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A/CN.2/R.426  
25 February 1980

ORIGINAL: ENGLISH

Committee on Contributions  
Fortieth session  
New York

NATIONAL WEALTH

Note by the Statistical Office

1. The General Assembly, in resolution 34/6B, requested the Committee on Contributions

"to study in depth and report to the General Assembly at its thirty-fifth session on ways and means of increasing the fairness and equity of the scale of assessments, bearing in mind the debate under agenda item 103 in the Fifth Committee during the thirty-fourth session of the General Assembly, and, in particular ... ways of taking into account the concept of accumulated wealth and the ways by which criteria could be developed to enable it to be applied as a factor in setting the scale of assessments".

2. The Committee on Contributions, at its thirty-seventh session held in 1977, discussed at length the subject of national wealth as a part of its examination of the topic of the possible synthesis of economic and social indicators of capacity to pay.

3. The Committee, in its report to the thirty-second session of the General Assembly, made the following observations:

"It could be argued that a nation's accumulated wealth as well as its current annual income could be jointly considered as the influencing factors of its capacity to pay. Applying as a parallel national taxation levied on a country's citizens to countries as members of the world community, it could be further argued that net income should be supplemented by net worth as a measure of capacity to pay. Certainly, in mature developed countries capital assets have been developed over hundreds of years. On the other hand, countries whose incomes have increased substantially in recent years but which do not have well-developed infrastructures must, of necessity, refrain for some time to come from devoting to consumption large portions of their national income before they are in a position to

match mature, developed countries in terms of the latter's accumulated wealth. Available estimates of national wealth, however, are far from uniform in scope." 1/

4. Further, the Committee stated that

"data relating to national wealth and net national welfare, which the Committee agreed would not only broaden the base of capacity to pay but would serve to measure the infrastructure of a country, were partially available for only 25 and 3 Member States, respectively. Nor was it likely that such data would be available for the membership as a whole for many years to come." 2/

5. The Committee, therefore, concluded that "this lack of uniformity and ... the very limited availability of statistics, unfortunately render the estimates inadequate for the purpose of international comparisons." 3/

6. During the same session, the Committee was informed that international guidelines for the preparation of data on national wealth were expected to be published by the United Nations in the near future. Those guidelines were issued almost immediately following the close of the Committee's thirty-seventh session. 4/ However, the guidelines represent only the first step in a lengthy process of establishing a systematic body of statistics of national wealth.

7. As a part of its regular work programme, the Statistical Office of the United Nations, in mid-1979, carried out a survey of country practices in compiling balance-sheet statistics. That survey, reproduced in its entirety in the annex to the present document, reviews the availability of balance-sheet statistics and the sources and methods used in their compilation.

8. The definition of national wealth is related to that of balance-sheet accounts in the following manner: with reference to table 1 of the annex, national wealth, that is, the total net worth of any one country, may be defined in two ways. First, it is the total of the various kinds of net tangible and intangible non-financial assets of residents, plus financial claims on non-residents, less financial liabilities to non-residents. Second, the same total may be obtained by adding together the totals for the net worth of each of the resident sectors. To illustrate, again with reference to the same table

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1/ Official Records of the General Assembly, Thirty-second Session, Supplement No. 11 (A/34/11), para. 21.

2/ Ibid., para. 18.

3/ Ibid., para. 21.

4/ Provisional International Guidelines on the National and Sectoral Balance Sheet and Reconciliation Accounts of the System of National Accounts, Series M, No. 60 (United Nations publication, Sales No. E.77.XVII.10).

of the annex, total net worth, based on the first method, is equal to  $661 + (31+51+115) - (52+36+77) = 693$ . Using the second method, total net worth is derived as the sum of the net worth of each of the resident sectors equal to  $91+11-110+674+27 = 693$ .

9. The uses of balance sheets are summarized in paragraphs 9 and 10 of the annex.

10. The conclusion of the survey is contained in paragraph 37 of the annex.

11. In view of the developments which have taken place since the Committee's thirty-seventh session in 1977, as described in the foregoing paragraphs, it may be concluded that at the present stage, there has not been sufficient progress in the areas of methodology and availability of national wealth statistics to warrant their use as a systematic element in the determination of countries' relative capacity to pay.

Annex

## SURVEY OF COUNTRY PRACTICES IN COMPILING BALANCE SHEETS

Report of the Secretariat

## INTRODUCTION

1. This paper reviews the availability of balance-sheet statistics and the sources and methods used in their compilation. Even with the generous co-operation which countries traditionally extend to the United Nations Statistical Office it is difficult to keep abreast of the latest developments in the 151 States Members of the United Nations.

## BALANCE-SHEET STATISTICS

2. Table 1, which is reproduced from the recently issued United Nations guidelines on balance-sheet statistics, 1/ shows the kind of statistics which are the subject of this paper. It contains illustrative figures in order to indicate equalities between various entries in the accounts.

3. There are two special features of table 1 that should be noted. First, all entries in the table are at market prices - either actual market prices in the case of assets for which markets exist or at imputed market prices for those which are never or only rarely traded. This is an important difference between the national balance sheets which are the subject of this paper and the balance sheets kept by enterprises. In the latter issue, prices (or face values) are generally used to value financial assets, and historic (or acquisition) costs are used in valuing tangible assets.

4. The second point is that the scope of tangible assets in table 1 is somewhat broader than in the conventional national accounts. In addition to producers' fixed assets and inventories, they include consumers' durable goods - vehicles, household appliances and the like - and non-reproducible assets, such as land and other natural resources.

## USES

5. Before reviewing country practices, it may be useful to briefly consider the main uses of balance sheets, as this helps to explain the progress made to date in the development of these statistics. The data shown in table 1 may be used in the following kinds of analysis:

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1/ Provisional International Guidelines on the National and Sectoral Balance-Sheet and Reconciliation Accounts of the System of National Accounts, Series M, No. 60 (New York, United Nations, 1977).

Table 1  
 BALANCE-SHEET ACCOUNTS

	Non-financial enterprises	Financial institutions	General government	Households	Private non-profit institutions	All institutional sectors	Rest of the world	Total
Financial assets								
Currency and deposits	23	68	12	170	2	275	52	327
Securities	32	153	9	250	13	457	36	493
Other	126	120	125	144	2	517	77	594
Net tangible and non-financial intangible assets	304	18	133	193	13	661		661
Total	485	359	279	757	30	1 910	165	2 075
Non-financial enterprises								
Financial institutions								
General government								
Households								
Private non-profit institutions								
All institutional sectors								
Rest of the world								
Total								
Financial liabilities, share capital and net worth								
Currency and deposits	8	184	103	1	0	296	31	327
Securities	235	62	145			442	51	493
Other	151	102	141	82	3	479	115	594
Net worth	91	11	-110	674	27	693	-32	661
Total	485	359	279	757	30	1 910	165	2 075

- (a) Financial ratios (e.g., ratios of particular types of assets to particular types of liabilities);
- (b) Structure of liabilities and assets (e.g., long- versus short-term, real versus financial);
- (c) Monetary policy (e.g., different measures of money supply);
- (d) Fiscal policy (e.g., impact of capital taxes, investment allowances);
- (e) National and sectoral "net worth".

6. This list is no doubt very incomplete, but it suffices to bring out some important aspects of balance-sheet statistics. First, the emphasis of balance-sheet statistics is on financial analysis; they are not designed to provide direct information about the production and consumption of goods and services - topics that have traditionally occupied the central position in both market and centrally planned economies. In particular, it should be noted that the information on tangible assets that is contained in balance sheets is not suitable for production analysis. This is both because in balance sheets assets are assigned to the sectors which own them rather than to the sectors which use them, and because they are valued net of depreciation. While a net valuation is an appropriate measure of what assets are worth to their owners, gross valuation is considered more suitable for studying the contribution of assets to production.

7. A second point is that the uses listed above refer only to the kind of statistics shown in table 1. The list would be considerably longer if the statistics shown there were complemented by reconciliation accounts showing the relationship between balance sheets and the flows recorded in the national accounts. Balance sheets plus reconciliation accounts can be used for many additional kinds of analysis, such as the financing of capital formation, the impact of inflation on sectoral wealth distribution and the effects of monetary and fiscal policies on the structure of assets and liabilities. However, reconciliation accounts are so rare at the present time that they do not merit consideration in a paper devoted to country practices.

8. A final point to be made is that for some of the uses listed above it is not necessary that the balance sheets should be complete. It may suffice for some purposes to compile a balance sheet for a single class of assets and liabilities or for a single institutional sector. For example, to calculate different measures of money supply all that is needed are data on holdings of currency and deposits; financial ratios may only be needed for certain types of enterprises; and to measure the net worth of the nation it is only necessary to compile data on assets and liabilities vis-à-vis the rest of the world.

9. To summarize, balance-sheet statistics provide information about financial aspects of the economy; they do not deal directly with production and consumption, which have been the central concern of economists for the last several decades.

The analytic uses of balance sheets per se are somewhat limited; their usefulness is greatly enhanced if they are combined with reconciliation accounts, but this is a difficult area where progress has hitherto been slow. Finally, it is not always necessary to complete the entire balance sheet; for some purposes all that is required is data for particular lines or columns of table 1.

10. These considerations probably account for the scarcity of balance-sheet statistics. Few, if any, countries would be able at present to compile comprehensive balance sheets as outlined in table 1. Several countries publish statistics on selected parts of the account, but the data have generally been developed as isolated series rather than as elements of an over-all balance. Nowhere do balance-sheet statistics seem to have regained the prestige that they enjoyed during the early years of the 1970s, when, according to Hart, they were regarded as "the crown of economic statistics". 2/

#### AVAILABILITY OF BALANCE-SHEET STATISTICS

11. This section presents the results of an inquiry made by the United Nations Statistical Office in early 1979 into the availability of balance-sheet statistics. Short questionnaires were mailed to the 151 Members of the United Nations, asking them to indicate what statistics were available on tangible and intangible assets and what institutional sectors were covered by these data. To keep the questionnaire short, respondents were not asked about the availability of statistics on liabilities. In practice, countries usually collect information about liabilities at the same time and on the same basis as for financial assets. Respondents were also asked about any new balance-sheet statistics that were being developed and were requested to list publications dealing with sources and methods for those statistics.

12. Seventy-five countries returned questionnaires, and some information about a further five countries was obtained from other sources. The remaining 71 countries are known to have relatively underdeveloped statistical systems. It seems likely that few, if any, of the non-respondents presently compile balance-sheet statistics; thus the tables in this section probably give a fairly complete picture of the current availability of these data.

13. Tables 2 and 3 show the statistics available on intangible and tangible assets according to type of asset and institutional sector, respectively. Virtually all respondents indicated that they had statistics on certain assets of financial institutions. These were the kinds of data that are almost everywhere collected by

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2/ A. G. Hart, "Uses of National Wealth Estimates and the Structure of Claims", Studies in Income and Wealth, vol. XII, (New York, National Bureau of Economic Research, 1950). Hart offers the interesting suggestion that the decline of balance-sheet statistics and the rise of interest shown in income measurements in the United States may have been due to the declining importance of agriculture. He points out that "wealth is a more national focus of attention (and income less natural) for a farmer than for a wage earner".

the central monetary authority for purposes of bank regulation, and tables 2 and 3 are confined to the 39 countries which have advanced beyond this elementary step in compiling balance-sheet statistics.

14. At first glance, these tables may give a rather encouraging picture of the availability of balance-sheet statistics, and some words of warning are called for. It should first be noted that a cross in the tables indicates only that some data are available for at least one year since 1965 for the type of asset or institutional sector concerned. In several cases, statistics on financial assets cover only corporate enterprises; sometimes data on tangible assets of government refer only to the central or federal level; in other cases statistics on inventories refer only to those held by companies over a certain size etc.

15. A second point is that the data shown as available in these tables are not necessarily compiled as components of balance sheets and, in most cases, fall considerably short of what is strictly required in terms of coverage or valuation for the construction of balance sheets as envisaged in table 1. For some countries, the only statistics available refer to the value of assets as recorded in company accounts and are published as components of "enterprise statistics". In so far as such data are used as management tools by enterprises, they may well be relevant as they stand for studying enterprise behaviour; but for use in national balance sheets they will often need substantial adjustments.

16. Even a cursory inspection of the data published by these 39 countries shows that, in reality, only a small number are even close to being able to construct the kind of balance sheets shown in table 1. Japan is the only country which appears to have appropriately valued data on all the cells of table 1; the United States of America and the United Kingdom of Great Britain and Northern Ireland presently lack statistics on non-reproducible assets; the Federal Republic of Germany, the Union of Soviet Socialist Republics, Sweden and Canada also lack (official) data on stocks of consumer durables. For most of the other 31 countries, tables 2 and 3 indicate merely the availability of some of the raw materials from which national balance sheets could eventually be constructed, usually after numerous and substantial modifications.

17. Table 2 shows that data on financial assets are slightly more widely available than on producers' tangible assets. Thirty-six countries compile some data for financial assets, compared with 32 for producers' tangible assets. Data on non-financial intangibles (patents, mineral concessions, leases etc.) are available in only 14 countries, and less than a quarter have estimates of consumer durables or "other" non-reproducible assets, i.e., cultivated land and timber tracts. None of the well-endowed countries, such as Canada, the USSR, South Africa or the United States, <sup>3/</sup> has any official series on subsoil assets, although it is probable that for at least some minerals estimates have been prepared in these countries by private bodies. This is what has happened in Zambia and Malaysia, where the unofficial estimates indicated in table 2 were developed by mining companies for copper and tin, respectively.

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<sup>3/</sup> Following a recent ruling by the Securities and Exchange Commission, certain mining companies operating in the United States are now required to estimate the value of their mineral resources.

Table 2

AVAILABILITY OF BALANCE SHEET TYPE STATISTICS ACCORDING TO TYPE OF ASSET

(X - indicates availability of official estimates; (x) indicates availability of unofficial estimates)

Country	Intangible assets				Tangible assets							
	Financial				Reproducible			Non-reproducible				
					Dwellings	Producers		Inven- tories	Con- sumers	Subsoil	Other	
	Currency and deposits	Sec- urities	Other	Non- financial		Other con- struc- tion	Other fixed assets					
Argentina	X	X	X	X	X	X	X	X				
Australia	X	X	X	X	X		X	X				
Austria	X	X	X	X	X	X	X	X				X
Botswana a/	X	X	X	X	X	X	X	X				
Brazil	X	X	X	X	X	X	X	X	X			X
Canada	X	X	X	X	X	X	X	X				
Chile	X	X	X									
Colombia	X	X	X									
Czechoslovakia	X	X	X		X	X	X	X				
Denmark	X	X	X		X	X		X				X
Finland	X	X	X	X	X	X	X	X				X
France a/	X	X	X	X	X	X	X	X				X
Gabon	X	X	X	X	X		X	X				X
Germany, Fed. Republic of	X	X	X		X	X	X	X	(x)			(x)
Greece	X				X	X	X					
Hungary					X	X	X	X	X	X	X	X
India	X	X	X	X	X	X	X	X	X	X		X
Israel	X	X	X	X		X	X	X				
Italy	X	X	X		X	X	X	X				
Japan	X	X	X	X	X	X	X	X	X	X	X	X
Jordan	X	X	X		X	X	X					
Korea	X	X	X									
Malaysia	X	X	X	X	X	X	X	X	(x)	(x)	(x)	
Netherlands	X	X	X		X	X	X	X				
New Zealand	X	X	X			X	X	X				
Norway	X	X	X									
Philippines	X	X	X		X	X	X	X				
Portugal					X	X	X	X				
Poland	X	X	X		X	X	X	X				
South Africa	X	X	X		X	X	X	X				
Sweden	X	X	X	X	X	X	X	X				
Trinidad	X	X	X		X	X	X	X				
Tunisia	X	X	X									
USSR	X		X		X	X	X	X				
United Kingdom	X	X	X		X	X	X	X	X			
United Republic of Tanzania					X	X	X					
United States	X	X	X		X	X	X	X	X			
Venezuela	X	X	X									
Zambia	X	X	X					X			(x)	

a/ Expected availability by end-1979.

18. Table 3 shows the sector coverage of data on financial assets and producers' tangible reproducible assets. The data most often refer to the corporate enterprise sector, and in the majority of cases the data are shown at book values. Just over half the countries have some data on government financial assets, although often for the central government only. About the same number have compiled estimates of the value of government fixed assets. In a number of cases, these statistics have been developed for use in calculating government consumption of fixed capital, and so assets are valued at market prices. Assets of unincorporated enterprises and households are covered rather less frequently. Twenty countries have some data on tangible assets, although they are not usually distinguished separately from those of corporate enterprises; data on financial assets of households and unincorporated enterprises are available in only 15 countries.

#### SOURCES AND METHODS

19. The information in this section comes from various sources, including direct communications with national statistical offices, published reports on methodology and a study presently under way at the United Nations Statistical Office of country practices regarding enterprise statistics. The information assembled from these sources is rather incomplete, and all that can be done in this section is to outline the commonest approaches used for estimating some of the main balance-sheet entries.

#### FINANCIAL ASSETS AND LIABILITIES

20. For the enterprise sector, the two main approaches are company surveys and analyses of company accounts. The surveys are conducted by mail, with the enterprise as the unit of inquiry, and are usually designed to collect the type of information contained in company accounts. Almost always, the balance-sheet information collected in enterprise surveys of this kind therefore refers to book value, a partial exception being the United Kingdom, where, since 1976, financial institutions have been required to report market values of variable-price financial instruments.

21. When the company accounts are used as a source of balance-sheet statistics they are generally acquired indirectly by the Statistical Office from either the tax authorities or company registrars. As already noted, company accounts almost always value assets and liabilities in a way which is not appropriate for national balance sheets.

22. For financial assets and liabilities of households, the two main approaches are household-wealth surveys and the estate-multiplier method. Household-wealth surveys have been carried out by several countries, including Japan, Sweden, the United Kingdom and the United States. These surveys, however, have generally produced rather unsatisfactory results, and, at the present time, Canada appears to be the only country which makes extensive use of surveys for collecting data on household assets and net wealth. Podoluk has described the problems

Table 3

AVAILABILITY OF BALANCE-SHEET TYPE STATISTICS ACCORDING TO INSTITUTIONAL SECTOR COVERED

(X - indicates availability)

Country	Financial assets				Reproducible tangible assets		
	Financial institutions	Corporate enterprises	Households and unincorporated enterprises	Government	Enterprises		Government
					Corporate	Unincorporated <sup>b/</sup>	
Argentina		X			X	X	
Australia	X	X			X	X	
Austria	X			X	X	X	X
Botswana <sup>a/</sup>		X			X	X	
Brazil	X	X	X	X	X	X	X
Canada	X	X		X	X	X	X
Chile	X	X	X	X			
Colombia	X	X	X	X			
Czechoslovakia		X			X	X	X
Denmark	X				X	X	X
Finland	X	X	X	X	X	X	X
France <sup>a/</sup>	X	X	X	X	X	X	X
Gabon	X	X			X	X	
Germany, Fed. Republic of	X	X	X	X	X	X	X
Greece	X				X	X	X
Hungary					X	X	X
India	X	X	X	X	X	X	
Israel	X	X			X		
Italy	X	X			X	X	X
Jordan	X				X	X	
Japan	X	X	X	X	X	X	X
Korea	X	X	X	X			
Malaysia	X	X	X	X	X	X	X
Netherlands	X	X		X	X	X	X
New Zealand		X			X		
Norway	X	X	X	X			
Philippines	X	X	X	X	X	X	X
Portugal					X	X	X
Poland	X	X		X	X	X	X
South Africa	X	X		X	X	X	X
Sweden	X	X	X	X	X	X	X
Trinidad	X				X	X	
Tunisia	X	X					
USSR	X	X		X	X	X	X
United Kingdom	X	X	X	X	X	X	X
United Republic of Tanzania					X	X	X
United States	X	X	X	X	X	X	X
Venezuela	X	X					
Zambia	X	X					

<sup>a/</sup> Expected availability by end-1979.

<sup>b/</sup> Excluding under-occupied dwellings.

encountered in the Canadian surveys. 4/ These include large response errors resulting from concealment of assets and undervaluation of the assets that are reported. In addition, there are certain types of assets, such as trust funds, claims to pension plans and equities in insurance policies, which respondents could not easily value, even if they were willing to do so.

23. In the estate-multiplier method, age-specific mortality rates are applied to the estates of deceased persons to obtain estimates of the asset holdings and net worth of the entire household sector. This approach has been used by the tax authorities in the United Kingdom and the United States and by private researchers in several other countries, including Australia and Ireland. 5/ An advantage of the estate-multiplier method is that it produces not just totals but estimates of the distribution of wealth, and this has, in practice, been its main attraction.

24. Apart from these sources, data on financial assets and liabilities may be obtained by various indirect means. Lists of debt-holders may be analysed to determine the sectoral distribution of assets. In the United Kingdom, for example, the share-registers of corporate enterprises have been examined to allocate holdings of securities among the enterprise, household, and government sectors. Financial institutions usually have sufficient information about their assets and liabilities to permit their counterparts to be allocated by sector.

#### FIXED ASSETS

25. Statistics on the stock of dwellings are available in many countries, usually from physical counts at intervals of 5 or 10 years, up-dated by information on new construction and on demolition of existing units. Since in most countries there is an active second-hand housing market, valuation at market prices does not present any great problem. A few countries, however, including Trinidad and the United Kingdom, have preferred to value the stock of dwellings by applying capitalization factors to estimated rents.

26. For other construction, plant and machinery, several methods are in use. Enterprise surveys of the kind discussed above in connexion with financial assets are used to collect the book value of fixed assets in about a dozen countries, including Botswana, Italy, the Netherlands and Norway. In all cases, the book value refers to historic (or "acquisition") cost. A number of countries, including Denmark, Greece, India, Israel and New Zealand, publish statistics on the value of fixed assets obtained from an analysis of company accounts. Again, the same problem arises: without extensive adjustments to bring the value up to market prices, the statistics are not suitable for national balance-sheets.

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4/ J.H. Podoluk, "Measurement of the distribution of Wealth in Canada", The Review of Income and Wealth (June 1974).

5/ The Review of Income and Wealth (June 1974), contains articles on the use of this method in Ireland, the United Kingdom and the United States.

27. Estimates of the value of fixed assets on a basis more appropriate for balance-sheet statistics may be obtained either by direct survey of assets or by the perpetual inventory method. Asset surveys are carried out every five years in Japan and at somewhat longer intervals in most centrally planned economies, including Czechoslovakia, Hungary, Poland and the USSR. The survey approach seems to be better suited to centrally planned than to market economies because the (administered) asset prices in the former are more stable than the (market) asset prices in the latter. A complete census of assets is clearly a massive undertaking; Yezhov wrote of the 1960 census in the USSR that "as regards its scale, economic significance and number of participants, this ... operation probably surpassed, and certainly equalled, even the national population census". <sup>6/</sup> All establishments were required to draw up a complete schedule of their assets and value them at replacement cost, using industry-specific price lists supplied by the central statistical organization. To obtain values net of depreciation a large sample of assets was examined to determine their remaining useful lines.

28. Japan's asset surveys are on a more modest scale. In the 1970 survey, for example, only about 1 per cent of government establishments was covered, and less than 0.5 per cent of enterprises. However, because the sample is selected using probabilities proportional to size, the survey covers a relatively high proportion of total assets.

29. The perpetual inventory method - largely pioneered by Professor Goldsmith - is described in various recent publications. <sup>7/</sup> Official series using this method are published by Canada, the Federal Republic of Germany, France, Italy, Japan, Norway, Sweden, the United Kingdom and the United States; official series are compiled but not published in Austria, Denmark, Greece and the Netherlands. A series has been developed by private researchers for Australia and undoubtedly for other countries. The principal motivation in compiling these series has usually been to use them in capital-output studies, and the chief interest, therefore, has centred on the gross valuation of the capital stock. In most cases, however, the series are accompanied by estimates of consumption of fixed capital, so that the net valuation needed for balance-sheet statistics is available.

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<sup>6/</sup> A. Yezhov, Organization of Statistics in the U.S.S.R. (Moscow, Progress Publishers, 1967).

<sup>7/</sup> See, for example, M. Ward, The Measurement of Capital (Paris, OECD, 1976), and Provisional International Guidelines on the National and Sectoral Balance Sheet and Reconciliation Accounts of the System of National Accounts, *op. cit.*

## CONSUMER DURABLES

30. Table 2 shows that few countries, so far, have attempted to estimate the value of durable goods owned by households. As with fixed assets, the choice is basically between household surveys and the perpetual-inventory method. Japan carried out a survey of household assets as part of its 1970 National Wealth Survey, but the series has subsequently been up-dated by the perpetual-inventory method. The series for the United Kingdom and the United States are both based largely on perpetual inventories, although in the United Kingdom the estimates for vehicles are derived from licence records on the numbers, ages and types of privately owned vehicles, together with data on new and second-hand car prices.

31. The definitions of consumer durables vary somewhat between countries. The estimates for Hungary include all household possessions which usually last longer than 12 months. The United Kingdom's series excludes items whose valuation may prove contentious, such as jewellery, works of art, antiques and collectors' items. The Japanese and the United States estimates exclude these items, as well as clothing and footwear.

32. The value of consumer durables net of depreciation is required for balance sheets. The United States uses straight-line depreciation, which means that assets are assumed to decline in value by a constant amount each year; in Japan, the declining-balance method is used, which means that asset values are reduced by a constant percentage each year. The United Kingdom publishes estimates based on both straight-line and declining-balance methods. The estimates of the net stock of consumer durables derived from these alternative methods are strikingly different, with the straight-line estimates nearly twice as high as the declining-balance series. 8/

## SUBSOIL ASSETS

33. Only two countries, Japan and Hungary, have any recent official estimates of the value of subsoil assets. The estimates for Japan cover four types of mines: coal, petroleum, metallic minerals and non-metallic minerals. For each mine the remaining life is estimated by dividing the presently exploitable reserves by the average quantities mined during the last five years. The estimated operating surpluses expected over the life of the mine are then converted to present values by discounting them with the rates of interest currently earned by investors in each type of mining venture. Finally, the net value of the fixed assets of mining companies is deducted to obtain the value of the subsoil assets alone. A similar procedure is used in Hungary, the main difference being that as there are no market securities, estimated future earnings are discounted by the planned rate of return on industrial investments (currently 8 per cent per year).

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8/ The United Kingdom has also published estimates for consumer durables, using different length-of-life assumptions. The lowest estimates (using short-life assumption and declining-balance depreciation) amount to only about a quarter of the highest estimates (using long-life assumption and straight-line depreciation). See J. R. Calder, "The Stock of Consumer Durables in the United Kingdom", Economic Trends, No. 293 (March 1978), Central Statistical Office, London.

AGRICULTURAL LAND AND TIMBER TRACTS

34. Agricultural land is usually valued at market prices, which may also be used for timber tracts, as is done in Denmark and India, for example. In Japan, where timber tracts are rarely sold, so that there is no real market price, the value is estimated from the cost side. The expense incurred each year to bring each type of forest area to its present age is converted to present value by "reverse discounting", using the interest rate investors expect to earn on forestry projects.

FUTURE DEVELOPMENTS

35. Of the 75 countries replying to the United Nations questionnaire, 17 reported that they are currently engaged in developing or expanding their balance-sheet statistics. Table 4 summarizes the areas where this work is being undertaken.

Table 4

BALANCE SHEET STATISTICS CURRENTLY BEING DEVELOPED OR EXPANDED

(X - indicates work in progress)

Country	Financial assets and liabilities			Producers' tangible fixed assets		Consumer durable goods
	Public	Private	Rest of the world	Public	Private	
Belgium	X	X				
Brazil	X			X		
Chile				X	X	
Czechoslovakia			X	X		X
Denmark				X	X	
Germany, Fed. Republic of				X	X	
India	X	X				
Korea			X	X	X	
Luxembourg	X	X				
Malta		X				
Norway				X	X	
Philippines	X					
Sri Lanka		X				
Sweden				X	X	
Turkey		X				
United Kingdom	X	X	X	X	X	
United States					X	

36. "Producers' fixed tangible assets" appear to be the most important area for new developments. For most countries, this involves work on perpetual inventory models, either to improve existing series (e.g., in the Federal Republic of Germany and Sweden), or to develop new capital stock estimages (e.g., in Chile and the Philippines). As regards financial assets and liabilities, the new work being undertaken by Belgium, India, Luxembourg and Sri Lanka is in the context of enterprise statistics and involves assembling statistics on book value from company accounts.

#### SUMMARY

37. From a survey of the 151 States Members of the United Nations it appears that only one country, at present, is in a position to provide the full range of balance-sheet statistics called for in the United Nations guidelines. Seven countries would be able to compile balance sheets confined to conventional types of assets and liabilities, excluding, for example, consumer durables and mineral deposits. A further 31 countries presently publish some statistics on certain balance-sheet items, but as the data have generally not been collected with a view to constructing national balance sheets, they tend to be deficient for such purposes in both coverage and valuation. In other countries only rather trivial kinds of balance-sheet data are available, such as certain banking statistics collected by the central monetary authority for purposes of bank regulation.

38. A review of sources and methods shows that for financial assets and liabilities extensive use is made of company accounts and enterprise surveys. The estate-multiplier method is used in several countries for measuring household assets and net worth. As regards producers' fixed assets, countries with centrally planned economies generally take direct surveys of assets, but in countries with market economies the perpetual inventory method is preferred.

39. It is noted that many of the purposes for which balance-sheet statistics are used can be adequately served without constructing a complete set of accounts. To date balance-sheet statistics have tended, therefore, to be developed in a piecemeal fashion, with priority going to those parts of the accounts whose use for economic analysis is most obvious. Chief among these are statistics on the financial assets and liabilities of corporate enterprises and statistics on the stock of producers' fixed assets. These two areas also predominate in countries' plans for the future development of balance-sheet statistics.

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