

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The National Balance Sheet of the United States, 1953-1980

Volume Author/Editor: Raymond W. Goldsmith

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-30152-4

Volume URL: <http://www.nber.org/books/gold82-1>

Publication Date: 1982

Chapter Title: The National Balance Sheet of the United States for 1975

Chapter Author: Raymond W. Goldsmith

Chapter URL: <http://www.nber.org/chapters/c7222>

Chapter pages in book: (p. 41 - 56)

---

# 4

# The National Balance Sheet of the United States for 1975

## 4.1. The Overall Balance Sheet

### 4.1.1. Sectoral Distribution

National assets, i.e., the total of the constructed balance sheets of all economic units at the end of 1975, are estimated at nearly \$14 trillion, distributed as follows among the nine sectors being distinguished:

	<u>\$ bill.</u>	<u>Percent</u>
1. Households	5,640	40.9
2. Nonprofit institutions	243	1.8
3. Farm business	539	3.9
4. Unincorporated nonfarm business	671	4.9
5. Nonfinancial corporations	2,144	15.6
6. Federal government	535	3.9
7. State and local governments	1,178	8.5
8. Financial institutions	2,637	19.1
9. Rest of the world	199	1.4
10. Total	<u>13,786</u>	<u>100.0</u>

The three nonfinancial business sectors account for about one-fourth of national assets; financial institutions for nearly one-fifth; the two government sectors for one-eighth; and the household sector (including nonprofit institutions) for slightly more than two-fifths. Only a little over 1 percent of domestic assets is owned by foreigners and is more than offset by foreign assets owned domestically.

Banks as the largest subgroup in 1975 accounted for one-third of the total assets of all financial institutions, rising to two-fifths if their trust departments are included; other deposit institutions had nearly one-fifth; insurance and pension organizations held fully one-fifth, leaving one-

fourth of the total for the other ten groups being distinguished. The figures for all of the nineteen subgroups are as follows:

	\$ bill.	Percent
1. Monetary authorities	125	4.9
2. Commercial banking	874	34.1
3. Mutual savings banks	120	4.7
4. Savings and loan associations	336	13.1
5. Credit unions	37	1.5
6. Federally sponsored credit agencies	125	4.9
7. Life insurance companies	280	10.9
8. Fraternal life insurance	6	0.2
9. Savings bank life insurance	1	0.0
10. Private pension funds	149	5.8
11. State and local government pension funds	106	4.1
12. Other insurance companies	77	3.0
13. Open-end investment companies	42	1.7
14. Real estate investment trusts	12	0.5
15. Finance and mortgage companies	98	3.8
16. Money market funds	4	0.1
17. Security brokers and dealers	17	0.7
18. Bank-administered trusts	155	6.0
19. Postal savings	0	0.0
20. All financial institutions	2,563	100.0

The only financial institutions of importance which are not covered by the statistics are investment companies other than open-end companies (so-called mutual funds). They are not included in flow-of-funds statistics, and it proved impossible to build up the necessary figures from company reports. It is known, however, that in 1953 the assets of these companies totaled \$3.9 billion, or 0.83 percent of the assets of all financial institutions, while they had risen in 1968, the latest year for which the figures are available, to \$11.6 billion, or 0.89 percent of the total (Goldsmith 1973, pp. 306-7). According to unpublished statistics of the Securities and Exchange Commission, the assets of investment companies other than mutual funds increased between 1968 and 1975 by 19 percent, which would put them at nearly \$14 billion or only 0.5 percent of the assets of all financial institutions at the end of the period. The omission of these investment companies, therefore, cannot substantially affect any of the findings. Still less important is the omission of small business investment companies, for which no continuous comprehensive statistics are available, but which are known to have remained very small throughout the period. At the end of the period their assets were still well below \$1 billion (*SBIC Digest*, February 1976), or 0.03 percent of those of all financial institutions.

#### 4.1.2. Main Assets and Liabilities

The main assets and liabilities distinguished in the national balance sheet are shown in table 11. National assets are nearly equally divided

**Table 11** Main Assets and Liabilities in the National Balance Sheet, 1975

	I. Assets		II. Liabilities, equities, and net worth	
	\$ bill. (1)	Percent (2)	\$ bill. (3)	Percent (4)
1. Land	1,551	11.3	...	...
2. Reproducible assets	5,031	36.5	...	...
3. Tangible assets	6,582	47.8	...	...
4. Deposits with financial institutions	1,187 <sup>a</sup>	8.6	1,210 <sup>a</sup>	8.8
5. Insurance and pension reserves	585	4.2	585	4.2
6. Bonds	1,106 <sup>b</sup>	8.0	1,099 <sup>b</sup>	8.0
7. Mortgages	803	5.8	803	5.8
8. Loans	637	4.6	652	4.7
9. Trade credit	327	2.4	291	2.1
10. Other claims or liabilities	417	3.0	461	3.3
11. All claims or liabilities	5,062	36.6	5,101	37.0
12. Equity in unincorporated business	982 <sup>c</sup>	7.1	982 <sup>c</sup>	7.1
13. Corporate stock	855 <sup>d</sup>	6.2	1,463 <sup>e</sup>	10.6
14. Direct foreign investment	141 <sup>e</sup>	1.0	118 <sup>e</sup>	0.9
15. Equity in trust funds	165 <sup>f</sup>	1.2	165 <sup>f</sup>	1.2
16. All equities (lines 12-15)	2,143	15.5	2,728	19.8
17. All financial assets or liabilities	7,205 <sup>g</sup>	52.2	7,829 <sup>g</sup>	56.8
18. Net worth	...	...	5,958	43.2
19. Total	13,786	100.0	13,786	100.0

<sup>a</sup>Includes currency (\$74 bill. = 0.54 percent) and small amounts of gold at book value (\$10 bill. = 0.07 percent).

<sup>b</sup>Includes all government securities (\$789 bill. = 5.72 percent); par values.

<sup>c</sup>Adjusted book value, i.e., replacement cost or market value of tangible assets less liabilities.

<sup>d</sup>Market value; excludes intercorporate stockholdings.

<sup>e</sup>Book values.

<sup>f</sup>Partly invested in corporate stock.

<sup>g</sup>The value of financial claims should equal that of liabilities. The discrepancies appearing in some of the lines of table 10 are due in line 4 to the mailfloat, which cannot be allocated among creditor sectors; in line 9 to a discrepancy between trade credit and trade debt in the flow-of-funds statistics; in line 13 to the fact that corporate stocks are entered among assets at their market value but among liabilities at their adjusted book value (reproduction cost or market value of tangible assets plus net financial assets); and in lines 6, 8, and 10 to some inconsistencies in classification of items. Similarly net worth should be equal to tangible assets plus net foreign balance. The difference is approximately equal to the excess of the adjusted book value over the market value of corporate stock of nonfinancial corporations of \$608 billion.

between tangible and financial assets. Of tangible assets fully three-fourths consist of reproducible tangible assets and almost one-fourth of land. Of the two main components of financial assets, claims and equities, the former accounts for over two-thirds and the latter for well below one-third, even including the equity of unincorporated business enterprises. Claims against financial institutions constitute fully one-third of all

claims, mainly in the form of deposits and insurance and pension claims. The other two-thirds of claims consist mainly of bonds, mortgages, loans, and trade credit. Equities represent almost one-third of all financial assets and nearly one-sixth of all national assets if corporate stock is valued at market prices; but for fully one-third and one-fifth respectively if these are valued, like the equity in unincorporated business enterprises, at adjusted book value. Assets subject to price fluctuations, often of substantial magnitude, constitute over three-fifths of total assets, three-fourths of them made up of tangible assets and one-fourth of financial assets in the form of equities.

#### **4.2. The Structure of Sectoral Balance Sheets**

Differences in the structure of the balance sheets of the nine main sectors as well as all nonfinancial and of all sectors as at the end of 1975 can be studied in table 12. While tangible and intangible assets were of about equal size in the national balance sheet, the share of tangible assets among sectors ranged from 3 percent for financial institutions to 97 percent for agriculture, all nonfinancial sectors other than households together showing a ratio of nearly 80 percent. The share of land was highest in agriculture with 65 percent; that of structures in nonfarm unincorporated business with 70 percent. The share of equipment was highest with fully one-fifth for nonfinancial corporations and the federal government (largely military durables). These two sectors also showed the highest share for inventories, about 15 percent.

Variations were equally large for the different types of financial assets, depending mainly on whether these assets were held primarily for income and investment or to facilitate the conduct of business. Domestic sectors held only a very small proportion, not exceeding 3 percent in the case of households, in the form of currency and demand deposits, while the ratio was highest with 7 percent for the rest-of-the-world sector. On the other hand households held one-seventh of their total assets, and over one-fifth of their financial assets, as time and savings deposits, more than any other financial asset, while such holdings were very small for other sectors except state and local governments and the rest-of-the-world sector. Some types of financial assets—corporate stock, corporate and foreign bonds, and government securities—constituted considerable proportions of the total assets, and still more of the financial assets, of households and nonprofit institutions as well as of financial institutions and the rest of the world, while they played only a secondary role in the balance sheets of the business and government sectors, in the case of corporate stock because intercorporate stockholdings are netted in the flow-of-funds statistics. Some assets, finally, are concentrated by their nature in one or only a few sectors, such as bank credit and mortgage and consumer credit in finan-

**Table 12**                      **Structure of Sectoral Balance Sheets, 1975**  
(percent)

	All sectors (1)	Households (2)	Non-profit institutions (3)	Nonfinancial unincorporated business		Nonfinancial corporations (6)	Federal government (7)	State and local governments (8)	Rest of the world (9)	Financial institutions (10)
				Farm (4)	Other (5)					
<i>A. Assets</i>										
1. Land	11.3	8.8	25.5	64.9	8.7	11.7	11.5	21.8	...	0.7
2. Structures	22.3	17.1	50.4	13.6	69.6	24.3	30.6	62.2	...	1.3
3. Consumer durables	4.0	9.7	...	...	...	...	...	...	...	...
4. Equipment	5.6	...	2.0	9.3	9.9	21.9	21.3	4.1	...	0.7
5. Inventories	4.6	2.6 <sup>a</sup>	...	9.4	3.8	15.8	13.8	0.1	...	0.0
6. Tangible assets	47.8	38.1	77.9	97.2	91.8	73.6	77.1	88.2	...	2.8
7. Demand deposits and currency	2.1	2.9	0.1	1.4	1.9	2.2	2.1	1.2	7.0	0.7
8. Time and saving deposits	6.4	13.7	...	...	...	1.0	0.1	4.1	10.5	0.8
9. Gold and foreign exchange	0.1	...	...	...	...	...	...	...	...	0.4
10. U.S. government securities	3.2	1.7	1.0	...	...	0.7	...	2.6	33.4	8.6
11. U.S. agency securities	0.9	0.2	...	...	...	0.2	1.3	1.9	...	3.0
12. State and local government securities	1.7	1.0	0.2	...	...	0.2	...	0.4	...	6.2
13. Corporate and foreign bonds	2.3	0.6	4.9	...	...	...	...	...	1.0	10.3
14. Corporate stock	6.2	8.9	12.9	...	...	...	...	...	13.4	11.1
15. Mortgages	5.8	1.2	0.6	...	...	...	2.5	1.1	...	26.9
16. Bank loans n.e.c.	2.0	...	...	...	...	...	...	...	...	10.5
17. Other loans	1.2	...	...	...	...	...	12.7	...	...	3.6
18. Consumer credit	1.4	...	...	...	1.9	0.9	...	...	...	6.3
19. Open-market paper	0.5	0.2	...	...	...	1.3	...	...	4.2	0.9
20. Trade credit	2.4	...	...	...	2.7	13.2	1.2	...	5.8	0.3

**Table 12**                      **Continued**

	All sectors (1)	House- holds (2)	Non- profit insti- tutions (3)	Nonfinancial unincorporated business		Nonfi- nancial corpo- rations (6)	Federal govern- ment (7)	State and local govern- ments (8)	Rest of the world (9)	Finan- cial insti- tutions (10)
				Farm (4)	Other (5)					
21. Insurance and pension reserves	4.2	10.4	...	...	...	...	...	...	...	...
22. Direct foreign investment	1.0	...	...	...	...	5.5	...	...	11.6	...
23. Farm business equity	3.3	8.0	...	...	...	...	...	...	...	...
24. Unincorporated nonfarm equity	3.9	9.4	...	...	...	...	...	...	...	...
25. Common trust funds	0.1	0.3	...	...	...	...	...	...	...	...
26. Individual trust funds	1.1	2.6	...	...	...	...	...	...	...	...
27. Other financial assets	2.5	0.8	2.5	1.5	1.8	1.3	3.0	0.6	12.9	7.6
28. Total financial assets	52.2	61.9	22.2	2.8	8.2	26.4	22.9	11.8	100.0	97.2
29. Total assets, percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30. Total assets, \$ bill.	13,786	5,640	243	539	671	2,144	535	1,178	199	2,637

*B. Liabilities, Equities, and Net Worth*

31. Demand deposits and currency	2.4	...	...	...	...	...	...	...	...	12.3
32. Time and savings deposits	6.4	...	...	...	...	...	...	...	...	33.6
33. U.S. government securities	3.2	...	...	...	...	...	81.8	...	...	...
34. U.S. agency securities	0.9	...	...	...	...	...	...	...	...	4.6
35. State and local government securities	1.6	...	...	...	...	...	...	19.2	...	...
36. Corporate and foreign bonds	2.3	...	...	...	...	11.9	...	...	12.9	1.4
37. Mortgages	5.8	8.5	11.1	9.6	12.1	7.2	0.2	...	...	0.3
38. Bank loans n.e.c.	2.0	0.3	...	3.7	1.7	7.8	...	...	11.0	1.5
39. Other loans	1.3	0.6	...	2.4	4.1	1.6	...	0.5	23.5	0.7
40. Consumer credit	1.4	3.5	...	...	...	...	...	...	...	...
41. Open-market paper	0.5	...	...	...	0.6	0.7	...	...	5.6	1.6
42. Trade debt	2.1	...	3.3	1.0	2.3	10.8	1.0	0.9	7.1	...
43. Insurance and pension reserves	4.2	...	...	...	...	...	17.6	...	...	18.6
44. Other liabilities	2.9	0.4	...	...	...	1.7	2.4	...	13.4	11.3
45. Liabilities	37.0	13.3	14.4	16.6	20.7	41.6	102.9	20.4	73.5	85.9
46. Direct foreign investment	0.9	...	...	...	...	...	...	...	59.1	...
47. Common trust funds	0.1	...	...	...	...	...	...	...	...	0.7
48. Individual trust funds	1.1	...	...	...	...	...	...	...	...	5.6
49. Equity in enterprises	17.1	...	...	83.4	79.3	58.4	...	...	...	7.8
50. Equities	19.2	...	...	83.4	79.3	58.4	...	...	...	14.1
51. Net worth	43.7	86.7	85.6	...	...	...	-2.9	79.6	-32.6	...
52. Liabilities, equities, and net worth	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup>Consumer semidurables.



cial institutions; trade credit in the business sectors; and insurance and pension reserves and equity in unincorporated business enterprises and trust funds in households.

Compared to a share of liabilities of two-fifths in the national balance sheet, the proportion ranges from as little as 13 percent for households, nonprofit organizations, and agriculture to over 90 percent for financial institutions, slightly over 100 percent for the United States government and fully 130 percent for the rest of the world, indicating net American investments abroad. The different forms of debt are more sector-specific than is the case for assets. Thus about four-fifths of the liabilities of the federal government and almost all those of state and local governments consist of government securities. Deposits and insurance and pension reserves are almost limited to the balance sheets of financial institutions, where they account for one-half and one-fifth respectively of total liabilities. A few types of debt, however, appear in the balance sheets of several sectors, particularly mortgages, bank debt, and trade debt. The adjusted book value of their equity represents 8 percent of the assets of financial institutions, but nearly 60 percent of those of nonfinancial corporations, while similar equities in farm and nonfarm unincorporated business enterprises, though not evidenced in the form of securities, equal about 80 percent of their assets.

Even the highly aggregative figures of table 12 suggest that the liquidity, debt, and leverage ratios of the various sectors differ considerably, and this is borne out by table 13. Financial institutions occupy a special position in that most of their assets are expressed in fixed dollar amounts, their debt ratio is close to unity, and their leverage ratio is relatively high—in 1975 over 1.80. The federal government has an even higher leverage ratio of nearly 27, as it has a slightly negative net worth, but tangible assets equal to nearly one-fourth of total assets. For the other sectors the leverage ratio is close to unity because the proportion of price-sensitive assets in their portfolios is not too different from their debt ratio. Among them the leverage ratio is lowest for households, with 0.77. Nonprofit organizations, agriculture, unincorporated nonfarm business, nonfinancial corporations, and state and local governments occupy an intermediate position with ratios of between 1.11 and 1.26. If liquid assets are limited to currency, deposits, U.S. government and agency securities, and open-market paper, the liquidity ratio is highest for households with 19 percent and financial institutions with 14 percent. The ratios are much lower for governments—10 percent for state and local governments and 4 percent for the federal government—and are minuscule for agriculture, nonfarm unincorporated business, and nonprofit institutions with 1–2 percent.

The ratio of all financial assets to liabilities, which can be regarded as a broad liquidity ratio, is the highest for households at close to 5, followed

**Table 13                      Sectoral Balance Sheet Ratios, 1975**

	Liquidity ratio <sup>a</sup>	Debt ratio <sup>b</sup>	A/L ratio <sup>c</sup>	Leverage ratio <sup>d</sup>
	(1)	(2)	(3)	(4)
1. Households	0.19	0.13	4.65	0.77
2. Nonprofit institutions	0.01	0.14	1.54	1.16
3. Farm business	0.01	0.17	0.17	1.17
4. Nonfinancial noncorporate business	0.02	0.21	0.39	1.16
5. Nonfinancial corporations	0.05	0.42	0.64	1.26
6. Federal government	0.04	1.03	0.22	-26.80
7. State and local governments	0.10	0.20	0.58	1.11
8. Financial institutions	0.14	0.92	1.05	1.82
9. All domestic sectors	0.13	0.39	1.34	1.10

<sup>a</sup>Deposits, U.S. government and agency securities, and open-market paper : total assets.

<sup>b</sup>Debt : total assets.

<sup>c</sup>Financial assets : financial liabilities. Ratio for all sectors together is in excess of unity because numerator includes corporate stock and equity in unincorporated business enterprises and denominator does not.

<sup>d</sup>Price-sensitive assets : net worth or equity.

at a considerable distance by nonprofit institutions with fully 1.50 and by financial institutions with 1.05. In all other sectors liabilities exceed financial assets, so that the ratio is below unity, particularly for agriculture and the federal government, for which the ratio is in the order of 0.20, rising to about 0.60 for state and local governments and nonfinancial corporations.

The debt/asset ratio is highest for the federal government with 1.03, the only domestic sector for which the ratio is above unity, followed by financial institutions with 0.92, a value which reflects the intermediary character of these organizations. The ratios for the remaining six sectors are much lower, ranging from 0.13 to 0.21 with the exception of nonfinancial corporations, for which it is as high as 0.42, indicating a relatively more intensive use of external financing than for unincorporated business, state and local governments, or households.

### 4.3. Distribution of Assets and Liabilities among Sectors

Table 14 shows the percentage distribution of the nearly fifty types of assets and liabilities distinguished among the nine sectors at the end of 1975. On the average the basic statistics show only three and a half sectors as holders or issuers of an identified asset or liability, the average being higher with four for assets than for liabilities with three. This does not mean that all the other sectors do not own or owe a given asset or liability, but only that it has not been possible to ascertain or estimate the amounts involved, or that they are assumed to be relatively small. The number of

**Table 14**                    **Distribution of Individual Assets and Liabilities among Sectors, 1975**  
(Distribution; percent)

	Amounts (\$ bill.) (1)	House- holds (2)	Non- profit insti- tutions (3)	Nonfinancial unincorporated business		Nonfi- nancial corpo- rations (6)	Federal govern- ment (7)	State and local govern- ments (8)	Rest- of-the- world (9)	Finan- cial insti- tutions (10)
				Farm (4)	Other (5)					
<i>Assets</i>										
1. Land	1,551	31.9	4.0	22.6	3.7	16.1	4.0	16.5	...	1.2
2. Structures	3,078	31.3	4.0	2.4	15.2	16.9	5.3	23.8	...	1.1
3. Consumer durables	546	100.0	...	...	...	...	...	...	...	...
4. Equipment	771	...	0.6	6.5	8.6	60.8	14.8	6.2	...	2.5
5. Inventories	639	23.0 <sup>a</sup>	...	8.0	4.1	53.1	11.6	0.2	...	0.2
6. Tangible assets	6,582	32.7	2.9	8.0	9.4	24.0	6.3	15.8	...	1.1
7. Demand deposits and currency	290	56.4	0.1	2.5	4.3	16.4	3.8	4.9	4.8	6.7
8. Time and savings deposits	885	87.3	...	...	...	2.5	0.1	5.4	2.4	2.3
9. Gold and foreign exchange	12	...	...	...	...	...	...	...	...	100.0
10. U.S. government securities	437	22.3	0.5	...	...	3.3	...	7.0	15.2	51.7
11. U.S. agency securities	121	7.5	...	...	...	2.6	5.8	18.5	...	65.6
12. State and local government securities	231	24.9	0.2	...	...	1.9	...	1.9	...	71.1
13. Corporate and foreign bonds	317	10.3	3.8	...	...	...	...	...	0.7	85.3
14. Corporate stock	855	59.0	3.7	...	...	...	...	...	3.1	34.2
15. Mortgages	803	8.3	0.2	...	...	...	1.7	1.6	...	88.2
16. Bank loans n.e.c.	277	...	...	...	...	...	...	...	...	100.0
17. Other loans	163	...	...	...	...	...	41.4	...	...	58.6
18. Consumer credit	197	...	...	...	6.4	9.3	...	...	...	84.3
19. Open-market paper	70	15.0	...	...	...	39.8	...	...	12.0	33.1
20. Trade credit	327	...	...	...	5.4	86.7	2.0	...	3.5	2.3



**Table 14**                      **Continued**

	Amounts (\$ bill.) (1)	House- holds (2)	Non- profit insti- tutions (3)	Nonfinancial unincorporated business		Nonfi- nancial corpo- rations (6)	Fedral govern- ment (7)	State and local govern- ments (8)	Rest- of-the- world (9)	Finan- cial insti- tutions (10)
				Farm (4)	Other (5)					
40. Open-market paper	78	...	...	...	5.7	21.0	...	...	16.8	56.5
41. Trade debt	291	...	2.7	1.7	5.3	79.9	1.8	3.7	4.9	...
42. Insurance and pension reserves	585	...	...	...	...	...	16.1	...	...	83.9
43. Other liabilities	390	5.4	...	...	...	9.2	3.2	...	6.8	75.4
44. Total liabilities	5,105	14.7	0.7	1.8	2.7	17.5	10.8	4.7	2.9	44.3
45. Direct foreign investment	118	...	...	...	...	...	...	...	100.0	...
46. Common trust funds	18	...	...	...	...	...	...	...	...	100.0
47. Personal trust funds	147	...	...	...	...	...	...	...	...	100.0
48. Business equities	2,441	...	...	18.4	21.8	51.2	...	...	...	8.5
49. Equities	2,724	...	...	16.5	19.5	46.0	...	...	4.3	13.6
50. Net worth	5,958	82.1	3.5	...	...	...	-0.3	15.7	-1.1	...
51. Liabilities, equities, and net worth	13,786	40.9	1.8	3.9	4.9	15.6	3.9	8.6	1.4	19.1

\*Consumer semidurables.

sectors for which estimates are available varies greatly. Thus eight of the twenty-six assets and nine of the twenty liabilities (including equity and net worth) concern only one sector. At the other end of the scale only relatively few items are distributed among six or more sectors, viz., land, structures, equipment, and inventories among tangible assets; demand and time deposits, U.S. government securities, and other assets among financial assets; and mortgages, bank loans, other loans, trade debt, and equity or net worth among the liabilities.

Because the portfolio structure of the nine sectors varies considerably, their shares in the several assets and liabilities differ, and often greatly so, from their shares in national assets. Thus the household sector with a share in national assets of over 40 percent necessarily accounts for 100 percent of the national total of consumer durables and semidurables, insurance and pension reserves, and equity in unincorporated business and in trust funds, but has no share, e.g., in bank loans, consumer credit, trade credit, and direct foreign investment. Among other assets the share of households is very high in deposits with financial institutions—with about 80 percent and corporate stock with nearly 60 percent (though only about 50 percent if intercorporate holdings are included), and is substantial in land and structures with over 30 percent. The only type of liability with a high share of households is mortgages, households owing 60 percent of the national total. As a result households own one-third of all tangible assets and nearly one-half of all financial assets, but owe less than one-seventh of all liabilities, and account for over four-fifths of national net worth.

If we combine the nine sectors and the nearly fifty types of assets and liabilities into five each, we obtain the following picture:

	House- holds <sup>a</sup>	Nonfinan- cial business	Govern- ment	Rest of the world	Financial institutions	All sectors
Tangible assets	35.5	41.4	22.1	...	1.1	100.0
Financial assets	49.1	8.9	3.6	2.8	35.6	100.0
Total assets	42.7	24.4	12.5	1.4	19.1	100.0
Liabilities	14.5	20.9	14.7	4.9	45.0	100.0
Equities	...	91.5	...	...	8.5	100.0
Net worth	85.6	...	15.4	-1.1	...	100.0

<sup>a</sup>Including nonprofit organizations.

Fully one-third of the national wealth, i.e., tangible assets plus net foreign balance, is owned by the household sector; over one-fifth by the government; and fully two-fifths by the four business sectors whose equity in turn is predominantly owned by the household sector. Financial assets are divided mainly between households, who own nearly one-half,

and financial institutions, which hold fully one-third. The distribution of liabilities is quite different. Financial institutions are responsible for nearly one-half, nonfinancial business for one-fifth, and households and governments for one-seventh each. As a result households account for over four-fifths of national net worth, which is equal to national wealth, leaving not much over one-seventh to government.

The distribution of the individual assets or liabilities among the nine sectors is to a large extent determined by the character of the activities of these sectors. This would be even more evident if a finer breakdown of assets and liabilities and of sectors had been available. The members of the individual sectors do, however, have a considerable degree of freedom in arranging their asset portfolios and in the ways in which they finance them, and the choices they make in these arrangements are reflected in the sectoral distribution of assets and liabilities in the national balance sheet. Thus the share of households in time and savings deposits of seven-eighths is the result of portfolio decisions to allocate a certain part of their savings or their assets to such deposits, plus the fact that time and savings deposits are generally unattractive for the other sectors, because they are not needed for the conduct of business and because of their low yield until the 1970s. Currency and demand deposits, which are needed for transaction purposes by all sectors, are distributed differently. Households hold over one-half of the total, but nonfinancial business enterprises account for nearly one-fourth and governments for nearly one-tenth. Marketable securities are held largely by financial institutions, evidence of the institutionalization of the financial process which has been going on for many decades (cf. Goldsmith 1958, 1973), their share ranging from one-third in corporate stock to over one-half in U.S. government securities to more than two-thirds in state and local government securities and to nearly seven-eighths in corporate and foreign bonds. It is equally high for mortgages. As a result fully one-third of all financial assets are held by financial institutions. As households own nearly one-half of all financial assets, only one-sixth of the total is left for all other sectors. Of this residual nearly one-tenth is held by nonfinancial business enterprises, 3½ percent by governments, and nearly 3 percent by foreigners. The share of holdings by nonfinancial sectors other than households is high in the case of U.S. government and agency securities with about one-fourth; open-market paper with fully one-half; and trade credit and direct foreign investment with almost 100 percent.

There are only a few types of liabilities in which more than two sectors appear as debtors. Among them mortgages are owed to the extent of three-fifths by households, and over one-third by nonfinancial business. Nonfinancial business enterprises account for over 70 percent of bank loans, for over two-fifths of other loans, and for seven-eighths of trade

debt. If government, corporate, and foreign bonds are combined, the federal government including its agencies is responsible for one-half of the total, and state and local governments and nonfinancial corporations for about one-fifth each, leaving 6 percent for foreign issuers and financial institutions.

#### 4.4. The Financial Interrelations Ratio

The financial interrelations ratio, the ratio of financial to tangible assets, at any one time depends on the net volume of issues of the past, the movements of prices of financial instruments, the value of the output/capital ratio, and the rate of growth of national product during the past.<sup>1</sup> The formula is:

$$FIR = \tau \alpha \beta^{-1} (\delta + \varphi + \xi)(1 + \nu) + F_{t-n}/W_t(1 + \nu')$$

where  $\delta$ ,  $\varphi$ , and  $\xi$  are the past new issue ratios (to gross national product) of nonfinancial, financial, and foreign issuers;  $\alpha$  is the inverse of the rate of growth of national product plus unity;  $\beta$  the capital-output ratio;  $\nu$  and  $\nu'$  ratios that depend on the relative size of price-sensitive financial assets and their price movements;  $\tau$  an adjustment factor which takes account of the fact that the calculation is applied to a limited period, here twenty-two years, instead of infinity, and approaches unity the longer the period;  $F_{t-n}$  the value of financial assets at the beginning and  $W_t$  national wealth at the end of the period. Inserting the appropriate values for the period 1954–75, and hence for the 1975 ratio, into the formula, yields:

$$0.77 \times 15.22 \times 0.25 (0.14 + 0.11 + 0.01) \times 1.10 + 0.24 \times 1.50 = 1.20$$

The calculated value of the financial interrelations ratio of 1.20 is thus somewhat above the observed value of 1.09. This is due to some simplifying assumptions made in the formula, particularly the assumption that all values grow at a uniform rate throughout the period, and that all growth rates are calculated from the values at the beginning and the end of the period. Some discrepancies are also due to the roughness of the estimated value of some parameters. The formula can nevertheless serve in identifying the contribution of the various factors to the observed level of the ratio in 1975. Thus it shows that about one-third of the financial interrelations ratio of 1975 reflects assets in existence before 1954 (allowing for their appreciation in the 1954–75 period); and that revaluations contri-

1. For discussion of components and derivation of the financial interrelations ratio cf. Goldsmith 1969, chap. 7.



buted about one-sixth. In international comparison  $\alpha$  with 15 and  $\beta^{-1}$  with 0.25, the new issue ratio with nearly 0.30, and the  $\delta/\varphi$  ratio with about 0.75 are close to the level for developed countries. So, therefore, the financial interrelations ratio is at slightly above unity.<sup>2</sup>

2. Cf. Goldsmith 1969, p. 322, where the figures refer to 1963 and should in most cases have been higher in 1975. Since for other countries no information is available on the equity of households in unincorporated business enterprises and personal trust funds are not treated as a separate financial asset, it is preferable, for purposes of comparison with Goldsmith 1969, to use a narrower concept of the financial interrelations ratio. It then breaks down as follows:

$$0.77 \times 15.22 \times 0.25 (0.14 + 0.11 + 0.01) \times 1.02 + 0.19 \times 1.35 = 1.04$$

The calculated value is again slightly higher than the observed value of 0.92. The main difference between the two ratios is the considerably lower value of revaluations in the narrower formula because revaluations now are taken into account only for corporate stock, but not for the equity in unincorporated business enterprises.