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Note by the editor:

Cross-references to other parts of the chapter and to other chapters are highlighted in yellow. They have not been updates at this stage.

The section on regional accounts consists of a slightly abbreviated versions of paras 19.88 to 19.96 in the 1993 SNA.

The section on the integrated accounts consists of a slightly modified version of paras 2.189 to 2.109 in the 1993 SNA.

"Footnotes" are presented as endnotes at the end of the chapter.

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Chapter 14: Summarising and presenting the accounts

A. Introduction

14.1 This chapter provides a synthesis of the accounts presented in chapters 6 to 13. It shows how the most common aggregates in the System, GDP, NDP and GNI are derived by consolidating the sector accounts previously described. It shows the impact on national aggregates of transactions undertaken between a resident unit and one resident in the rest of the world. It describes the articulation of the accumulation accounts. It also describes how the basic structure of the System may be applied in different contexts without disturbing the conceptual framework, for example compiling accounts on a quarterly rather than an annual basis and discusses how far accounts for only a part of the economic territory can be compiled as regional accounts.

14.2 The chapter also touches on some of the practical issues concerned in making the accounts available to users: the need to concentrate on time series, making a trade-off between timeliness and accuracy and the question of what to do with statistical discrepancies in the accounts. It also discusses some alternative options for presenting the accounts.

14.3 Many of the topics covered here are only touched on. The aim is not to give an exhaustive description but to alert readers to the need to consider these topics and to provide references to documents that deal with the subjects concerned in greater detail.

B. Gross and net domestic product

1. T accounts and the goods and services account

14.4 The tables presented in the previous chapters use a format very common in published tables; the items representing resources are shown in the right-hand side of the table and the items representing uses in the left-hand side of the table. This format is flexible because it allows a multiple number of columns to be shown for both parts of the table and even for the two parts to be shown on different pages if the columns are sufficiently numerous. However, there is another format for the tables that is particularly useful for explanatory purposes, the T account.

14.5 In a T account, only one set of descriptive headings (stubs) is shown in the middle of the table with values representing resources in columns to the right and values representing uses in columns to the left. An example of a T account is given in table 14.1. The rows in the table show the rows from tables 6.1, 7.1, 7.2, 8.1 and 9.1 at a high level of aggregation. The data values shown are for the sum of the national economy plus the rest of the world. In this table, and the immediately following ones, the rest of the world is being treated as a de facto sector of the national economy. All transactions within the national economy involve two resident institutions. Transactions with the rest of the world involve one resident unit and one non-resident unit. By taking the national economy and the rest of the world

together, an artificial closed economy is created that covers all institutions that carry out transactions with a unit in the national economy.

Table 14.1: Summary current account

Uses		Resources
	Transactions and other flows	
	Imports of goods and services	499
540	Exports of goods and services	
	Output at basic prices	3,604
1,883	Intermediate consumption	
	Taxes less subsidies on products	133
1,854	Value added, gross/Gross domestic product	1,854
768	Compensation of employees	768
191	Taxes less subsidies on production and imports	191
459	Operating surplus, gross	459
442	Mixed income, gross	442
454	Property income	454
1,854	Balance of primary incomes,gross	1,854
491	Current transfers	491
1,854	Disposable income, gross	1,854
1,399	Final consumption expenditure	
11	Change in pension entitlements	11
414	Saving, gross	

Summarising the current accounts

14.6 The table begins with imports and exports of goods and services, the entries from the rest of the world account that show the value of goods and services that reach the national economy from the rest of the world and those that are produced in the national economy but are provided to the rest of the world.

14.7 The immediately following rows show the main entries from the production account, output and taxes less subsidies on the resource side and intermediate consumption on the use side. The balancing item for the production account, value added appears next, also on the use side as the closing item of the production account.

14.8 The next entries come from the generation of income account. The first entry, the same figure as the previous balancing item is value added and it is shown on the same row as before. On the uses side are compensation of employees, operating surplus and mixed income. These appear on the resource side of the distribution of primary income account and are again aligned with their previous entries on the use side of the account.

14.9 Property income is the next item to appear in the table. Property income may be payable by residents or non-residents and may be receivable by residents or non-residents. Once the values for three of them are known, the value of the last must also be determined. For example, property income receivable by residents must be equal to property income payable by both residents and non-residents less property income receivable by non-residents. Thus property income receivable by both residents and non-residents (shown under resources) must be equal to property income payable by both residents and non-residents (shown under uses).

14.10 Value added as a resource plus the resource entries of compensation of employees, operating surplus, mixed income and property income, less the corresponding entries for these items as uses leads to the balance of primary incomes. This is the balancing item for the distribution of primary income account shown as a use, and the first item, a resource, of the secondary distribution of income account

14.11 Current transfers payable by resident and non-resident units must be equal to current transfers receivable by both resident and non-resident units, and thus the use and resource are equal as is the case for property income.

14.12 Continuing in this fashion, disposable income enters on both sides of the table, as does the change in pension entitlements. In a closed economy, when final consumption expenditure is deducted from disposable income (adjusted for pension entitlements), the balancing item is saving. In this case, though, the table shows the sum of the national economy and the rest of the world. The equivalent of 'saving' in the context of the rest of the world is the current external balance and this is added to national saving in Table 14.1.

14.13 Table 14.1 demonstrates a simple economic proposition in national accounting terms. Notwithstanding all the distribution and redistribution of income shown in the sequence of accounts, income as generated less consumption is equal to saving

Consolidating the current accounts

14.14 As described in chapter 3, consolidation is a process whereby off-setting items on alternate sides of the accounts are removed in order to focus more clearly on those items where there is no internal offset. If this process is performed on table 14.1, table 14.2 results.

Table 14.2: Consolidated current account

Uses		Resources
	Transactions and other flows	
	Imports of goods and services	499
540	Exports of goods and services	
	Output at basic prices	3,604
1,883	Intermediate consumption	
	Taxes less subsidies on products	133
1,399	Final consumption expenditure	
11	Change in pension entitlements	11
414	Saving, gross	

14.15 Table 14.2 consists of a very limited number of items. Imports (499), output at basic prices (3,604) and taxes less subsidies on products (133) appear on the right-hand side. Exports (540), intermediate consumption (1,883), final consumption (1,399) and saving (414) appear on the left-hand side. The set of items on the right-hand side together show the value of the total of all goods and services supplied to the economy valued at market prices (4,236). The items on the left-hand side of the account show how the goods and services are used, either for consumption in the current period (the sum of both intermediate and final consumption, 3,282) or for exports (540) plus the amount left over as saving (414). Writing these identities in equation form gives

Total supply = output + imports + taxes less subsidies on products
4,236 = 3,604 + 499 + 133

Total use = consumption +exports + saving
4,236 = 3,282 + 540 + 414

Summary and consolidated capital and financial accounts

14.16 If the capital and financial accounts (tables 10.1 and 11.1), are summarised in the same way that the current accounts were summarised to give

table 14.1, table 14.3 results. In this case, the titles given to the right- and left-hand columns are changed; the columns to the right are described as changes in liabilities and net worth, and those to the left show changes in assets.

Changes in assets	Table 14.3: Summary capital and financial accounts	Changes in liabilities and net worth
	Transactions and other flows	
	Saving, gross	414
414	Gross capital formation	
0	Acquisitions less disposals of non-produced, non-financial assets	
	Capital transfers, receivable	66
	Capital transfers, payable (-)	-66
0	*Net lending (+) / net borrowing (-)*	0
691	Net acquisition of financial assets	
	Net incurrence of liabilities	691

14.17 Table 14.3 shows that capital transfers receivable and payable exactly offset one another in the same way that property income and current transfers do. Further, transactions in financial assets shown as changes in assets exactly balance the amounts shown as changes in liabilities and net worth because when all transactions of resident units with either other resident units or non-resident units are taken into account, there can be no net lending or borrowing left unexplained.

14.18 Consolidating table 14.3 leads to table 14.4 which shows how total saving (on the right-hand side of the account) matches total capital formation on the left. There are no entries left from the financial account because the lending of every financial asset balances the borrowing of the same asset and these disappear on consolidation.

14.19 In terms of an equation, table 14.4 can be written as

Saving = Capital formation

It is then possible to consolidate tables 14.2 and table 14.4, thereby eliminating saving. Writing the consolidation of these tables in equation form gives the same equation for total supply but the equation for total use becomes

Total use = consumption + exports + capital formation

Changes in assets	Table 14.4: Consolidated capital and financial accounts	Changes in liabilities and net worth
	Transactions and other flows	
	Saving, gross	414
414	Gross capital formation	
0	Acquisitions less disposals of non-produced, non-financial assets	

The goods and services account

14.20 Clearly, ex-post the total amount of goods and services supplied to the economy must be equal to the total use made of those goods and services. Combining the equations for total supply and total use gives the following identity:

Output + imports + taxes less subsidies on products
= intermediate consumption + final consumption +exports + capital formation

The equation reflects the notion that goods and services produced now are used either to generate more goods and services in the current period (intermediate consumption) or to generate more goods and services in future periods (capital formation) or to satisfy human wants immediately (final consumption). However, because no economy is entirely closed, it is necessary to allow for those goods and services supplied from outside the economy (imports) and those goods and services used by other economies (exports).

14.21 This identity comprises the goods and services account. ***The goods and services account shows the balance between the total goods and services supplied as resources to the economy as output and imports (including the value of taxes less subsidies on products not already included in the valuation of output) and the use of the same goods and services as intermediate consumption, final consumption, capital formation and exports.***

2. The GDP identities

14.22 Rearranging the order of items appearing in this balance leads to the most familiar definitions of GDP

Output - intermediate consumption + taxes less subsidies on products
3,604 - 1,883 +133
= final consumption + capital formation + exports – imports = GDP
= 1,399 + 414 + 540 - 499 = 1854

There are thus two separate ways in which GDP can be defined:

(i) ***the output measure of gross domestic product (GDP) is derived as the value of output less intermediate consumption plus any taxes less subsidies on products not already included in the value of output,***

(ii) ***the expenditure measure of gross domestic product (GDP) is derived as the sum of expenditure on final consumption plus gross capital formation plus exports less imports.***

14.23 The output measure of GDP can also be expressed as value added adjusted to ensure all taxes less subsidies on products are included. As described in chapter 7, value added can be viewed as the elements comprising income: compensation of employees, operating surplus, mixed income and other taxes less subsidies on production. If separate estimates are available of these components, then a third way of compiling GDP is possible, that is, from the income side. Because other taxes less subsidies on production are included in value added and taxes less subsidies on products are to be included also, the two tax items can be replaced by the term that is the sum of them both, taxes less subsidies on production and imports.

GDP = Compensation of employees + gross operating surplus + gross mixed income + taxes less subsidies on production and imports
1,854 = 768 + 459 + 442 + 191

The third way in which GDP can be defined is thus

(iii) ***the income measure of gross domestic product (GDP) is derived as compensation of employees plus gross operating surplus plus gross mixed incomes plus taxes less subsidies on both production and imports.***

3. A note on the valuation of output

14.24 In chapter 6, it is explained that the preferred measurement of output in the system is basic prices. At basic prices, the value of output excludes all taxes on products and includes all subsidies on products. It includes all [other] taxes on production and excludes all[other] subsidies on production. However, the data sources in some countries may not permit this valuation to be followed. In this case, output will be valued at producers' prices. All taxes on both products and production will be included in the value of output and all subsidies on both products and production will be excluded.

14.25 For this reason, the definition of GDP from the output side given above includes the phrase "plus any taxes less subsidies on products not already included in the value of output". When output is valued at producers' prices, there will be no further taxes on products to add in; they will be already included in the measure of output (and similarly subsidies on products will already be deducted. In this case, GDP may be defined as *the output measure of gross domestic product (GDP) is derived as the value of output at producers' prices less intermediate consumption*. When output is measured at basic prices, (as preferred in the System and as followed in the numerical example) the definition can be rephrased as *the output measure of gross domestic product (GDP) is derived as the value of output at basic prices less intermediate consumption plus taxes less subsidies on products*.

4. Gross and net domestic product

14.26 While the third definition of GDP is correct both economically and statistically, it is held not to be the best measure of income. Income is usually defined as the amount that can be spent while keeping the level of capital intact. (For further discussion on this see xxx.) It is for this reason that the item consumption of fixed capital is so important in the accounts and appears in every account as the difference between balancing items on a gross and net basis. To measure domestic production on a net basis, it is necessary:

(i) to deduct consumption of fixed capital from the output measure of GDP,

(ii) to replace gross capital formation by net capital formation in the expenditure measure of GDP,

(iii) to replace gross operating surplus by net operating surplus and gross mixed income by net mixed income in the income measure of GDP.

14.27 Each deduction from GDP is equivalent because the difference between the gross and net capital formation is the consumption of fixed capital as is the difference between the sum of operating surplus and mixed income on a gross basis as opposed to a net basis. Thus, ***net domestic product (NDP) is defined as gross domestic product (GDP) less the consumption of fixed capital.***

NDP = GDP - consumption of fixed capital
1,632 = 1,854 - 222

C. The link between the domestic economy and the rest of the world.

14.28 It is commonplace to examine the relationship between one country and the rest of the world as in the balance of imports and exports of goods and services. This balance is of key importance to economic policy makers and analysts. However, in recent years, other entries in the international accounts[1] and their impact on SNA totals have come into prominence. Some of this is due to the increasing importance of global manufacturing and off-shore processing. Some is due to the recognition of the contribution of permanent and temporary migrants to the incomes of their home country. The impact of globalisation is discussed further in chapter ??? and the consequences of labour mobility in chapter ????. The present section explains how income concepts can be adjusted to reflect the impact of the rest of the world and how borrowing from or lending to the rest of the world affects the level of investment in a country.

1. Gross and net national income

14.29 It is possible to expand the T accounts such as those shown earlier in this chapter by expanding the number of columns to the right and left of the central headings. A first step is to show the figures for the total economy and the rest of the world separately. This is shown for the complete sequence of accounts in table 14.5.[2]. The columns for the rest of the world are drawn up from the perspective of the rest of the world and not from that of the total economy. Thus although imports represent an outflow from the total economy, from the point of view of the rest of the world, imports to the total economy represent a resource and this is how they are shown in this and similar tables.

14.30 Table 14.5 highlights the fact that for all the transactions that disappeared on consolidation

(that is excluding the balancing items) total receivables and total payables are equal only when transactions with the rest of the world are included. Just as the provision of goods and services in the goods and services account must allow for imports and exports, so must redistributive transactions and accumulation entries.

14.31 In some countries, border or seasonal workers may have a significant effect on the amount of compensation of employees that is either payable abroad or receivable from abroad. Compensation earned abroad but repatriated to the country where the employee is resident (as opposed to where he or she works) adds to the income of households available for consumption. The concept of national income as opposed to domestic production is thus another key aggregate of the System. As well as labour income from abroad in the form of compensation of employees, income earned abroad on capital, especially financial capital, in the form of property income, is included in national income as well as any taxes on products payable by non-residents. Similar payment flowing out of the national economy to the rest of the world have to be deducted from GDP to reach national income.

Table 14.5: Sequence of accounts for the total economy and the rest of the world

Uses			Resources	
Rest of the world	Total economy	Transactions and other flows	Total economy	Rest of the world
		Imports of goods and services		499
540		Exports of goods and services		
		Output at basic prices	3,604	
	1,883	Intermediate consumption		
		Taxes less subsidies on products	133	
	1,854	Value added, gross / National income, gross	1,854	
-41		*External balance of goods and services*		-41
6	762	Compensation of employees	766	2
0	191	Taxes less subsidies on production and imports	191	0
	459	Operating surplus, gross	459	
	442	Mixed income, gross	442	
63	391	Property income	416	38
	1,883	Balance of primary incomes,gross	1,883	
10	481	Current transfers	452	39
	1,854	Disposable income, gross	1,854	
	1,399	Final consumption expenditure		
0	11	Change in pension entitlements	11	0
-41	455	Saving, gross / Current external balance	455	-41
	414	Gross capital formation		
0	0	Acquisitions less disposals of non-produced, non-financial assets		
		Capital transfers, receivable	62	4
		Capital transfers, payable (-)	-65	-1
-38	38	*Net lending (+) / net borrowing (-)*	38	-38
50	641	Net acquisition of financial assets		
		Net incurrence of liabilities	603	88

14.32 ***Gross national income (GNI) is defined as GDP plus compensation of employees receivable from abroad plus property income receivable from abroad plus taxes less subsidies on production receivable from abroad less compensation of employees payable abroad less property income payable abroad and less taxes less subsidies on production payable abroad.*** In the terms of an equation,

GNI = GDP + compensation of employees receivable from abroad
+ property income receivable from abroad
+ taxes less subsidies on production and imports receivable from abroad
- compensation of employees payable abroad
- property income payable abroad
- taxes less subsidies on production and imports payable abroad.

1,883 = 1,854 + 6 + 63 + 0 – 2 - 38 - 0

14.33 As mentioned above, an income concept is better measured after deducting consumption of fixed capital so ***Net National Income (NNI) is defined as GNI less the consumption of fixed capital***.

NNI = GNI - consumption of fixed capital
1,661 = 1,883 – 222

2. National disposable income

14.34 A further step in examining the impact of the rest of the world on the national economy is to consider current transfers receivable from abroad and those payable abroad. Transfers receivable from abroad include remittances from nationals working abroad for long enough (more than one year) to be treated as resident elsewhere. However, like compensation of employees payable from abroad, these transfers from non-residents can have a major impact on the resources available to the national economy. Overseas assistance, other than development assistance for capital projects is also shown here. As before, transfers payable abroad must be deducted in moving from national income to national disposable income.

14.35 National disposable income, more often than domestic product and national income, is usually shown on a net basis. ***Net national disposable income (NNDI) is defined as net national income (NNI) plus current transfers receivable from abroad less current transfers payable abroad.*** In equation terms,

NNDI = NNI + current transfers receivable from abroad – current transfers payable abroad
1632= 1661 + 10 - 39

3. Net lending or borrowing from the rest of the world

14.36 Because the total for the entries of borrowing and lending must balance, it is possible to demonstrate that the value of saving and of capital formation must be equal. However, here also the rest of the world plays an important part. It is highly relevant to know how saving is affected by the external current external balance which acts like “saving” of the “rest of the world sector” and to know how far there is lending and borrowing to the rest of the world.

14.37 Table 14.5 shows that the saving of the total economy is 455 but there is dis-saving to the rest of the world in that imports at 499 are lower than exports at 540. This means that more of the goods and services produced in the economy are exported than imported and so the amount left for use as consumption or capital formation is less than the amount produced. The current external balance is -41, a flow from the total economy to the rest of the world. In consequence capital formation is equal only to 414, the amount of national saving adjusted for the current external balance.

14.38 There are capital transfers between the total economy and the rest of the world; an inflow to the total economy of 4 and an outflow of 1. Taken together with the current external balance, this means that there is net lending to the rest of the world of 38. Total acquisitions of financial assets at 691 are made up of 641 from other parts of the total economy and 50 from the rest of the world. These are balanced by changes in liabilities of 603 to the total economy and 88 to the rest of the world.

D. Time series, revisions and discrepancies

1. Time series

14.39 The tables in this manual are designed to be expository and therefore feature data only for a single time period. In practice, of course, it is time series of the aggregates that explain the movement of economic variables that are of most interest to analysts. The style of tables used in chapters 6 to 13 are well suited to time series presentation since the number of columns may be extended as necessary to accommodate increasingly long time series. For example, instead of one table with one column for each of the five institutional sectors, it is straightforward to have five tables, one for each of the sectors but for multiple years.

14.40 The length of time series shown will depend on a number of factors. For some purposes, as long a run as possible may be interesting and some countries have series going back for over fifty years. However, most printed tables show not more than the ten to fifteen most recent years, with earlier data available only electronically. Usually more attention is given to ensuring the data for the recent past are as complete and accurate as possible with earlier years receiving less attention.

14.41 There may be factors that imply that long time series are mainly of only academic interest. For example, the change from command economy to market economy that took place in eastern Europe in the early 1990s was such that because of the fundamental change in the nature of economic activity, time series stretching back before this period are of limited analytical interest. In this case the political changes overshadowed the economic consequences.

2. Revisions

14.42 One consequence of preparing national accounts on a continuing basis over a number of years is that data sources change and improve. Intermittent sources, such as a quinquennial survey may become available and indicate that the earlier assumptions based on projecting the previous survey were flawed. In a case such as this it is not sufficient to simply replace the data for the most recent period (or even from the date of the new survey forward) but to ensure that the whole time series is suitably adjusted in order to portray the best possible evolution of the series in question over as long a period as possible. Failure to do so results in inappropriate discontinuities in the series that can be seriously misleading to analysts unaware that the source of the underlying data has changed.

14.43 This need to revise data brings to the fore the conflict inherent in statistics between making the data as accurate as possible and making them as timely as possible. Users would like data that are both timely and accurate but there are trade-offs between these goals in practice. Each statistical office must make judgements about how to balance these conflicting demands but whatever the ultimate conclusion, having time series which are consistent over time and explanations to enable analysts to appreciate the trade-offs the statistical office has to take are essential.

3. Discrepancies

14.44 Although the System is such that there is perfect consistency between the three measures of GDP, this is a conceptual consistency that in general does not emerge naturally from data compilations. This is because of the wide disparity of data sources that must be called on and the fact that any error in any source will lead to a difference between at least two of the GDP measures. In practice it is inevitable that many such data errors will exist.

14.45 Just as a statistical office must make choices about the trade-off between timeliness and accuracy, choices must also be made about how to deal with discrepancies. Resources can be invested in improving data surveys; the form of the questionnaire, the sampling basis, processing techniques including the treatment of missing data and so on. However, while ultimately desirable, such an approach is costly and long-term. Even with very sophisticated data collection methods, discrepancies between different estimates will persist due to differences in coverage, valuation and lags in recording.

14.46 Two approaches are open to a statistical office. The first is to be open about the problem and publish a statistical discrepancy. When this is done, it is usual to attach it to the variant of GDP the office feels is least accurate. The aim is to show users something about the degree of reliability of the published data.

14.47 The alternative is for the office to remove the discrepancy by examining the data in the light of the many accounting constraints in the System and making the best judgement possible about where the errors are likely to have arisen and altering the data accordingly. The supply and use framework, described in chapter xx, is a very powerful tool for doing this sort of work and more information on such balancing techniques can be found in xxxx

14.48 In countries with very limited statistical resources, it may not be possible to compile all three measures of GDP. Indeed, it happens that sometimes only the output measure is compiled completely and only certain components of the expenditure measure are available, principally government expenditure, capital formation, exports and imports (usually of goods only). In such cases it may be that an estimate of GDP by expenditure is presented where household consumption is derived as a global balancing item. Such an estimate will cover not only the true but unknown value of household consumption but will also include the cumulated errors from all other parts of the estimates. Any errors in the output measure, missing figures for imports and exports of services, the fact that government expenditure has been recorded on a cash rather than on an accrual basis, all these problems (if they exist) will distort the value of household consumption. The lesson for users looking at accounts with no statistical discrepancy is to be sure to understand how it was eliminated. The lesson for compilers is to study the possibilities of working at more detailed levels to avoid having to make such gross assumptions about missing items, especially one as critical to an assessment of living conditions as household consumption.

4. Accounts in volume terms

14.49 A major purpose in constructing accounts covering a longer period of time is to be able to study the way in which the basic structure of the economy has changed. However, in order to do this it is necessary to abstract from the effects of price changes. This is done by constructing accounts in volume terms which enable the user to see the changes from one year to the next that would have resulted if there had been no change in prices.

14.50 Chapter 16 describes in detail the theory and practice underlying the construction of price indices and the construction of volume measures. In practice, it is only the elements of the goods and services account and non-financial capital stock for which volume measures are derived. It is useful to look at three types of series; the expenditure components of GDP, the output components of GDP and capital stock measures separately.

5. The expenditure components of GDP

14.51 The measure of GDP easiest to express in volume terms is that of expenditure. As long as appropriate price indices exist, the estimates of household consumption, capital formation, exports and imports can be deflated at very detailed levels. Government final consumption is more difficult but techniques have been developed here also. (See chapter 16). As with the current price data, the results can be cross-checked using the supply and use framework.

6. The output components of GDP

14.52 Central to the output measure of GDP is value added, the balancing item in the production account. Statements can be found saying that it is not possible to think of a balancing item having price and volume dimension. To date the most common practice is to deflate the values of output and intermediate consumption independently, industry by industry, and then derive the difference as value added for each industry. Different price indices are necessary for two reasons. The first is because the goods and services included in intermediate consumption for any industry are not the same as the output of that industry. The second reason is that intermediate inputs are always measured at purchaser's prices whereas output is measured at either basic prices or producers' prices.

14.53 More recently, though, there is increasing interest in trying to associate movements in value added, after price effects have been eliminated, with changes in labour and capital inputs. For productivity measures it is useful to think of both volume and price measures associated with each of labour and capital inputs and thus with value added. A description

of the different concepts of factor productivity can be found in the OECD manual, *Measuring Productivity* (Ref1). The manual discusses the question of whether the estimates of the costs of capital and labour exactly exhaust the estimate of value added coming from direct volume estimates, a subject which is taken up in chapter xx on capital stocks.

7. Capital stock

14.54 Implicit in the immediately previous discussion is the notion that capital stock needs to be estimated excluding the effects of price changes. This is necessary even if there is no thought of estimating capital services or productivity measures. The levels of capital stock are typically derived by cumulating capital formation in successive periods and deducting the amount that has been exhausted. It clearly makes no sense to aggregate figures of capital formation at the prices actually paid since the effect of rising prices (even prices rising only moderately) will be to overstate the amount of "new" capital relative to "old".

14.55 The preferred technique is to estimate all capital still in stock at the price of a single year and then revalue this to the price prevailing when the balance sheet is to be drawn up, typically the first and last day of the accounting period. This should be done at the most detailed level practicable. Estimates of consumption of fixed capital are usually derived at the same time. More on this can also be found in chapter xxx.

E. Integration of stock and flow data

14.56 The balance sheets are an integral part of the system. An understanding of the articulation of the balance sheets with the flows relating to assets in the capital, financial and other changes in assets accounts is fundamental to understanding the role capital accumulation plays in the System.

14.57 The basic accounting identity linking the opening and the closing balance sheet values for a single type of asset can be summarized as follows:

The value of the stock of a specific type of asset in the opening balance sheet valued at the prices prevailing at the date the balance sheet refers to ;

plus the total value of the assets acquired, less the total value of those disposed of, in transactions that take place within the accounting period: transactions in non-financial assets are recorded in the capital account and transactions in financial assets in the financial account;

plus the value of other positive or negative changes in the volume of the assets held (for example, as a result of the discovery of a subsoil asset or the destruction of assets as a result of war or a natural disaster): these changes are recorded in the other changes in the volume of assets account;

plus the value of the positive or negative nominal holding gains accruing during the period resulting from a change in the price of the asset: these are recorded in the revaluation account where they may be further decomposed into neutral holding gains which reflect changes in the general price level, and real holding gains which reflect a change in the relative price of the asset;

equals the value of the stock of the asset in the closing balance sheet valued at the prices prevailing at the date the balance sheet refers to.

14.58 The identity is valid even in the case of assets that are held only temporarily within the accounting period and that do not appear in either the opening or the closing balance sheets. The identity holds for assets in total, for every separate class of asset and indeed for every individual asset. ***An asset account describes the changes in the stock of an asset or class of assets from one balance sheet to the next, itemising which changes are due to capital transactions, which to financial transactions and which to other changes in volume and revaluation.***

14.59 The link between the balance sheet and flow accounts in respect of financial assets and liabilities is often recognised and presented. Less attention has been focussed on the links for non-financial assets though as chapter ??? on capital services makes clear, it is no less important, especially as regards an understanding of productivity growth in the economy.[3]

F. Quarterly accounts

14.60 One response to the demand for timely data is to compile accounts on a quarterly basis. In principle, the System can be applied to any length of time period but there are some special considerations that need to be respected for quarterly as opposed to annual accounts. For greater detail on compiling quarterly accounts, see *IMF Quarterly National Accounts manual: Concepts, data Sources and Compilation (2001)* (Ref 2) or the Eurostat manual Handbook on Quarterly National Accounts (2001) (Ref 3) What follows here is simply an indication of some of the key considerations that apply to quarterly as opposed to annual accounting.

14.61 The accounts are to be compiled on an accrual basis and not a cash basis. While there will always be amounts accrued but not yet paid or received, the proportion of these amounts, relative to the total flows in the period, will be larger for a shorter period. In addition, there may be seasonal effects for some flows, for example if annual taxes such as taxes on income fall due for payment in a single quarter.

14.62 The qualifying criteria for a fixed asset is that it should be used in production for more than one year. For simplicity and consistency between quarterly and annual accounts, this period is maintained even for quarterly accounts. Similarly the distinction between short-term and long-term in the classification of financial assets remains a year.

14.63 It is usually the case that the source data for annual estimates is of a better quality than for quarterly estimates. This means that when the annual data become available, the quarterly data need to be revised to be consistent with the annual data. One exception though is the measurement of changes in inventories. The level of inventories at the start and end of the period should be deflated and the change in inventories calculated as the difference. Holding gains (or losses) may occur when goods are held in inventories and the shorter the periods over which estimates of changes in inventories excluding holding gains and losses are made, the better those estimates will be. It is simple to think of the situation where the level of inventories is the same at the same date in successive years (possibly zero) but where there has been considerable movement of goods into and then out of inventory in the intervening period. In such a case, the sum of the quarterly (or even shorter period) estimates of changes in inventories is to be preferred to the annual estimates.

14.64 One aspect of quarterly accounts is the effects that arise because patterns of supply and demand may change with the season. For example, more electricity may be used in winter to heat buildings than in summer or, conversely, more may be used in summer to cool them. Many agricultural products are more readily available at one time of year rather than another and thus have lower prices then. Many holidays fall at the same time each year. For these reasons, it is desirable to calculate quarterly data on a seasonally adjusted basis in order to study the pattern of evolution of the economy abstracting from seasonal effects.

14.65 It is possible in principle to compile the whole set of accounts in the System, including balance sheets, on a quarterly basis. The most common sets of quarterly accounts, though, are for the goods and services account, the income components of value added, government expenditure and the balance sheet for financial assets and liabilities. The quarterly goods and services account should also be compiled in volume terms.

G. Regional accounts

14.66 Regional accounts are of special importance when there are important disparities between the economic and social development of the various regions of a country.

14.67 A full system of accounts at the regional level implies treating each region as a different economic entity. In this context, transactions with other regions are recorded as if they are external transactions. External transactions of the region have, of course, to distinguish between transactions with other regions of the country and transactions with the rest of the world.

14.68 Three types of institutional units have to be considered in the context of regional accounts.

(a) There are regional units, the centre of interest of which is in one region and most of their activities take place in this region. Among regional units are households, corporations whose establishments are all located in the region, local and state governments, at least part of social security and many NPISHs.

(b) There are multi-regional units, the centre of interest of which is in more than one region but does not relate to the country overall. Many corporations and a number of NPISHs are in this situation.

(c) A small number of units are national units, which means that their centre of interest is not located geographically even in the sense of multi-regional location. This is the case of central government and may be the case for a small number of corporations (probably public), generally in a monopolistic or quasi-monopolistic situation, like the national railway corporation or the national electricity corporation.

14.69 Assigning transactions of the regional units to a specific region does not raise any conceptual problem. Assigning the transactions of multi-regional units between various regions raises more difficulties. Even when transactions such as output are physically evident, it is still necessary to record intra-corporate flows between establishments located in different regions. Further, some of the transactions of multi-regional units simply cannot be allocated between the different regions in which they operate. This is the case for most property income and transactions in financial instruments. Thus the only balancing items of multi-regional units that can be defined unambiguously at the regional level are value added and operating surplus. This is an example of the difficulty caused by trying to treat establishments as if they were enterprises.

14.70 Assigning the transactions of national institutional units by region raises even more complex issues to the point where the usefulness of attempting to do so may be questioned. While sales of electricity and railway services or compensation of employees paid by central government may be assigned to regions, interest on the public debt payable by central government or national corporations cannot be geographically located. Consequently, a reasonable solution is to introduce a kind of national sector, not allocated as such between the regions or constituting an extra region. This national sector would have establishments located in the regions.

14.71 These conceptual difficulties partly explain why no country establishes the complete System for every region. In most cases regional accounts are limited to recording production activities (with conceptual problems arising for locating some of them, like transportation and communication) by industry and more complete accounts for institutional sectors composed of regional units, such as households and local and state government. Establishing accounts for goods and services and input-output tables by region does not raise insoluble conceptual issues, though it involves treating deliveries to and from other regions as exports and imports. However, the practical difficulties of doing so are very considerable in the absence of a sophisticated system of transport statistics.

14.72 Nonetheless, regional accounts, even with the limitations mentioned above, are a very useful tool for economic policy. Partial regional accounts may be inserted in a set of regional statistical indicators on labour participation,

unemployment, poverty, etc. The greater the contrast between the regions in a country, the more useful is such a system of regional indicators, including GDP per capita, household disposable income and household consumption per capita. It is for countries themselves to devise their own regional accounts and statistical indicators, taking into consideration their specific circumstances, data system and resources that might be devoted to this work.

H. Integrated economic accounts

14.73 The T account described in section B can be extended to cover all the sectors of the economy and as much detail as required in the accounts. Such an extended presentation is referred to as a set of integrated economic accounts. An example is table 14.x which shows, simultaneously, the general accounting structure of the System and presents a set of data for the individual institutional sectors, the economy as a whole and the rest of the world.

Table 14.x Integrated economic account

This table will be based on the existing table 2.8 but will reflect new classifications and some new data values

14.74 The table takes its name from the fact that it brings together in one presentation

the institutional sector accounts,

the rest of the world accounts, and

the goods and services account.

Uses, changes in assets and assets are on the left-hand side; resources, changes in liabilities and net worth, and liabilities are on the right-hand side. The columns refer to the institutional sectors and the rest of the world. There is also a column for the total economy, one for goods and services, and one total column. As a matter of convention, a reverse order is followed on the two sides.

14.75 The rows show the transactions and other flows, assets and liabilities for balance sheets, balancing items and some important aggregates. The presentation of transactions and other flows follows the structure of the sequence of accounts for institutional sectors. The row for a given transaction shows all the payables and receivables for that transaction, which must necessarily be equal. This was explained in section B in relation to property income payable and receivable by resident and non-resident units. Obviously it must hold also when the resident units are divided by institutional sector.

14.76 Another aspect of aligning entries so that the resources and uses balance on the same row concerns the placement of the entries for the balancing items. Although the rows of table xxx follow the order of the sequence of accounts, by putting the entry for each balancing item as the final entry of one account and the first entry of the next, the breaks in the accounts come one row earlier on the right-hand side (resources, changes in liabilities and net worth) of the accounts than on the left-hand side (uses and changes in assets).

14.77 In order to make this table simple but comprehensive, classifications of sectors, transactions and other flows, assets and liabilities are at the highest level of aggregation compatible with understanding the structure of

the System. However, columns and rows can be subdivided to introduce sub-sectors or more detailed classifications of transactions and other flows, assets and liabilities.

1. Institutional sector accounts

Current accounts

14.78 As an example of the institutional sectors current accounts, consider the column for non-financial corporations.

a. The *production account* shows output (1,753) on the right-hand side, intermediate consumption (899) and value added (854 gross, 717 net, the difference referring to consumption of fixed capital (137), on the left-hand side. Value added, the balancing item of the production account, appears again in the same row as a resource of the *generation of income account.*

b. The uses of the *generation of income account* (compensation of employees (545) and other taxes less subsidies on production (51)) are shown on the left-hand side, the balancing item being operating surplus (258 gross, 121 net), which appears again as a resource of the *allocation of primary income account.*

c. In the allocation of primary income account, property income receivable (86) is recorded on the right-hand side, and property income payable (135) is recorded on the left-hand side. The balancing item is the balance of primary incomes (209 gross, 72 net), which appears again as a resource of the *secondary distribution of income account.*

d. The *secondary distribution of income* account shows current transfers, payable (47) and receivable (24), leading to the balancing item of disposable income (186 gross, 49 net). This item, which can also be described as the undistributed income of non-financial corporations, appears as a resource in the *use of income account.*

e. The only transaction appearing in *use of income account* for the corporations sectors is an entry for the change in pension entitlements. In this case the entry has a value of zero so the balancing item of the use of income account, saving, has the same value as disposable income (186 gross, 49 net).

14.79 The accounts for other institutional sectors may be read the same way, the relevant transactions varying according to the sector involved.

The use of income account

14.80 The presentation of the two ways in which disposable income is associated with final consumption, one taking account of the redistribution of income in kind leading to actual consumption and the other showing final consumption expenditure to disposable income directly, is simplified in table xxx. The redistribution of income in kind account and the use of adjusted disposable income account are merged with the use of income account as follows. Disposable income, net, is 356 for general government, 40 for NPISHs and 1,164 for households. Final consumption expenditure is 368 for government, 16 for NPISHs and 1,015 for households. Social transfers in kind are shown as a use of households (228) and a negative use of government (212) and NPISHs (16). Actual final consumption is then the sum of consumption expenditure and social transfers in kind. This is 1,243 for households, 156 for government and 0 for NPISHs. The sum of total consumption expenditure and the sum of actual final consumption is 1,399. Saving is, as usual, given by disposable income less final consumption expenditure or disposable income plus social transfers in kind less actual final consumption. (Both derivations of saving must also take into account the item for the change in pension entitlements.)

The accumulation accounts

14.81 The accumulation accounts follow the sequence of current accounts for the institutional sectors. For example, net saving of households is 160. Households receive 23 and pay 5 as capital transfers. Thus changes in their net worth due to saving and capital transfers is 178. Households have 61 as gross fixed capital formation (19 as net fixed capital formation after deduction of consumption of fixed capital (42)), 2 as changes in inventories and 5 as

acquisitions less disposals of valuables. Their acquisitions less disposals of non-produced non-financial assets (land) are 4. The net lending of households is 148. They incur financial liabilities (net) of 33 and acquire financial assets (net) of 181. Other changes in volume of assets are 2. The value of the assets held by households increases by 96 due to changes in the prices of both non-financial assets (80) and financial assets (16); there are no nominal gains/losses on their liabilities, which means that all their liabilities are denominated in monetary terms and probably in the national currency of the economy in question.

The balance sheets

14.82 The balance sheets are also part of the integrated economic accounts. In order to see the relationships between the accumulation accounts and balance sheets, take general government as the example. The opening assets are 1,987 (1,591 non-financial assets and 396 financial assets) and the opening liabilities 687, net worth thus being 1,300. The total value of non-financial assets increase by 56, which results from all changes in these assets recorded in the accumulation accounts, gross fixed capital formation, (37), consumption of fixed capital, (-30), acquisitions less disposals of valuables, (3), acquisitions less disposals of non-produced non-financial assets, (2), other volume changes, (1) and nominal holding gains, (44). Financial assets increase by 123 (net acquisition of financial assets, 120, other volume changes, 1, nominal holding gains, 2). On the right-hand side, liabilities increase by 176, which results again from all changes in liabilities recorded in the accumulation accounts (net incurrence of liabilities, (170), other volume changes, (-1), revaluation of liabilities, (7)). So the closing assets are 2,166 (1,647 + 519) and the closing liabilities are 863; closing net worth (1,302) shows an increase over the year of 2. The sources of this change in net worth are summarized on the right-hand side of the account showing the change in balance sheets changes in net worth due to saving and capital transfers (-40, see also the right-hand side of the capital account), to other changes in volume of assets, (2, see also the right-hand side of the other changes in volume of assets account), and to nominal holding gains/losses, (38, see also the right-hand side of the revaluation account).

2. The rest of the world account

14.83 As explained earlier, the rest of the world accounts are presented from the viewpoint of the rest of the world. Imports of goods and services (499) are a resource for the rest of the world, even though they represent an outflow from the national economy and exports (540) are a use of the rest of the world. Thus imports appear on the right-hand side of the table and exports on the left. The external account of goods and services is shown at the same level as the production account for institutional sectors. The external balance of goods and services is (-41). With a positive sign, it is a surplus of the rest of the world (a deficit of the nation) and vice versa. The external account of primary incomes and current transfers covers all other current transactions.[4] Starting with the external balance of goods and services (-41) as a resource on the right-hand side, it shows the various kinds of taxes, compensation of employees and other current transfers when appropriate. The current external balance remains 41. Again, with a positive sign, it is a surplus of the rest of the world (a deficit of the nation) and vice versa.

14.84 Transactions of the accumulation accounts appear in the columns for the rest of the world when relevant (mainly capital transfers and financial transactions). The rest of the world columns show the assets and liabilities position of the rest of the world vis-à-vis the nation (external assets and liabilities account). The row "changes in net worth due to saving and capital transfers" corresponds, for the rest of the world, to the current external balance and capital transfers.[5]

3. The goods and services account

14.85 In the integrated economic accounts, the goods and services account is shown in a column, not in a row. It reflects the various transactions in goods and services that appear in the accounts of the institutional sectors. Intermediate consumption and final consumption appear as uses in the institutional accounts on the left-hand side of the accounts. For the goods and services account, they appear in the *right*-hand side column, even though the right-hand side is generally reserved for resources and consumption is a use. This device gives a balance for the row for each of the items appearing in the goods and services account. On the resources side of the table, the figures appearing in the column for goods and services

are the counterparts of the uses made by the various sectors and the rest of the world: exports (540), intermediate consumption (1,883), final consumption expenditure/actual final consumption (1,399), gross fixed capital formation (376), changes in inventories (28) and acquisitions less disposals of valuables (10). On the use side of the table, the figures in the column for goods and services are the counterparts of the resources of the various sectors and the rest of the world: imports (499) and output (3,604). On the same side taxes less subsidies on products (133) are shown directly in the column for goods and services. They are a component of the value of the supply of goods and services that has no counterpart in the value of the output of any institutional sector.

4. The total economy column

14.86 The columns for the total economy remain to be explained. Except for taxes less subsidies on products and gross and net domestic product, the figures in these columns are simply the sum of the corresponding figures for the institutional sectors. The production account for the total economy includes, as resources, output (that is, the total output of the economy (3,604)) and taxes less subsidies on products (133), the latter being the counterpart of the figure appearing on the left-hand side in the column for goods and services. The uses side of the production account for the total economy shows intermediate consumption (1,883) and domestic product at market prices (1,854 gross, 1,632 net). The latter is the sum of value added of the various sectors and taxes less subsidies on products. Domestic product then appears on the right-hand side as a resource of the generation of income account for the total economy. Taxes less subsidies on products are shown again on the left-hand side in the column for total economy and on the right-hand side as a resource of government (and the rest of the world if relevant). This double routing of taxes less subsidies on products is made in order to get domestic product, gross and net, directly in the overall accounts, as explained above.

14.87 The other items in the columns for total economy are self-explanatory. National income at market prices (1,883 gross, 1,661 net) is shown directly as the sum of balance of primary incomes of the various sectors; national disposable income, national saving, etc. are also obtained directly.

I. Presentational issues

14.88 Although it is possible, as already noted, to introduce more detail into the integrated economic accounts by introducing more columns for sub-sectors and more rows for disaggregations of transactions, this may quickly result in a very complicated and unmanageable table. For this reason, more detailed analysis of production and transactions in goods and services, transactions in financial instruments, detailed balance sheets, as well as analysis by purpose are done in other types of tables. Some of these alternatives are described in following chapters. This section focuses on the presentation of the main macro-aggregates with supporting detail.

14.89 It is fundamental to an understanding of the System to grasp the three different ways of compiling GDP, from the output, expenditure and income side. However, the definitions in section B concentrate on the different types of flows at the most aggregate level to make the distinction between the three approaches as clear as possible. In practice when presenting the results to users, some more detail is necessary. The amount and kind of detail can vary from country to country but there are some broad guidelines that tend to be used by international organisations when producing tables for several countries at the same time.

1. Output measures of GDP

14.90 For the output measure, it is usually appropriate to give some level of industry detail. In connection with the development of the 4th revision of ISIC (Ref 3) a level of 11 industry groups, called the "top-top" group has been developed especially for summary presentations. The industry groups are given in the table below. A more detailed set of headings, showing 38 industry groups is also available.

Table 14.x: Top-top ISIC aggregations

	ISIC rev 4 sections	Description
1	A	Agriculture, forestry and fishing
2	B, C, D and E	Manufacturing, mining and quarrying and other industry
2a	*C*	*Of which: manufacturing*
3	F	Construction
4	G, H and I	Wholesale and retail trade, transportation and storage, accommodation and food service activities s
5	J	Information and communication
6	K	Financial and insurance activities
7	L	Real estate activities
8	M and N	Professional, scientific, technical, administration and support service activities
9	O, P, and Q	Public administration, defence, education, human health and social work activities
10	R, S, T and U	Other services

14.91 In the World Development Indicators publications of the World Bank, (Ref 4) for instance, very summary data are given for all countries showing a breakdown by agriculture (ISIC sectors A), industry (ISIC sectors B to F of which manufacturing, ISIC sector C, shown separately) and services (ISIC sectors G to U). In countries where there are a small number of key industries, it may be useful to break some of these headings down further and to merge others. For example, it may be useful for an insight into the working of the economy to distinguish agriculture undertaken on a commercial scale to produce cash crops for export from small scale informal agricultural activities or to distinguish the assembly of electronic goods. Equally in some countries it may be sufficient to merge some service groups. However, it is good practice to follow the basic ordering adopted by ISIC whatever the level of detail shown. An example of the level of detail shown in one African country with a large subsistence economy is given in table 14.xxx

Table 14.x: Industry level headings for a country with a large subsistence economy

Monetary
- Agriculture
  - Cash crops
  - Food crops
  - Livestock
  - Forestry
  - Fishing

Mining & quarrying

Manufacturing
- Formal
- Informal

Electricity & Water

Construction

Wholesale & Retail Trade

Hotels & Restaurants

Transport & Communication
- Road
- Rail
- Air & Support.
- Posts & Telecommunications

Community services
- General government
- Education
- Health
- Rents
- Miscellaneous

Total Monetary

Non-Monetary
- Agriculture
  - Food crops
  - Livestock
  - Forestry
  - Fishing

Construction

Owner-occupied Dwellings

Total Non-Monetary

GDP at Basic prices

All net taxes on Products and Imports

GDP at Market Prices

2. Expenditure measures of GDP

14.92 The most aggregate level of the expenditure measure of GDP (again that used in the World Bank's World Development Indicators) is household final consumption expenditure, general government final consumption expenditure, gross capital formation, exports of goods and services and imports of goods and services. (The item for household final consumption expenditure includes that for NPISHs also). Somewhat more detail is given in the OECD publication, *National accounts of OECD Countries, Detailed accounts* (Ref 7). The components of GDP by expenditure that appear there are shown in table 14.x.

Table 14.x: GDP by expenditure: Headings in an OECD table

GDP: expenditure approach
Final consumption expenditure
Household final consumption expenditure
Final consumption expenditure of NPISHs
Government final consumption expenditure
Individual consumption expenditure
Collective consumption expenditure
of which Actual individual consumption expenditure
Gross capital formation
Gross fixed capital formation, total
Cultivated assets
Transport equipment
Other machinery and equipment
of which Office machinery and hardware
Radio, TV and communication
Construction
Dwellings
Other buildings and structures
Intellectual property assets
Of which Software
Changes in inventories and acquisitions less disposals of valuables
Changes in inventories
Acquisitions less disposals of valuables
External balance of goods and services
Exports of goods and services
Exports of goods
Exports of services
Imports of goods and services
Imports of goods
Imports of services
Statistical discrepancy
Gross domestic product

3. Income aggregates

14.93 There is much less standardisation in the presentation of income measures of GDP. Some presentations concentrate on showing compensation of employees and operating surplus (and mixed income) by the same industry breakdown as is shown for the output measure of GDP. Other presentations give the different components of compensation of employees, (wages and salaries, and employers' social contributions), as well as the different types of taxes and subsidies levied on production. As already pointed out, income should, properly speaking, be measured net of consumption of fixed capital and thus show the composition of NDP, not GDP. The size of NNI relative to NDP is also of interest to analysts and should be shown.

14.94 Again national needs should be taken into account when determining the presentation of the accounts. In a country where income in kind or subsistence income is significant, a breakdown of compensation of employees that includes these items should be considered.

4. Accounts in volume terms

14.95 Accounts in volume terms may be presented in a number of ways that are not necessarily mutually exclusive. It is possible to present them in level terms so that for one year the figures in current prices and in volume terms will be identical. A consequence of this is that if, as recommended in the System, volume estimates are derived by means of chain-linking, then the aggregates may not be equal to the sum of the components. One solution is therefore to present the volume estimates in index number form. The year that previously was the same in level terms becomes 100 for both the aggregates and the components. This procedure both disguises the non-additivity and makes changes easier to recognise but users can still calculate the level figures if desired by applying the base year level values to the volume indicators. A third alternative is to show the volume indicators only in terms of growth rates from either the previous year or from a base year. However, rounding problems suggest this may be an additional form of presentation rather than the only one.

5. Quarterly accounts

14.96 As noted in the discussion on quarterly accounts above, quarterly estimates should be presented on both a seasonally adjusted and on an unadjusted basis. Often they will be presented in current prices and as volume series also. An added complication is that for each of the four presentations, the sum of the four quarters should be equal to the annual data as presented in the annual accounts.

6. Presenting other parts of the accounts

14.97 The chapters that discuss the interpretation of the sector accounts also consider matters of presentation as do the chapters showing the links with other statistical systems, notably the links to government finance statistics, external transactions and monetary and financial statistics. In all cases, though, attention should be paid to presenting the accounts in a manner most useful to the readers of the publication for which a presentation is being designed. This may well vary from one type of publication to another and flexibility in approach is essential to enable the readers to make best use of the data being presented.

External references:

1. Organisation for Economic Cooperation and Development. *OECD Manual – Measuring Productivity: Measurement of Aggregate and Industry-Level Productivity Growth.* Paris, 2000.

2. International Monetary Fund. *Quarterly National Accounts Manual – Concepts, Data Sources and Compilation.* Washington, D.C., 2001.

3. European Communities - Eurostat. *Handbook on Quarterly National Accounts.* Luxembourg, 2001.

4. World Bank. *World Development Indicators 2006.* Washington, D.C., 2006.

ISIC Rev.4 has not been published yet. It is available in draft, electronically:

5 United Nations. *International Standard Classification of All Economic Activities. Revision 4.* Accessible in draft at http://unstats.un.org/unsd/cr/registry/isic-4.asp

After the publication in print, assuming it is issued next year, the reference would be:

6. United Nations. *International Standard Classification of All Economic Activities. Revision 4.* New York, 2007.

7. Organisation for Economic Cooperation and Development. *National Accounts of OECD Countries: Detailed Tables 1993/2004, 2006 Edition Volume II*. Paris, 2006.

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1 It is assumed that the terminology "balance of payments" is to be replaced by "international accounts' as suggested as part of the BPM revision

[2] Some work needs to be done on this tables. It is unfortunate that the value of GNI is exactly equal to intermediate consumption and that property income and transfers payable to ROW are exactly equal to those receivable. The amendment to the table values will be done later when the format of all tables is finalised. AH

[3] This may be the place to insert table 2.7. I need to consider the pros and cons of where to place them and in any case the classification in the tables as they currently exist needs to be changed.

[4] To be changed when proposed new BPM structure is approved.

[5] See footnote 1