383.1	426.7	494.5	568.8	632.6	688.5	772.6	881.9	991.1	1096.3	1181.0	TIME + SAVINGS ACCTS.	5
6	168.4	195.4	223.5	252.4	287.7	322.6	347.2	387.4	427.6	471.7	512.6	AT COMMERCIAL BANKS	6
7	214.7	231.4	271.0	316.4	344.9	365.9	425.4	494.5	563.4	624.6	668.4	AT SAVINGS INST.	7
8	-	-	-	-	-	2.4	3.7	3.7	3.9	10.8	45.2	MONEY MARKET FUND SHRS.	8
9	251.9	252.0	248.2	259.7	298.3	340.7	371.3	394.5	430.0	486.0	552.5	CREDIT MARKET INSTRUMENTS	9
10	113.5	107.2	97.0	96.6	115.4	136.0	152.8	162.8	177.2	203.8	243.0	U.S. GOVT. SECURITIES	10
11	95.9	84.9	76.5	79.6	96.7	113.6	133.4	139.6	149.4	166.7	189.4	TREASURY ISSUES	11
12	51.8	52.1	54.4	57.7	60.4	63.3	67.4	72.0	76.8	80.7	79.9	SAVINGS BONDS	12
13	44.1	32.8	22.1	21.9	36.4	50.3	66.0	67.6	72.7	86.0	109.5	OTHER TREASURY	13
14	17.7	22.3	20.5	17.0	18.6	22.4	19.4	23.2	27.7	37.1	53.6	AGENCY ISSUES	14
15	46.9	46.0	46.1	48.4	53.7	61.9	68.1	70.6	73.2	75.0	74.3	ST. + LOC. OBLIGATIONS	15
16	24.8	34.3	43.1	48.0	50.1	55.2	63.5	69.3	66.3	64.8	71.6	CORPORATE + FGN. BONDS	16
17	51.3	52.9	54.1	60.5	63.9	68.2	71.9	79.8	91.8	106.2	123.0	MORTGAGES	17
18	15.4	11.7	7.9	6.2	15.3	19.5	15.1	11.9	21.6	36.1	40.6	OPEN-MARKET PAPER	18
19	746.9	729.4	834.1	914.1	712.7	504.8	659.7	827.2	777.0	808.5	906.9	CORPORATE EQUITIES	19
20	48.3	47.6	56.7	59.8	46.5	34.1	42.2	47.0	42.8	42.6	46.2	INVESTMENT COMPANY SHARES	20
21	698.6	681.8	777.4	854.3	666.1	470.7	617.5	780.2	734.2	765.9	860.7	OTHER CORPORATE EQUITIES	21
22	125.0	130.5	136.8	143.7	151.3	158.0	166.6	175.0	186.5	198.5	210.7	LIFE INSURANCE RESERVES	22
23	218.7	239.4	275.8	322.3	310.6	302.5	365.7	427.9	465.5	530.5	622.1	PENSION FUND RESERVES	23
24	5.2	4.4	4.9	5.0	4.9	3.9	4.5	6.3	7.3	8.8	11.3	SECURITY CREDIT	24
25	23.8	26.3	28.7	31.3	34.1	36.8	40.6	46.0	52.9	60.5	69.0	MISCELLANEOUS ASSETS	25
26	477.7	502.0	550.9	621.5	698.3	749.3	801.2	899.3	1044.8	1210.0	1375.8	TOTAL LIABILITIES	26
27	456.1	481.2	526.6	591.5	671.7	722.8	772.3	863.3	1003.4	1164.8	1326.9	CREDIT MARKET INSTRUMENTS	27
28	276.5	290.7	317.1	358.6	405.7	440.9	479.0	540.6	634.0	738.2	847.0	HOME MORTGAGES	28
29	17.9	19.0	20.3	21.5	22.6	23.7	24.8	25.8	26.9	27.9	28.9	OTHER MORTGAGES	29
30	101.2	105.5	118.3	133.2	155.1	164.6	172.4	194.0	230.8	275.6	311.3	INSTALMENT CONS. CREDIT	30
31	36.6	37.6	39.5	44.5	48.6	49.0	50.9	54.8	58.6	64.3	70.9	OTHER CONSUMER CREDIT	31
32	5.7	7.5	9.2	10.1	13.5	15.2	13.7	14.6	17.4	19.2	23.2	BANK LOANS W.E.C.	32
33	18.3	20.9	22.3	23.6	26.2	29.4	31.5	33.4	35.7	39.5	45.5	OTHER LOANS	33
34	12.2	10.4	13.1	17.5	13.2	11.4	12.1	17.2	20.3	21.7	22.9	SECURITY CREDIT	34
35	4.7	5.3	5.8	6.5	7.1	8.0	9.1	10.5	11.8	13.2	14.6	TRADE CREDIT	35
36	4.7	5.1	5.4	6.0	6.4	7.1	7.7	8.4	9.3	10.3	11.4	DEFERRED AND UNPAID LIFE INSURANCE PREMIUMS	36

(1) EXCLUDES CORPORATE EQUITIES.

FEBRUARY 1980
NONFINANCIAL BUSINESS

NONFINANCIAL BUSINESS

SECTOR STATEMENTS OF SAVING AND INVESTMENT

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ANNUAL NET FLOWS												ANNUAL NET FLOWS		
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
	NONFINANCIAL BUSINESS - TOTAL													
1	182.4	128.6	139.8	161.7	195.6	200.9	198.5	230.4	257.8	298.1	337.2		INCOME BEFORE TAXES	1
2	80.9	79.6	90.8	103.8	110.4	105.9	141.9	163.4	181.9	195.6	212.0		GROSS SAVING	2
3	75.3	71.2	82.5	88.0	96.0	93.6	125.0	137.0	156.4	174.1	193.5		GROSS INVESTMENT	3
4	112.3	108.5	119.3	138.1	167.7	166.1	133.9	175.6	217.7	249.9	282.6		CAPITAL EXPENDITURES	4
5	102.9	104.4	112.2	127.8	146.6	150.7	143.3	161.6	193.3	225.6	259.5		FIXED INVESTMENT	5
6	91.4	92.4	95.2	106.9	126.0	138.9	135.8	151.5	177.6	209.3	241.1		BUSINESS PLANT + EQUIPMENT	6
7	.2	.9	2.7	1.9	-.3	.4	2.7	4.1	5.5	2.6	.5		HOME CONSTRUCTION (1)	7
8	11.2	11.1	14.3	19.0	20.9	11.5	4.8	6.0	10.2	13.7	17.9		MULTI-FAMILY RESIDENTIAL	8
9	9.4	3.8	6.4	9.4	17.9	8.9	-10.7	10.0	21.9	22.3	18.4		CHANGE IN INVENTORIES	9
10	*	.3	.7	.9	3.2	6.5	1.3	4.0	2.5	2.0	4.7		MINERAL RIGHTS FROM U.S. GOVT	10
11	-37.0	-37.3	-36.8	-50.1	-71.7	-72.5	-8.9	-38.6	-61.3	-75.7	-89.1		NET FINANCIAL INVESTMENT	11
12	30.4	17.6	35.4	48.0	65.5	46.7	36.2	49.1	52.9	84.6	107.2		NET ACQ. OF FINANCIAL ASSETS	12
13	67.4	54.9	72.1	98.1	137.2	119.2	45.1	87.6	114.2	160.4	196.3		NET INCREASE IN LIABILITIES	13
14	3.4	5.7	11.4	10.9	7.9	4.1	9.9	10.5	2.7	2.6	3.2		CORPORATE EQUITIES	14
15	45.6	44.2	49.9	67.2	87.6	93.5	38.7	65.8	104.8	125.6	152.7		CREDIT MARKET INSTRUMENTS	15
16	12.0	19.8	18.9	12.7	11.0	21.3	29.8	25.3	24.5	23.3	25.2		BONDS	16
17	10.8	14.0	22.9	32.4	33.0	25.4	15.9	22.7	36.8	43.3	52.5		MORTGAGES	17
18	14.8	5.7	5.9	16.0	33.7	30.3	-11.1	3.2	24.2	33.9	43.2		BANK LOANS N.E.C.	18
19	8.0	4.7	2.3	6.0	10.0	16.5	4.1	14.6	19.4	25.1	31.8		OTHER LOANS	19
20	21.1	8.2	10.5	22.9	39.4	30.1	7.9	16.7	22.5	45.5	64.9		TRADE DEBT	20
21	-2.7	-3.2	.3	-2.9	2.4	-8.5	-11.4	-5.4	-15.9	-13.3	-24.5		OTHER LIABILITIES	21
22	5.6	8.5	8.2	15.8	14.4	12.2	16.9	26.4	25.5	21.4	18.5		DISCREPANCY	22

FEBRUARY 1980
BUSINESS

BUSINESS

SECTOR STATEMENTS OF FINANCIAL ASSETS AND LIABILITIES

YEAR-END OUTSTANDINGS

YEAR-END OUTSTANDINGS

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
	NONFINANCIAL BUSINESS - TOTAL													
1	389.8	410.3	447.3	499.2	573.0	565.9	609.9	667.5	727.3	825.6	944.8		TOTAL FINANCIAL ASSETS	1
2	62.0	63.1	61.7	64.4	65.9	67.2	73.5	75.0	75.9	81.3	88.5		DEMAND DEPOSITS + CURRENCY	2
3	3.7	5.3	9.5	11.9	16.6	20.5	22.4	24.4	29.2	31.2	30.5		TIME DEPOSITS	3
4	43.9	46.7	52.8	55.1	56.8	61.3	73.9	83.0	78.8	77.6	96.0		CREDIT MARKET INSTRUMENTS	4
5	180.8	189.1	202.5	229.8	266.8	243.6	250.0	269.5	300.6	355.5	420.1		TRADE CREDIT	5
6	96.1	105.8	119.6	135.4	155.5	167.8	185.5	208.5	234.5	266.2	296.3		MISCELLANEOUS ASSETS	6
7	638.4	688.6	750.8	841.7	977.7	1017.4	1065.9	1158.1	1287.9	1466.1	1695.7		TOTAL LIABILITIES	7
8	455.9	500.1	549.3	616.5	705.1	798.6	839.1	904.0	1008.8	1129.8	1285.5		CREDIT MARKET INSTRUMENTS	8
9	-	-	-	.6	2.4	4.1	6.7	9.2	12.7	15.8	19.2		TAX-EXEMPT BONDS	9
10	147.6	167.3	186.1	198.3	207.5	227.1	254.3	277.2	298.1	318.3	340.0		CORPORATE BONDS	10
11	144.4	158.3	181.2	213.6	246.6	271.8	289.5	312.6	349.4	392.4	445.1		MORTGAGES	11
12	119.9	125.6	131.5	147.5	181.2	211.6	200.5	202.5	226.5	260.2	306.1		BANK LOANS N.E.C.	12
13	44.1	48.8	50.5	56.5	67.5	83.9	88.0	102.6	122.1	143.2	175.0		OTHER LOANS	13
14	155.5	163.8	174.2	197.1	236.4	177.0	184.8	201.5	224.0	271.5	336.4		TRADE DEBT	14
15	27.0	24.7	27.3	28.1	36.2	41.9	42.0	52.6	55.0	64.7	73.8		OTHER LIABILITIES	15

