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## CHAPTER 7

# Some International Comparisons

UNDERSTANDING of the structure of the national wealth of the United States, of its growth, and of its relation to income would be considerably deepened if we could compare our situation with that of other countries, particularly countries similar to the United States in their economic and institutional structure. Comparison of the present situation of foreign countries in different stages of their economic development with that of the United States in earlier stages of its history might be particularly interesting and suggestive. Unfortunately, adequate comparisons of this type are not yet possible and cannot be presented here. Limitations of time and resources have ruled out the thorough exploration, examination, and adjustment of the data available for foreign countries, necessary for an adequate international comparison. Moreover, the relative scarcity of reliable and sufficiently detailed estimates of national wealth for foreign countries and the disparity in the methods of estimation used would make such comparisons both difficult and precarious. We must therefore be satisfied with a much less ambitious approach.

All that is attempted in this chapter is the comparison of a few basic structural characteristics of national wealth for varying groups of countries—sometimes less than ten, sometimes as many as forty—during the 1950's. Even this limited comparison has been made possible only by the recent publication in Income and Wealth Series VIII of national wealth estimates for a number of countries for which they were not previously available, and by the inclusion in the introduction to that volume of a set of comparative tables based on these country papers.¹ Any attempt to go beyond the countries and dates covered in Income and Wealth Series VIII does not in the present situation promise an increase in information commensurate with the effort required, except in the analysis of marginal capital-output ratios, omitted from this report.

The comparisons center on three basic aspects of national wealth:

<sup>1</sup> The Measurement of National Wealth, "Introduction," by Raymond W. Goldsmith and Christopher Saunders; "Statistics of National Wealth for Eighteen Countries," by Th. van der Weide (Income and Wealth Series VIII, London, Bowes and Bowes, 1959).

- 1. The structure of net national wealth in current prices, i.e., the distribution of total national wealth among the main types of tangible assets
- 2. The distribution of net national wealth among the three main economic groups—business enterprises, households, and government
- g. The ratio of net to gross reproducible tangible wealth

## Structure of National Wealth

#### THE SHARE OF LAND

For broad international and historical comparisons one of the two or three crucial ratios characterizing the structure of national wealth, and possibly the one most revealing of a country's economic status, is the proportion of land (particularly agricultural land) to total national wealth.

This share now stands at about 17 per cent in the United States, after having declined fairly steadily from 25 per cent in 1929, 35 per cent in 1900, and 45 per cent in the middle of the nineteenth century.2 The shares are remarkably similar for most European countries for which the figures are available, as shown in Table 22. They are slightly below the United States level for Belgium and the Netherlands, and slightly above it for West Germany and Luxemburg, lying for all countries between one-seventh and one-fifth of the value of total tangible wealth. For Sweden, the ratio is substantially below that of the United States, about one-eighth. It probably would still be somewhat lower for the United Kingdom, for which no current estimate is available. Unfortunately, only one underdeveloped and primarily agricultural country, India, is included in the comparative tabulations of Income and Wealth, Series VIII. Here the land-tangible assets ratio is, of course, much higher and amounts to close to 50 per cent, indicating an approximate equality between the value of land and of reproducible tangible assets. Ratios of this magnitude will probably be found in many of the predominantly agricultural countries in Southeast Asia, the Middle East, Central America, and Africa.3 Such ratios are not at all surprising

<sup>&</sup>lt;sup>2</sup> The estimates for the United States are taken (unless otherwise indicated) for the period since 1900, from the appendix tables to this report, and for the nineteenth century, from R. W. Goldsmith "The Growth of Reproducible Wealth of the United States of America from 1805 to 1950," Income and Wealth Series II, London, 1951.

<sup>&</sup>lt;sup>3</sup> For Honduras, an estimate not utilized in Table 22 (E. Tosco, La Riqueza de Honduras, mimeographed, September 1957) puts the share at 44 per cent.

TABLE 22
Share of Land in National Wealth, Selected Countries and Years, 1950-56

			Per C	and as ent of All ble Assets	Land as Per Cent of Tangible Assets Excluding Consumer Durables		
	Country	Date	Total	Agricultural	Total	Agricultural	
	_	_	(1)	(2)	(3)	(4)	
1.	United States	1955	17	5	18	6	
2.	Sweden	1952	11	2	12	2	
3.	Belgium	1950	14		16		
4.	Netherlands	1952	15	12	18	15	
5.	Australia	1956	17	9	18	10	
6.	West Germany	1955	20		22		
7.	France	1954		14		15	
8.	Yugoslavia	1953	26	23	29	25	
9.	Norway	1953				2	
10.	Luxemburg	1950			20	10	
11.	South Africa	1955			28		
12.	India	1950			51	45	

Source: Van der Weide, op.cit., Table I.

if it is recalled that we need look back only about a century to find in the United States equally high shares of land in total tangible wealth. Yugoslavia and South Africa, two countries ranking in their economic development between the industrial countries of Europe and North America and the agrarian countries of the tropics and subtropics, show land-wealth ratios of about 30 per cent.

The ratio of agricultural land to total wealth in the United States of 6 per cent, a ratio which is more characteristic of economic development than the all-land ratio since the latter includes urban land of high locational value, is among the lowest in the world. It is, however, above that for some Scandinavian countries and probably for Great Britain, and compares with ratios of approximately 15 per cent in France and the Netherlands, 25 per cent in Yugoslavia, and 45 per cent in India.

The ratio of all land to total national wealth thus combines two main components. The first is the ratio of agricultural land to national wealth shown in columns 2 and 4 of Table 22. This ratio is likely to decline in the course of economic development, as agriculture gradually accounts for a declining share of labor force and output. The second component is the ratio of nonagricultural (mainly urban) land to national wealth. It is not evident that this ratio will have a

definite long-term trend. In some phases of economic development, particularly during rapid urbanization, the ratio may rise. During others it may fall, particularly when improvements in transportation reduce the scarcity value of land in urban centers. It is, however, to be expected that the second component of the land-national wealth ratio, reflecting locational advantages, will increase in importance in comparison with the first component, which is largely the result of differences in physical characteristics such as soil fertility, though locational factors also play an important role in it.

## THE EQUIPMENT-STRUCTURES RATIO

A second important ratio is the relation of the value of equipment (producer and consumer durables) to structures shown in Table 23.

TABLE 23

RATIO OF EQUIPMENT TO STRUCTURES, SELECTED COUNTRIES AND YEARS, 1950-55 (per cent)

		Ratio of Total  Equipment to Structures,  Consumer Durables			Ratio of Enterprise Equipment to Structures, Dwellings		
	Country	Date		Excluded (2)		Excluded (4)	
1.	United States	1955	50	29	35	85	
2.	Belgium	1950	<b>7</b> 5	47	54	265	
3.	Luxemburg	1952		69	81	165	
4.	Netherlands	1952	88	42	58	124	
5.	West Germany	1955	70	42	47	105	
6.	Norway	1953		38	46	88	
7.	Yugoslavia	1953	58	37	38	71	
8.	Canada	1955	71	39	49	95	
9.	Union of South Africa	1955		34	36a	53a	
10.	Colombia	1953		29	33	47	
11.	Japan	1955	81	38	43	72	
12.	India	1950		25	27	57	

Source: Van der Weide, loc.cit.

While this ratio now stands at about 50 per cent in the United States, it is substantially higher for each of the few countries for which the information is available: about 70 per cent for Canada and West Germany; 75 per cent for Belgium; fully 80 per cent for Japan; and almost 90 per cent for the Netherlands. If consumer durables are excluded, in all but two of the eleven countries the ratio of producer durables to

a Excluding government corporations and public enterprises.

all structures is higher than in the U.S. The median ratio for these eleven countries of slightly less than 40 per cent compares with an American ratio of slightly less than 30 per cent.

For purposes of analysis, it is probably preferable to limit the comparison to business and government enterprises, excluding dwellings as well as consumer durables. The picture then is somewhat different. The United States with a ratio of producer durables to enterprise structures of 85 per cent is close to the median for the eleven foreign countries for which the information is available. The ratio is considerably higher than in the U.S. in all Western European countries for which it can be calculated—Belgium, Luxemburg, the Netherlands, and West Germany—and slightly higher in Canada and Norway. It is lower only in definitely underdeveloped countries—in descending order, Japan, Yugoslavia, India, Union of South Africa, and Colombia.

It is not easy to explain these relationships, particularly in view of the well-known status of the U.S. as a highly mechanized country with an ample stock of consumer durables. In only a few countries, particularly in Japan and to a lesser extent in West Germany, does the relatively small value of the stock of dwellings explain the high ratio of equipment to structures. Relative costs—particularly the relatively high cost of building construction in the U.S.—may provide part of the answer. Incompatibilities in coverage and completion as well as differences in length of life probably are all responsible for some of the difference. Much more data and analysis, as well as a detailed examination of the derivation of the estimates underlying Table 23, however, are needed before a satisfactory explanation can be attempted.

#### THE SHARE OF FOREIGN ASSETS

There is at least one point at which the structure of the national wealth of the United States differs from that of many, if not most, foreign countries—the share of both foreign assets and foreign liabilities in total national wealth. This statement unfortunately cannot be documented in detail, since only a few foreign countries have sufficiently accurate or continuous estimates of their foreign assets and liabilities for comparison with those of their domestic wealth.

In the United States, foreign assets represented only 5 per cent of domestic tangible wealth including monetary metals, and not more than 3.5 per cent excluding them, even at the end of the first postwar decade (1956). Foreign liabilities (including all foreign investments in the U.S.) amounted to over 2 per cent of domestic tangible wealth,

leaving a net balance of 3 per cent including monetary metals and of not much over 1 per cent excluding them. These ratios are apparently considerably below those that can be inferred for many foreign countries, both developed European and underdeveloped non-European countries. In Belgium and the Netherlands, for instance, the net foreign balance constitutes 10 and 7 per cent, respectively, of national wealth.

In the countries which in the past have been heavy importers of foreign capital, the net foreign balance is usually negative, since foreign liabilities, in the form of both borrowing abroad and foreign ownership of domestic assets, are larger than those countries' foreign assets, including their holdings of monetary metals. In Canada, for instance, the net foreign balance is equal to about 12 per cent of national wealth; in Latin America (as a whole) somewhat less than 10 per cent; in Australia 5 per cent (the result of foreign assets of 2 per cent and foreign liabilities of 7 per cent of national wealth); and in Norway to 1.5 per cent.<sup>4</sup> There is little doubt that net foreign liabilities are in similar or even larger proportions of national wealth for a number of underdeveloped countries in Southeast Asia, Africa, and Latin America, although exact statistical calculations are not feasible, chiefly because of the lack of estimates of national wealth.

#### OWNERSHIP OF TANGIBLE ASSETS

The distribution of reproducible tangible assets among business enterprises, households, and governments—which, of course, is not identical with the share of these three groups in national equity—shows considerable international differences. In the United States in 1955 nearly one-half of tangible assets were operated by business enterprises (if farms are included); two-fifths represented dwellings and consumer durables operated by households; and a little over one-eighth were operated by the government. These ratios would not be substantially changed by the inclusion of nonreproducible assets, particularly land.

Of the countries for which the necessary data are available (Table 24) two—Belgium and Canada—show a share of the government in reproducible tangible wealth only slightly higher than the ratio found in the United States. A few other countries show a markedly higher ratio, averaging one-fifth of total reproducible tangible wealth—the Netherlands, West Germany (partly estimated), and Japan. Of the

<sup>&</sup>lt;sup>4</sup> Most of these ratios are derived from information in the country papers in Income and Wealth Series VIII.

TABLE 24

DISTRIBUTION OF OWNERSHIP OF REPRODUCIBLE TANGIBLE WEALTH, SELECTED COUNTRIES AND YEARS, 1950-56 (per cent of reproducible tangible wealth)

		REPR	ODUCIBLE WEAT	REPRODUCIBLE WEALTH OF ENTERPRISES	RISES	REPRODUCIBLE WEALTH OF HOUSEI	REPRODUCIBLE WEALTH OF HOUSEHOLDS	WEALTH OF GOVERNMENT	WEALTH OF GOVERNMENTS
					Private Nonresi-	Dwellings	ings	Government Owned Enterprises	nt Owned prises
COUNTRY	Date	Total (1)	Dwellingsa (2)	Government (3)	dential (4)	Includeda Excluded (5) (6)	Excluded (6)	Included (7)	Excluded (8)
1 Ilnited Ctates	1044	76	08	2	4	43	13	13	=
9. Relogium	1950	77	36	, rv	36	51	15	14	<b>∞</b>
3. Netherlands	1952	99	20	ĸ	41	42	22	18	12
4. West Germany	1955	75	25			40	15		10
5. France	1954	65	17b	20	28	30+	13	42	22
6. Yugoslaviac	1953	92	23	47	7	34	12	59	12
7. Canada	1955	71	19	2	20	35	16	15	13
8. Australia	1956		31		29	41	10	30	
9. Japan	1955	64	14	9	#	34	20	22	16
Source: Van der Weide, op.cit., Table III. a Includes all dwellings; hence cols. 1, 2, an	Veide, op.cit.,	, Table III.	er Weide, op.cit., Table III. Iwellings; hence cols. 1, 2, and 5 overlap.	3	Collective	peoples' own	e Collective peoples' ownership included in cols. 3, 7, and	led in cols. 3	, 7, and 8.

countries for which the ratio can be calculated—all basically free-enterprise countries—the share of the government is highest in France, where the available estimates put it at approximately two-fifths. Almost as high a ratio would probably be obtained for Australia.

The share of households in the ownership of tangible wealth in the Netherlands and West Germany is similar to the American level of two-fifths. It is somewhat lower—in the order of one-third—in Australia and Japan, chiefly because of the relatively low share of dwellings in national wealth. On the other hand, the ratio is substantially above the American level in Belgium because of the high proportion of dwellings in the estimates of national wealth.

The share of private business enterprises (including farms but excluding government owned enterprises) is not very different from the American ratio of somewhat below one-half in most of the other countries for which estimates are available.

## Ratio of Net to Gross Wealth

The ratio of the net to the gross value of reproducible tangible assets—the significant ratio, since there is no difference between the two components for inventories and for land—is astonishingly similar for the few countries for which estimates are available, as Table 25 shows.

The four foreign countries for which the ratio can be calculated—West Germany, Netherlands, Yugoslavia, and Australia—all show a ratio of net to gross reproducible tangible wealth of very close to 60 per cent which is the figure obtained for the United States.<sup>5</sup> The ratios are also very similar for most of the main components of reproducible tangible assets such as dwellings and producer durables. Substantial differences appear only in the ratios of nonresidential private structures, government structures, and consumer durables, but they are not systematic. For private nonresidential structures as well as consumer durables, the net-gross ratio for the United States is low

<sup>5</sup> Such a ratio can be the result of numerous combinations of rates of growth of expenditures and their average length of life. It may, for instance, represent the combination of a 2 per cent growth and a life of slightly more than 60 years, an unlikely high value for the average of all capital expenditures; of a growth of 3 per cent and a life of slightly more than 40 years; of a growth of 4 per cent and a life of a little over 30 years; or, again a less likely combination, of 5 per cent growth and 25 years' life. Hence, several countries may show the same net-gross ratio although capital expenditures have increased at considerably different rates in the past, provided only that there are offsetting differences either in the distribution of capital expenditures among items of differing durability or because similar items are retained in the stock for longer or shorter periods.

TABLE 25

RATIO OF NET TO GROSS REPRODUCIBLE TANGIBLE WEALTH,
SELECTED COUNTRIES AND YEARS, 1952-56

(per cent)

	United States (1956)	West Germany (1955)	Netherlands (1952)	Yugoslavia (1953)	Australia (1956)
	(1)	(2)	(3)	(4)	(5)
1. Reproducible tangible wealth,					
including item 9	60	60	61		59
2. Reproducible tangible wealth,					
excluding item 9	62	59	61	62	61
3. Structures, private	58	<b>57</b>	61	58	56
4. Structures, dwelling	56	60	61	51	57
5. Structures, other private	53	55	61	66	53
6. Structures, government	59	50	50a	57a	57a
7. Equipment, private,					
including item 9	55	61	59		53
8. Equipment, private,					
excluding item 9	60	58	57	56	56
9. Consumer durables	50	67	61		49

Source: Col. 1, Tables A-5 and A-7.

Cols. 2 to 5, Van der Weide, op.cit., Table II.

compared with most of the other countries for which data are available, while it is high for government structures.

In view of our limited information about the foreign data's reliability and scope, and of the many factors that could be responsible for differences in the net-gross ratio for individual types of assets, no attempt to explain each of these differences will be made. It is more remarkable that, notwithstanding the differences of five countries' structure of reproducible tangible assets, length of life of the different types of assets, and time shape of the capital expenditure streams which underlie the ratio, the over-all ratio of net to gross reproducible tangible wealth is practically identical. This near identity, of course, may be, and probably is, at least in part, the result of offsetting differences in the various factors that determine the national over-all ratio.

## Rate of Growth of National Wealth in the Postwar Period

The number of countries for which the rates of growth of real national wealth during the postwar period can be calculated is so small that not much can be concluded from a comparison of the figures shown in

a Includes government equipment.

Table 26 and Chart 10, with the rate of growth of national wealth in the United States. It is fairly evident, however, that unless the foreign countries for which the data are available are entirely untypical of the world outside, the rate of growth of real reproducible wealth per head, during the postwar decade and after, was at least as rapid abroad as in the United States. In Europe and the (former) British Dominions, the stock of tangible wealth apparently has grown faster than in the U.S., a relation partly explained by the rapid reconstruction in a number of European countries. The rate of growth in the underdeveloped countries, about which unfortunately little is known outside of Latin America, seems to have been, at best, as rapid and generally somewhat slower than in the U.S.

TABLE 26

RATES OF GROWTH OF REAL NATIONAL WEALTH IN POSTWAR PERIOD,
SELECTED COUNTRIES AND PERIODS, 1945-58
(per cent per year)

			REPRODUCIBLE ALTH	REPRODUCIBLE WEALTH PER HEAD			
			Consume	r Durables		Consumer Durables	
	COUNTRY	Period	Included (1)	Excluded (2)	Population (3)	Included (4)	Excluded (5)
1.	United States	1945-58	3.9	3.4	1.7	2.2	1.7
2.	Argentina	1945-55		2.9	2.2		0.7
3.	Colombia	1945-53		3.6	2.2		1.4
4.	Australia	1947-56	4.6	4.6	2.4		2.2
5.	United Kingdom	1947-57		3.4	0.4		3.0
6.	South Africa	1945-55		5.2	2.0		3.2
7.	Canada	1947-55	6.8	6.2	2.9	3.9	3.3
8.	West Germanya	1948-55		5.4	1.9		3.5
9.	Norway	1945-55		5.6	1.0		4.6

Source: Country papers in Income and Wealth Series viii, except for United States (Table A-2) and for United Kingdom (National Income and Expenditures, U.S. Department of Commerce, various issues).

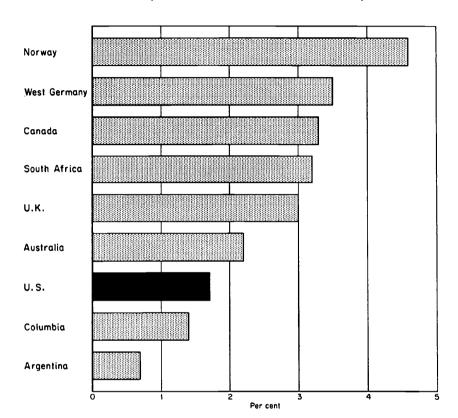
The calculation of rates of growth of reproducible national wealth by means of the comparison of estimates of (deflated) wealth at two points of time, or of the comparison of a period's cumulated net capital expenditures with the stock of capital at the beginning of the period, is limited by scarcity of data for the nine countries listed in Table 26. It is, however, possible to derive rough approximations of

a Only fixed reproducible assets.

<sup>6</sup> Cf. Chapter 4.

CHART 10

Average Annual Rate of Growth of Real National Wealth Per Head in Postwar Period, Selected Countries and Periods, 1945-58



Source: Underlying data in Table 26.

the rates of growth of reproducible tangible wealth in the postwar period for another half-dozen countries for which bench-mark estimates of national wealth in the postwar period are available. One of two approaches must be accepted for reducing the available estimates of gross capital expenditures (in prices that underlie the bench-mark estimates of national wealth) for the postwar period to a net basis. One is using the ratio of depreciation allowances to gross capital expenditures derived from the countries' official national accounting statements; the other is by applying a standard ratio, based on the theoretical relationship between gross and net capital expenditures,

that corresponds to a given rate of growth of capital expenditures in the past and an assumed length of life of reproducible tangible assets.<sup>7</sup>

Most of the countries for which additional rough estimates thus become available show a rate of growth per head of reproducible tangible wealth (excluding consumer durables) during the postwar period—usually between 1950 and 1957—which is definitely above the rate of 1.75 per cent observed for the United States. This is undoubtedly so for Japan, with a rate of growth of real reproducible assets per head of at least 4 per cent, and for Belgium, with the rate of about 3 per cent. For France, the Netherlands, Luxemburg, and India, the rate of growth seems to have been at about the same level as for the United States. Only in Sweden does the growth of real reproducible tangible assets per head seem to have been definitely below the U.S. level.

The inclusion of these additional countries, notwithstanding the lesser reliability of the estimates that can be derived for them, thus seems to reinforce the conclusion drawn from Table 26, that the rate of growth of reproducible wealth in the United States during the entire postwar period, and still more during the 1950's, was at best as rapid as in the rest of the non-Communist world and may well have proceeded at a slightly slower rate than in those countries. The comparable rates in Communist countries were probably in most cases well above the U.S. level, although the absence of published bench-mark estimates of the stock of reproducible tangible assets makes documentation difficult.8

This relationship—the absence of a lead in the American rate of growth—probably is in contrast to the experience in the prewar period, but it is in line with the fact that real income per head also increased more rapidly in many foreign countries during the postwar period (again excluding Southeast Asia) than in the United States. However, the position of foreign countries compared with the U.S. appears to have been more favorable with respect to the rate of growth of reproducible tangible wealth than with respect to income, with the result that, insofar as a judgment is possible, the capital-output ratio rose more (or fell less) in the rest of the world than in the U.S.

<sup>7</sup> Cf. Chapter 3.

<sup>8</sup> With the gross investment rates of between 20 and 30 per cent encountered in most Communist countries, the high net-gross capital expenditure ratios, and the rapid rate of growth, in real per head terms, of the volume of national product and capital expenditures, the stock of capital is bound to increase by much more than 2 per cent a year, even if the average reproducible capital-output ratio at the beginning of the postwar period had been very high in international comparison—which is unlikely.

## Changes in the Structure of Wealth During the Postwar Period

There is not enough statistical material available for foreign countries to permit a statistically founded comparison between the changes in the structure of national wealth that have taken place in the United States during the postwar period with those that have occurred abroad.

The figures at hand for a few countries (Germany, Canada, Australia) and fragmentary material for a few others make it likely, however, that the changes were in the same direction abroad as those observed in the United States after World War II. Thus, the share of reproducible tangible assets appears to have continued its increase at the expense of the share of land. Within reproducible tangible assets, the share of equipment has increased substantially. While it advanced in the postwar decade from 13 to 19 per cent in the U.S., it rose during approximately the same period from 24 to 30 per cent in Germany, from 23 to 29 per cent in Canada, and from 17 to 18 per cent in Australia. Similar changes appear to have taken place also in a number of underdeveloped countries, where they accompanied the increase in the share of manufacturing in national output, but figures are missing to document statistically the shift in the structure of national wealth.

