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STATISTICAL OFFICE OF THE UNITED NATIONS

Country practices in national accounting at constant prices

Report of the Secretary-General

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CONTENTS (continued)

INTRODUCTION

1. The Statistical Commission at its seventeenth session considered that a comparative study of national practices in respect of national accounting in constant prices would furnish a useful base for the future work on statistics of prices and quantities. 1/ The present report, which has been prepared by the Statistical Office of the United Nations, covers the practices followed both by countries basing their national accounts work on the United Nations System of National Accounts (SNA) 2/ and by countries applying the System of Material Product Balances (MPS). 3/

2. The report deals with the methods used in estimating constant price series for the flows of production and expenditure included in the systems. These flows can be factored into price and quantity components. In addition, the estimation of net factor income from abroad, which is an income flow, is discussed.

3. The practices used in estimating product and expenditure flows at constant prices by SNA and MPS countries, respectively, were dealt with in two previous papers. 4/ The data contained in the previous papers have been revised and expanded in the present report, after direct consultation with national authorities and further study of available published material.

4. The report is organized in the following manner. First comes a short discussion of the need for and availability of constant-price estimates. Discussed next are the main concepts of product and expenditure, the forms of valuation and the types of classification used by countries in their constant-price work. This is followed by a description of the main approaches used by countries in their constant-price work, and of the indicators applied according to type of producer and item of expenditure. A separate chapter is devoted to a discussion of the problems that arise in constructing index numbers because of quality changes, the introduction of new products and the disappearance of old ones. The formulas and weight bases used by countries in their constant-price work are discussed in the last chapter of the report. Four tables summarizing the methods of constant price estimation used by individual countries are given in the annex.

1/ See Official Records of the Economic and Social Council, Fifty-fourth Session, Supplement No. 2, para. 89.

2/ A System of National Accounts, Studies in Methods, Series F, No. 2, Rev.3 (United Nations publication, Sales No. E.69.XVII.3).

3/ Basic Principles of the System of Balances of the National Economy, Studies in Methods, Series F, No. 17 (United Nations publication, Sales No. E.71.XVII.10).

4/ "Country practices in national accounting at constant prices", CES/WP.22/40 (for SNA countries) and "National practices of countries with centrally planned economies in compiling the balance of the national economy in constant prices", CES/WP.22/39 (for MPS countries).

I. THE NEED FOR AND AVAILABILITY OF CONSTANT-PRICE ESTIMATES

A. The need for constant-price estimates

5. While national accounts data at current prices are well suited for the analysis of changes in the composition of aggregates such as gross output, value added, final expenditure, etc., they are less suitable for the measurement of trends. For the latter purpose, series are needed from which the influence of price movements has been removed. Estimates at constant prices are also needed in order to measure the relative productivity of industries and changes in productivity over time. In recent years, inflation has become a widespread and serious problem and an increasing number of countries have therefore felt the need to supplement their national accounts series at current prices with constant-price estimates in order to evaluate the extent of inflation.

6. Reliable national accounts series at constant prices provide information which is useful in evaluating and planning economic development and in identifying problem areas in an economy. The constant-price data can be used in balancing the supply of goods and services against their demand. Combined with information on labour productivity, they are also useful in determining the demand for labour. The correlative price indexes are useful over-all indicators of changes in relative prices among components of national accounts aggregates, and of price inflation.

B. The availability of constant-price estimates

1. Countries using the SNA

7. Table 1 (see annex) indicates the main national accounts series available in SNA countries. In most developed SNA countries, quite detailed estimates at constant prices are available both for gross domestic product classified by kind of economic activity and for expenditure on the gross domestic product classified by type, object or purpose, according to the items concerned. Estimates of gross domestic product classified by kind of economic activity, sometimes in considerable detail, are also available for many developing SNA countries. Many of these countries also provide constant-price data of expenditure on the gross domestic product. These estimates are generally less detailed than those supplied by developed countries. The data are often classified according to broad categories only, and several developing countries derive total private consumption expenditure as a residual, by deducting direct estimates of government consumption, gross capital formation and net exports at constant prices from the total value added arrived at from the production side.

8. Many developed and a number of developing SNA countries derive value added at constant prices by the double-deflation method, and consequently present separate constant-price estimates for gross output and for intermediate consumption, both classified by kind of economic activity. The double-deflation method is used most frequently in the case of goods-producing industries, particularly agriculture, and only rarely for service industries.

9. Some countries which make their estimates of product and expenditure by means of the commodity flow method have estimates of gross output classified according to commodity groups. These estimates are useful for economic planning and are needed for estimating input-output tables at constant prices.

10. Although this is not evident from the tables annexed to this paper, several countries estimate, and sometimes publish, supplementary data for total expenditure at constant prices, which are adjusted for the effect of changes in the terms of trade. This adjustment is made in order to indicate changes in the purchasing power of the gross national product. Such adjusted estimates have been found useful, particularly by developing countries which export mainly raw materials and import finished goods.

11. Estimates of the quantity of services rendered by wage and salary earners, based on information about time worked and the corresponding wage and salary rates, are made by some countries. There are still many problems to be solved, particularly with regard to the measurement of changes in the quality of labour services, before a satisfactory quantitative measure of labour services rendered can be developed. An alternative measure of wages and salaries at constant prices is obtained by deflating the series at current prices by the cost-of-living index. This measure represents changes in the purchasing power of wages and salaries.

12. Many SNA countries compile and publish implicit price indexes for the main components of the gross domestic product classified according to expenditure categories. These indexes may combine the errors of the estimates in current and constant prices on which they are based, and must therefore be interpreted with caution. Since the implicit price indexes are of the Paasche type, the index number for any given year can, strictly speaking, be compared only with the base year and not with index numbers for intervening years. In spite of their inherent weaknesses, these indexes are found useful because of their comprehensive coverage.

2. Countries using the MPS 5/

13. MPS countries generally compile data at constant prices for social product (gross output of the material sphere), material input (including consumption of fixed capital) and net material product (net value added of the material sphere).

14. All the countries also compile estimates at constant prices of capital formation and final material consumption. In addition, some countries compile data at constant prices for losses and net exports, in order to arrive at totals for the user side of the balance of the national economy.

15. A few countries also compile estimates of total consumption and total income of the population.

5/ In preparing this paper, the Statistical Office had much less information available to it for countries using the MPS than for those using the SNA.

16. Index numbers of quantities and prices of material output and expenditure are generally compiled by MPS countries. Practically all MPS countries also compile price indexes for non-material services (commodity-type services according to the SNA). Some countries also compile explicit quantity indexes and constant price series for these services.

II. CONCEPTS OF PRODUCTION AND EXPENDITURE

A. Production

1. Countries using the SNA

(a) Definitions employed

17. The estimates at constant prices of gross output, intermediate consumption and value added classified by kind of economic activity compiled by most SNA countries relate to the productive activity taking place within the domestic territory as defined in the SNA.

18. In addition, gross national product at constant prices is estimated by a number of countries, either as a supplementary total, or as the primary concept. In the latter case, the break-down according to kind of economic activity is also based on the national concept.

19. Gross national product reflects the incomes received by residents from economic activity in the country as well as abroad, and excludes income of non-residents from such activity. The concept therefore includes net factor incomes received from the rest of the world. The main drawback to using this concept in constant-price work is that the methods used in deflating factor incomes to and from abroad are usually quite crude, and this may lead to serious distortions.

20. Net domestic product at constant prices, i.e. constant gross domestic product less consumption of fixed capital, is estimated as a supplementary concept by several countries. This concept is particularly useful for the measurement of productivity changes. The estimates of consumption of fixed capital at constant prices, however, are often inaccurate, particularly when they are obtained by deflating depreciation at current prices by the implicit price index for gross fixed capital formation.

(b) Valuation

21. Most of the countries which still base their estimates on the old SNA value gross output and value added at constant prices classified by kind of economic activity at factor cost (approximate factor values). Some countries, which make their constant-price estimates within the context of an input-output table, apply valuations at both producers' values and approximate basic values (producers' values less net indirect taxes which refer to commodities).

22. The estimates of value added at factor cost (approximate factor values in the terminology of the new SNA) at present supplied by countries exclude all net indirect taxes levied on gross output, while net indirect taxes are included in the figures for intermediate consumption. This leads to figures for value added which are distortions of true factor values. In order to arrive at estimates expressed in true factor values, all net indirect taxes levied both directly and

indirectly on intermediate consumption should also be deducted. Correspondingly, value added figures expressed at basic values should exclude direct and indirect net commodity taxes levied on intermediate consumption in order to represent true basic values. 6/

23. The distortion of value added which arises when approximate factor values are applied is due to the fact that net indirect taxes are excluded from gross output but are included in the portion of the output which is used for intermediate consumption. Because of this distortion, some countries, for instance the United States, reject the concept of factor cost (approximate factor values) on theoretical grounds. However, many countries consider estimates of value added at factor cost more useful in spite of their weaknesses, than estimates at market prices (producers' values) in describing the structure of production, because they are invariant to differences in net indirect taxes on gross output of the various kind-of-activity groups. Also, if intermediate consumption includes few indirect taxes and subsidies, or if net indirect taxes on intermediate consumption are relatively evenly distributed by kind-of-activity groups, the distortion of value added introduced by applying approximate instead of true factor values will not be substantial.

24. The concept of market prices (producers' values) has the following three advantages as compared to the factor cost concept: (i) most of the available basic data are expressed in these values; (ii) the totals obtained from the production and expenditure sides coincide when market prices are used; (iii) this circumstance facilitates the analysis of expenditure in relation to value added by kind of economic activity. It should be noted that producers' values and purchasers' values are equivalent in the case of the total gross domestic product.

(c) Classifications

25. The kind-of-activity classifications used in the case of gross output, intermediate consumption and value added correspond approximately in most cases to the classification according to major divisions recommended in the SNA. More detailed classifications are used by some developed countries.

26. Countries which publish estimates of the gross output of commodities at constant prices usually apply a classification by broad commodity groups according to the industries in which the commodities are usually produced.

2. Countries using the MPS

(a) Definitions employed

27. The MPS countries apply a territorial concept of production. This concept

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6/ Countries usually apply approximate basic values which exclude only net commodity taxes levied on gross output. Net commodity taxes are indirect taxes and subsidies which can be allocated to specific commodities.

differs from the domestic concept of the SNA in that it includes embassies, military establishments, etc. which are located on the territory of a country.

(b) Valuation

28. The MPS countries value gross output at producers' values; material input and net material product are valued at purchasers' values. In the case of the net material product, producers' values and purchasers' values are identical. This is the same treatment as is applied by the countries using the SNA.

(c) Classifications

29. The MPS countries classify their series on gross output, material input and net material product according to sector of ownership (socialist sector with a number of subsectors, and private sector), and by branches (industries).

B. Expenditure

1. Countries using the SNA

(a) Definitions employed

30. The expenditure concept used by SNA countries refers to the expenditure of residents and is therefore a national concept. In practice, however, most countries do not make explicit constant-price estimates of current expenditure of resident households abroad and of non-resident households in the country.

31. For purposes of the basic concept of gross national expenditure at constant prices, exports and imports are each deflated by their corresponding price indexes or extrapolated by appropriate quantity indexes. A supplementary concept (see para. 10) takes into account changes in the purchasing power of the trade balance in terms either of imports or exports and is arrived at by deflating this balance directly.

32. A unique bill of goods and services against which the balance of trade may be matched is not available. The common practice is to deflate the balance of trade by the price index of merchandise imports, i.e. $\frac{E - M}{P_M}$, where E and M are the current values of exports and imports, respectively, and P_M is the price index for imports. This procedure assumes that all proceeds from exports have been or will be spent on imports and that the relative prices of exports and imports will not change in the near future. However, the proceeds from exports may in fact be utilized in order to finance other purchases from or payments to foreigners.

33. The gain or loss in imports during the period in question, as compared to the base period, which actual exports would finance as a result of the relative changes

in the prices of exports and imports is

$$\frac{(E - M)}{(P_M)} - \left(\frac{E}{P_E} - \frac{M}{P_M}\right) = E\left(\frac{1}{P_M} - \frac{1}{P_E}\right)$$

where P_E is the price index of exports. If the balance of trade is negative, some countries deflate it by P_E in order to assess the increase in the volume of exports between the period in question and the base period required to finance actual imports during the given period because of changes in the terms of trade. This change is equivalent to: $M\left(\frac{1}{P_E} - \frac{1}{P_M}\right)$.

(b) Valuation

34. Expenditure on the gross domestic product at constant prices is generally valued at market prices (purchasers' values) in SNA countries. Countries which apply the commodity flow method in their constant-price estimates sometimes build up the series for expenditure at purchasers' values from separate estimates of the supply of commodities at approximate basic values, trade and transport margins, and net indirect taxes.

(c) Classifications

35. The constant-price estimates of expenditure on the gross product are classified in most SNA countries according to the main groups of the classifications for each category of expenditure recommended in the SNA.

2. Countries using the MPS

(a) Definitions employed

36. The territorial concept is applied in the case of the items on the user side of the balance of the national economy. This implies that all expenditures of non-residents on the territory of the country are included.

(b) Valuation

37. Most of the items on the user side of the balance of the national economy are valued at purchasers' prices, including in recent cases consumption from own production.

(c) Classifications

38. The MPS countries classify net capital formation into net fixed capital formation and increase in stocks. Some of the countries classify net fixed capital formation by a number of subgroups. Final material consumption is in most cases classified into material consumption of the population (personal consumption and consumption of institutions separately), and other (government) material consumption.

III. METHODS OF ESTIMATING PRODUCT AND EXPENDITURE AT CONSTANT PRICES

A. Countries using the SNA

1. The balance between production and expenditure

39. Countries which estimate gross product at constant prices from both the output and the expenditure sides ensure that the totals estimated from each side are equivalent. The totals for each side should by definition be equal if they are expressed in the same values, for instance purchasers' values.

40. Countries in these cases achieve balance between the estimates on the production and the expenditure sides by recalculating or adjusting items which in the first round of calculations are known to have been based on limited or questionable basic statistics.

41. Some countries apply a more detailed approach in estimating gross output and expenditure at constant prices of value added and final expenditure. These countries use the commodity-flow method in making their constant-price estimates, and balance the supply and use of commodity groups item by item. Where the commodity-flow method is used, the composition of the gross domestic product by expenditure categories is estimated by distributing the total supply classified by commodity groups at constant prices by its various uses. In arriving at this distribution, any direct information which can be obtained on various components of expenditure at constant prices is taken into account. In some cases, one major component of expenditure - most frequently private final consumption expenditure, but in at least two cases (Finland and Norway) increase in stocks - is obtained by deducting constant-price estimates for the other expenditure components from total gross domestic product estimated from the production side. Examples of countries which use the commodity-flow approach are France, Italy, the Netherlands, Norway and the United States (see annex, tables 2, 3 and 4).

42. The commodity-flow approach to constant-price estimates is usually employed within the framework of detailed input-output tables or commodity balances. For example, France employs a table on the production and import and the final domestic demand and export of 421 groups of goods and services. Norway uses a table which distinguishes 1,900 categories of commodities in the rows, and 190 industries and other producers of origin and intermediate use of commodities and 230 categories of the final demands for them in the columns. Each of the countries starts with a balanced table on the supply and disposition of goods and services for the base year and the current year and then converts the current-year values into constant prices either by deflating current-year values or by extrapolating base-year values. France, Italy, Norway and the United States rely mainly on price deflation, while the Netherlands makes more use of extrapolation.

43. Most of the countries which use the commodity-flow method distribute the supply of goods and services by uses at producers' values. Trade and transport margins

are therefore distributed separately and have to be added to the estimates of each item of expenditure at producers' values in order to arrive at series expressed in purchasers' values. Where the commodities are also distributed at approximate basic values, as in the case of Norway, net commodity taxes at constant prices also have to be distributed separately and have to be added in order to arrive at series expressed in producers' prices. The accuracy with which the allocation by uses of trade and transport margins and of net commodity taxes can be made depends on the detail of the basic information available.

44. Where the estimates are made by deflating the figures on the input and expenditure side separately, the price indexes should, ideally, be based on products which are identical, not only in physical characteristics but also with regard to conditions of sale, distance transported, etc., in order to obtain a balance between the two sides.

45. However, it is not possible to carry this approach out completely in practice. Most countries apply price indexes for both sides which are based on products with identical physical characteristics only and which are more applicable to the production than to the expenditure side.

46. Where the estimates are based on data valued at approximate basic values, a similar problem arises with regard to the treatment of net commodity taxes. Balance will be achieved in this case if the destination of the products subject to differences in net commodity taxes according to use is known in the base period and the current period, and the volume of output is used as quantity indicators. This is the approach used by most countries.

2. Price differences for identical products

47. In many instances, different prices are charged for the same goods sold on the same terms to different purchasers. This price discrimination affects the constant-price estimates, at both producers' (purchasers') and approximate basic values. Common examples are goods sold for domestic consumption or export, and goods sold for further processing or final consumption.

48. If extrapolation by quantity indexes is used, balance will be obtained between the production and expenditure sides even if no distinction is made between the different uses to which the product is put. Changes in the mix of end uses which are priced differently in this case will be reflected in the aggregate implicit price changes on the expenditure side. If, when extrapolation is used, the identical goods sold at different prices on different markets are treated as different products, any change in the mix of uses will appear as a volume change both on the product and the expenditure sides.

49. Where price deflation is used, a few countries make approximate allowances for the imbalance which occurs between the estimates on the production and the expenditure sides because of changes in uses of goods which are subject to price discrimination. In some of these cases, the price indexes used in deflating the

production side are adjusted by approximate methods. In other instances, products sold in different markets are treated as separate products on the expenditure side and are deflated separately. In some cases, the difference between the series on the production and the expenditure sides which then arises is included as an adjustment item on the production side.

3. General approaches for the production side

(a) Double deflation of value added

50. It may be seen from table 2 in the annex that double deflation is used for all or most industries by six countries - Federal Republic of Germany, France, Italy, Mexico, Norway and Sweden. In the case of agriculture, almost all the countries studied use double deflation. In addition to the six countries mentioned above, six other countries use double deflation in the case of electricity, gas and water supply, six in the case of mining and four in the case of manufacturing. Double deflation is also applied quite frequently in the case of construction.

51. In order to use double deflation, it is necessary to have reliable series of quantity or price indicators in respect of both gross output and intermediate inputs. Errors in the indicators for the two items may be combined when value added in constant prices is computed as the difference between gross output and intermediate consumption at constant prices. It has been found that when the input-output coefficient is greater than one half, constant-price value added compiled through double deflation will be more erratic than the series of gross output and intermediate consumption at constant prices from which it is calculated.

(b) Estimates of value added by proxy indicators

52. Direct estimation of value added at constant prices by proxy indicators is frequently used in the case of manufacturing industries which have highly diversified intermediate inputs or gross outputs. The larger chance errors in the results where the input-output ratios are high also limit the use of the double-deflation method in the case of a number of other manufacturing industries. Extrapolation or price deflation of value added by means of index numbers relating to gross output are used in most cases. In the case of many service industries, indicators relating to input employment or man-hours worked are used because meaningful output indicators are not available.

4. General approaches for the expenditure side

53. Independent estimates of final expenditure are derived either by extrapolating base-year estimates of each component in as great detail as possible by means of representative volume indicators (particularly in the case of food, fuel and similar items), or by price deflation. In some cases, current-year quantities are revalued at base-year prices. In a number of instances (construction, some service industries, producers of government and private non-profit services) estimates of gross output are used for corresponding items of expenditure.

B. Countries using the MPS

54. In countries using the MPS, double deflation is applied in practically all cases to arrive at the production of the net material product at constant prices. The only exception is that of Hungary which extrapolates net output of wholesale and retail trade by a quantity index of trade turnover.

55. Most MPS countries arrive at their constant-price estimates of gross output, material inputs and the components of final expenditure by deflating the series at current prices by means of appropriate price indexes. The calculation of gross output of agriculture at constant prices is an exception from the general rule in all countries. The constant-price series for gross output of agriculture are obtained by direct valuation, i.e., by multiplying current-year quantities by base-year prices. In Bulgaria, the German Democratic Republic, Romania and the USSR, direct valuation is used also in estimating gross output at constant prices of industry. Direct valuation is also used for forestry in the case of Czechoslovakia. On the expenditure side, Bulgaria uses quantity indexes in extrapolating net exports, and Poland applies extrapolation by quantity indexes in marginal cases both on the production and the expenditure sides.

C. Links between main concepts used by SNA countries

56. As indicated in chapter II, the main concepts of production and expenditure used by SNA countries in their national accounts work are gross domestic product, gross national product, and gross domestic product excluding allowances for the consumption of fixed capital. Some countries make their estimates of gross domestic product at producers' (purchasers') values, and others at approximate basic or approximate factor values. Special problems arise in estimating the items which connect these concepts with each other at constant prices.

1. Net factor income from abroad

57. In order to derive series for total gross national product at constant prices from constant-price series of gross domestic product, it is necessary to estimate the flows of compensation of employees and property and entrepreneurial income to and from the rest of the world at constant prices.

58. Most countries use a short-cut method for these estimates and deflate the outgoing flows by the unit value index for imports and the incoming flows by the unit value index for exports. A few countries, however, apply more refined methods; they estimate each of the main components of factor income received from or paid to the rest of the world separately at constant prices.

2. Indirect taxes and subsidies

59. In order to reconcile estimates of gross domestic product at approximate factor values and estimates of gross expenditure at purchasers' values, a number of

countries estimate net indirect taxes at constant prices. In cases where the taxes are levied on quantities, the method generally used is to multiply the quantities of output classified by commodity groups in the current year by net indirect taxes per unit of output of the corresponding commodity group in the base year. Where ad valorem taxes are used, the same percentage of net indirect taxes as in the base year is applied to the constant-price estimate of gross output excluding tax, in the current year.

3. Consumption of fixed capital

60. Table 1 (see annex) shows that a number of countries estimate consumption of fixed capital at constant prices, in order to arrive at constant-price estimates of net domestic product. In most cases, the estimates are made by deflating current-value data for consumption of fixed capital by the implicit price index for gross fixed capital formation. In some countries, the perpetual inventory method is used as the basis for estimates of consumption of fixed capital at constant prices.

IV. THE USE OF INDICATORS OF QUANTITIES AND PRICES

A. General

61. The estimates at constant prices should be based on indicators of prices or quantities which are as detailed as possible. Detailed indicators make the resulting constant-price series more representative and more comparable over time. Changes in the composition of commodity groups are taken into account better when detailed indicators are used. Where price deflation is applied and the traditional price indexes are base-weighted, as is usually the case, a more accurate reweighting to a current base is possible when detailed price series and corresponding current weights are available.

62. The quantity indicators used in constant-price work are either quantities valued directly in base-year prices, quantity relatives or index numbers of quantities. In a few countries, the production indexes for agriculture and manufacturing have been revised in order to meet the requirements of national accounts estimation at constant prices. In most cases, however, available quantity indexes are used without adjustment, even if they do not correspond exactly to national accounts requirements. Sometimes, special quantity indexes are constructed from available series of quantities produced. It also happens quite frequently that quantity indicators are derived by deflating current value series for part of the flow in question by appropriate price indexes.

63. Where price indexes are applied in making constant-price estimates, current-weighted indexes are needed in order to achieve symmetry with constant-price series arrived at by extrapolation with base-weighted quantity indicators. However, available general-purpose price indexes are generally base weighted. In a number of cases, components of base-weighted price indexes are used directly for deflation purposes, because the information needed to reweight the indexes is lacking. However, most countries derive current-weighted price indexes by reweighting price data collected for base-weighted indexes by current-year weights. As was mentioned above, the accuracy of the reweighted price indexes depends very much on how detailed the price indicators and the current weights are. A number of countries construct special price indexes for deflation purposes by applying price relatives for representative commodities to current-value data for commodity groups. In some cases, implicit current-weighted price indexes which are derived from constant-price data for part of the flow to be deflated and the corresponding series at current prices are used.

64. Price deflation is generally assumed to lead to more reliable results than extrapolation by quantity indicators in the case of output mixes which consist of a wide range of products which have similar cost structures. In these cases, the price changes of the individual components are more closely correlated than the quantity changes. For these reasons, part of the output of manufacturing, as well as the output of most service industries, is frequently deflated by price indexes.

65. In the case of a number of service industries, appropriate price or quantity indicators are not available, and employment is then used in extrapolating gross

output or value added. This approach is used for a number of service industries and for producers of government and private non-profit services. Where employment series are used as indicators, adjustments for changes in productivity ought to be made. The methods used in adjusting estimates based on input data for productivity changes in the case of some industries are described below.

B. Indicators of production

1. Countries using the SNA

(a) Agriculture, forestry, hunting and fishing

66. Extrapolation by means of quantity indicators is commonly used in the case of the gross output of this industry. Weight-base-year values are frequently extrapolated by indicators obtained by valuing current-year quantities at base-year prices. In other cases, available quantity indexes are applied, or base-year prices are extrapolated by quantity relatives. Only for a few components of the industry, such as agricultural services, are price indicators generally used.

67. As in the case of most other industries, reliable indicators of prices are more frequently available than quantity indicators for the intermediate input of this industry. Among the countries studied, the United States appears to be the only one where price series are used to deflate current-year values to base-year values in the case of both gross outputs and intermediate inputs of agriculture, forestry, hunting and fishing.

(b) Industrial activity

68. Gross output and value added of mining, manufacturing, electricity, gas and water supply are also extrapolated by quantity indicators in most cases. Seven of the countries studied apply the industrial production index in extrapolating value added. In the case of the United Kingdom, the industrial production index has been specially adjusted to be suitable for national accounts purposes. Thirteen countries use specially constructed quantity indexes in extrapolating gross output or value added of most industrial activity. The elementary series of indicators entering into these production indexes are, for the most part, derived from quantities of goods produced. However, in the case of manufacturing industries which produce a wide range of commodities or largely unstandardized goods, other kinds of elementary indicators are used in compiling the indexes, such as the quantity of raw materials used or man-hours worked.

69. Countries which make separate estimates for large-scale and small-scale manufacturing often apply crude methods for small-scale industry, such as using the implicit price indexes for similar components of large-scale manufacturing. In the case of India, however, value added of large-scale manufacturing is extrapolated by the industrial production index, while special quantity indicators have been developed for small-scale industry on the basis of quantities produced by a number of representative establishments of these industries.

70. Deflation of gross output or value added of manufacturing by means of relatives or index numbers of prices is used most frequently in the case of industries which make a wide range of products or fabricate largely unstandardized, complex goods. The indicators used may refer either to output or to input. For instance, Canada deflates the output of aircraft, railway rolling stock and ships by a price index based on the cost of labour and materials used.

71. Norway deflates deliveries of manufactured goods to exports, classified according to commodity group, by means of the export price index. It also makes a separate estimate at constant prices of labour input into own-account construction and maintenance by the manufacturing industry by deflating figures at current prices by wage indexes for the relevant industries.

72. Most countries use data on the total quantity of electricity generated as an indicator for gross output or value added of that industry. Several countries value current quantities generated at the average unit value per kWh of electricity delivered to all users. Some countries, for instance Mexico, have developed separate quantity indexes for the sale of energy to different types of consumer and generated for own use.

73. Intermediate consumption of industrial activity is extrapolated by means of quantity indicators wherever suitable indicators are available. Where the inputs are very diversified or quantity indicators are not available for other reasons, price deflation is used. The Federal Republic of Germany uses price deflation in the case of both output and intermediate consumption of all components of industrial activity. In the case of Canada and Sweden, the current-weighted index numbers of prices used are derived by deflating the current value of representative sets of intermediate goods by the corresponding constant-price value. Most of the other countries derive current-weighted index numbers of prices directly from data on the quantities and prices of selected commodities.

(c) Construction

74. Price deflation is used much more frequently than extrapolation by volume indexes in the case of estimates at constant prices of the gross output or value added of construction activity, because it is very difficult to estimate quantity indicators for this industry in view of the diversity and complexity of its output. The number of items of input taken into account in constructing the indexes varies. In the United Kingdom, labour and material costs as well as an estimated allowance for profits are included. Norway also includes an estimate for the consumption of fixed capital. A few countries include an allowance for changes in labour productivity, but the specific methods used are not indicated. Wherever possible, the estimates are made separately for each major component of construction activity.

75. In Canada, construction of residential buildings is deflated by a wage index for construction workers, adjusted for changes in productivity. For non-residential construction and engineering construction cost, indexes covering both labour and material inputs are used. Repair and maintenance work is deflated by an implicit price index for all other components of construction activity.

76. Some countries, for instance Canada, the Federal Republic of Germany, Sweden, the United Kingdom and the United States, have experimented with or applied regression techniques in obtaining the data needed to construct price indexes for parts of construction activity, such as shipbuilding, highway construction and house building. Also, some of these countries construct price indexes for complex products of construction by combining price data for components of specified models of the products.

77. Quantity indicators are sometimes used in extrapolating building construction. For instance, Denmark estimates a quantity indicator for building construction by multiplying floor area completed by cost per square metre in the base year. Finland uses the volume of space of various types of buildings as indicator. Contract drilling is extrapolated by means of quantity indexes by Canada and Norway. The former applies footage drilled, and the latter number of holes drilled, as indicator.

(d) Wholesale and retail trade, restaurants and hotels

78. Gross output of wholesale and retail trade is generally defined as equal to gross trade margins. Since intermediate consumption of the industry is small, the input-output ratios of the base year in most instances have been assumed to have remained constant. Only a few countries have made separate estimates of intermediate consumption based on the price movements for selected items.

79. As it is much more feasible to gather price series than quantity series of the wide range of merchandise purchased or sold at wholesale and retail, deflated current values are commonly used as indicators for these transactions. A number of countries make separate estimates for wholesale and retail trade and in a few cases (for instance the Federal Republic of Germany, Finland, the United Kingdom and the United States) the estimates are made in considerable detail by type of outlet or type of commodity.

80. In the case of several developing countries, the data needed to make detailed estimates for wholesale and retail trade are not available. These countries often extrapolate the trade margins of the base year by means of quantum indicators based on marketed quantities of agricultural and industrial commodities.

81. Price deflation by means of specially constructed price indexes or the consumer price index is commonly used in making constant-price estimates for restaurants and hotels.

82. However, a few countries apply extrapolation by means of direct quantity indicators for this industry. For instance, Norway extrapolates gross output of hotels by the number of guest-nights and beverages consumed in restaurants by quantities delivered to them. Food consumed in restaurants is extrapolated by a weighted quantity index for the two former items. Employment data are used by a number of developing countries in extrapolating the value added of hotels and restaurants.

(e) Transport, storage and communications

83. As is evident from table 2 (see annex), the gross output, intermediate consumption or value added of this industry is in most cases estimated at constant prices for each detailed component of services rendered.

84. Quantity indicators on the whole appear to have been used more frequently than price deflation in the case of constant-price estimates of gross output or value added of transport and communications. Examples of quantity indicators used are ton-miles of freight or number of passengers or passenger-miles transported, tonnage of vessels with cargo arriving or departing, number of letters or telephone calls, employment, etc. Some countries prefer to deflate passenger and freight revenue and income from communication services by index numbers of tariffs or rates where sufficient information is available to construct such indexes. In other cases, as for instance storage and harbour services, representative quantity indicators are not available while reasonably representative price indicators can be obtained.

(f) Financing, insurance, real estate and business services

85. There is so far no generally accepted agreement on the best methods to be used in making constant-price estimates of the gross output of these industries, since even the concept of what the estimates are intended to measure still needs to be clarified. Among the countries which are furthest advanced in developing constant-price estimates for these industries, one group - represented chiefly by the United Kingdom and the United States - develops its indicators by deflating, by means of appropriate price indexes, a representative selection of the transactions of the industry, such as deposits by type of institution and loans outstanding in the case of banks, and premiums received and claims paid in the case of insurance. Another group of countries (chiefly represented by Italy) develop quantity indicators on the basis of number of debtors, number of current accounts, number of savings bank books, postal orders, money drafts etc., in the case of banks.

86. Most countries, however, use more approximate methods such as deflating current values by means of the consumer price index and indexes of wages and salaries, or extrapolating base-year value added either by quantity indexes obtained by price deflation or by employment series. Where employment series are used, allowances are sometimes made for changes in productivity.

87. The allowances for changes in productivity are sometimes very approximate, such as, for instance, an assumed 1 or 2 per cent increase per year. In the case of the Federal Republic of Germany, however, productivity changes are measured by change in quantities per head, referring for instance to number of book entries, counter transactions, etc. in the case of banking, and number of new policies and number of claims in the case of insurance.

88. Where separate estimates of intermediate consumption at constant prices are made, price deflation by specially constructed price indexes or by the wholesale price index is used in most cases.

89. The imputed rent of owner-occupied buildings has in most cases been extrapolated by number of dwellings, and sometimes a distinction is made between dwellings of different types and between urban and rural dwellings. The gross output or value added of real estate and other business services are mostly either deflated by special price indexes or extrapolated by the number of employees. In the case of the United Kingdom, direct volume indicators are used for the value added of some business services. For instance, accounting services are extrapolated by a weighted index of the number of tax assessments for individuals, partnerships and companies, and legal services are extrapolated by a weighted average of number of cases tried and number of proceedings by solicitors. Intermediate consumption of real estate and business services is mostly deflated by price indicators.

(g) Community, social and personal services

90. In the case of health and education services, several countries extrapolate gross output or value added by direct quantum indicators. Since the services rendered are complex and heterogeneous, it is difficult to find indicators which are truly representative. The indicators chosen by most countries using this approach are relatively simple, such as number of hospital beds or number of doctors and dentists in the case of medical services, and number of pupils or teachers in the case of education services. Only rarely are attempts made to distinguish between types of medical treatment and type and level of education, in estimating the indicators.

91. Price indexes based on indicators of average prices for stays in hospitals or visits to doctors have been used in some cases for medical services and indexes of salary rates of teachers in the case of educational services.

92. Recreational services, such as visits to cinemas, theatres, etc. and personal services, such as hairdressing, etc. are extrapolated by price and quantity indexes in about an equal number of cases. The gross output or value added of other community, social and personal services are for the most part deflated by price indexes.

(h) Producers of government and private non-profit services

93. Several countries deflate value added of producers of government services by an index of wages and salaries or extrapolate value added by number of persons employed or hours worked. A number of countries make separate constant-price estimates for wages and salaries of civilian and military employees classified according to rank, and for other cost components, including consumption of fixed capital. Appropriate components of the wholesale price index or special indexes constructed on the basis of the prices collected for the indexes are in most cases used in deflating intermediate consumption. Consumption of fixed capital is either deflated by the implicit price index for gross fixed capital formation or is estimated at constant prices in connexion with the calculation of the stock of fixed capital at constant prices by the perpetual inventory method.

94. A few of the countries studied apply direct quantity indicators to value added in the case of some of the services rendered by producers of government services. For instance, the United Kingdom extrapolates local authority health services by a weighted index of number of patients for each type of service and number of school children inspected, and Austria extrapolates police services by number of identified perpetrators and number of traffic accidents. Otherwise, the countries studied do not appear to have applied the techniques of performance budgeting in their estimates of value added of producers of government services at constant prices.

95. Those few countries studied which make constant-price estimates for producers of private non-profit services to households generally either deflate value added by an index of wages and salaries or extrapolate value added by numbers employed or man-hours worked.

2. Countries using the MPS

96. As may be seen from table 2 (see annex), the countries using the MPS in most cases estimate gross output of agriculture, forestry, industrial activity and construction at constant prices by valuing current quantities at base-year prices. Poland deflates the output of the three latter industries by price indexes. The German Democratic Republic in some instances adjusts the current estimates by absolute amounts which represent the effect of price changes.

97. Price deflation of gross output is used by all MPS countries in the case of hotels and restaurants, transport and communications. In the case of wholesale and retail trade, trade margins at constant prices are obtained by deflating sales and purchases separately by means of price indexes in almost all countries. Hungary extrapolates net output of wholesale and retail trade by quantity indexes of trade turnover obtained by price deflation, and the USSR extrapolates trade margins by an index of quantities sold which includes the effect of changes in the composition of sales.

98. Material inputs are in all cases deflated by price indexes. No details are available of the way in which the indexes are obtained.

C. Indicators of expenditure

1. Countries using the SNA

99. Some components of expenditure correspond closely to items on the production side. This is the case, for instance, with output of construction and gross fixed capital formation in residential and non-residential buildings, the output of producers of government services and final consumption expenditure of general government, and the output of passenger transport and expenditure on the corresponding items. In these cases, a number of countries apply similar methods

of making constant-price estimates for the production and expenditure sides, or simply carry over figures estimated for the production side to the expenditure side. This is, however, not a general rule, because the classifications and coverage of the items on each side differ, and the indicators used for the production side may thus not be suitable for the corresponding items of expenditure.

100. Since the totals in constant prices on the production and expenditure sides are identical, some countries estimate one of the items on the expenditure side as a residual. Several developing countries obtain total private final consumption expenditure at constant prices in this way. This is, of course, not a satisfactory procedure because of the importance of the item and because no breakdown by expenditure categories can be obtained. Other countries (for instance Finland and Norway, which use the commodity-flow method in making their constant-price estimates) obtain increase in stocks at constant prices as a residual.

(a) Private final consumption expenditure according to object

101. Seven of the countries studied apply price deflation for all items of private consumption expenditure. The Netherlands uses price deflation in almost all cases, and the Federal Republic of Germany and Sweden deflate 60 per cent of the total by means of price indexes. Price deflation of private final consumption expenditure is also widely used by Norway.

102. At the other extreme, Austria, Ireland and Panama apply extrapolation of base-year values by quantity indexes or value current quantities at base-year prices. Sierra Leone deflates imported goods by the unit value index of imports while domestically produced goods are extrapolated by quantity indexes.

103. Indicators of quantity are used by many countries in the case of food, beverages and tobacco and in the case of fuels, because relevant and reliable quantity series can be collected relatively easily. For most other items, deflation by price indexes is much more prevalent than extrapolation by quantity indexes.

(b) Government final consumption expenditure

104. Price data are also used much more frequently than quantity data as indicators for constant-price estimates of the value of commodities which enter into government final consumption expenditure. Series of wage and salary rates are often used to deflate the remuneration of government employees. In other instances, particularly in the case of education and health services, the numbers of employees or man-hours worked are used in order to extrapolate base-year wages and salaries. Components of the wholesale price index or specially constructed price indexes are in most cases used to deflate purchases of other goods and services.

(c) Increase in stocks

105. Because of the lack of data on the quantity of various commodities held in stock, price series are generally used in estimating changes in stocks at constant as well as at current prices. The price indexes used are in most cases based on

the material collected for the wholesale and retail price indexes. In the case of Canada, the price series chosen are weighted in the case of manufacturing by the estimated commodity content of the stocks built up, based on information on the type of materials purchased and the destination of the products. Sales classified by type of business are used as weights in the case of trade. For other industries, the estimated commodity groups used as weights are based on data collected from various sources. On the basis of assumptions made with regard to turnover periods and accounting methods, the deflators for the book values of stocks cover varying time periods. In the case of the United Kingdom, the commodity composition of stocks and the average length of time the commodities remain in stock are estimated from censuses of production or other sources and appropriate price indexes are selected on the assumption that book values are the lowest of cost and market prices.

(d) Gross fixed capital formation

106. Except in the case of residential and non-residential construction, where extrapolation by quantity indexes is applied in some cases, price deflation is used almost generally for estimates of gross fixed capital formation at constant prices classified by type of capital goods and by kind of economic activity. Price indexes relating to gross output are applied in most cases, but in a few instances, such as complex machinery and equipment, price indexes for representative inputs are used. The estimates are often made in considerable detail.

(e) Exports and imports

107. Price deflation is used much more frequently than extrapolation by quantity indexes in the case of exports and imports of merchandise. The following procedure is used in most cases: (i) base-weighted quantum indexes are compiled for a selection of exported and imported commodities; (ii) current-weighted unit-value indexes for these commodities are derived by dividing the quantum indexes into index numbers of their current value; and (iii) the resulting unit-value indexes are used in deflating the total values of exports and imports. A few countries extrapolate the base-year figures by indicators obtained by valuing current quanta of exports and imports at base-year prices.

108. A number of developing countries also apply the indexes used for merchandise exports and imports for their estimates of exports and imports of other goods and services at constant prices. Most developed countries, however, make separate estimates for the various components of exports and imports of other goods and services by means of price and quantity indexes developed specially for the purpose. In particular, freight receipts and outlays are often estimated in considerable detail. In some cases, the figures for gross output at constant prices of freight and transportation services relating to the rest of the world are carried over from the corresponding estimates of the gross output of the transportation industry.

2. Countries using the MPS

109. Final private consumption expenditure on purchased commodities is deflated by price indexes in all MPS countries except Yugoslavia where valuation of current

quantities at base-year prices is used. Consumption from own production is in all countries estimated at constant prices by valuing current quantities at base-year prices.

110. Price deflation is generally used in the case of other final consumption expenditure and net fixed capital formulation. Extrapolation by quantity indexes is used for net exports by some of the countries. 7/

7/ No information was available to the Statistical Office on the methods used in estimating losses and increases in stocks at constant prices.

V. QUALITY CHANGES AND NEW PRODUCTS

111. Constant-price estimates are free of distortions only in cases where the specifications of goods and services to which the price and quantity indicators used in making the estimates remain unchanged. In practice, however, gradual changes occur constantly in the characteristics of the commodities on which the indicators are based. In most cases these changes are minor, as for instance small modifications in style, improved packaging or improved conditions of purchase or delivery. Such minor changes are generally disregarded by countries in their constant-price estimates.

112. However, serious problems of comparability arise where there are abrupt shifts between different varieties of the same product, where an old product is replaced by a new one with improved technological characteristics, or where entirely new products appear. The appearance of new products is particularly prevalent among highly processed commodities, and chemical and pharmaceutical goods. Particular difficulties arise in identifying and measuring quality changes in the case of complex goods.

113. Where price indexes are used and one series of quotations has to be substituted for another because a new product replaces an old one in the market. countries, in most cases, decide whether any difference in price is due to a pure quality change or to a pure price change. If it is decided that the difference in price between the new and the replaced transaction is due entirely to a difference in quality, the countries generally link the new series of price quotations to the old one. If the difference between the new and the old price is considered to represent a pure price change and there is little or no difference in quality between the new and the old product, the new price quotations are substituted for the old.

114. The most difficult case arises when it is clear that the difference in price between a new and an old variety of a commodity is due partly to a pure price change and partly to a change in quality. The difference in economic worth or quality is in this case most easily determined as the difference in the relative market value of the two varieties. This, of course, requires the variants to be in fact available on the market at the same time.

115. However, it frequently happens that relative market prices for the two products are not available because the quality changes occur abruptly. Where any other method of adjusting for quality changes is too difficult to carry through, countries often resort to substitution or splicing in these cases also. This is appropriate only if the available information suggests that more elaborate estimating techniques would not yield substantially better results than the substitution or linkage. Where completely new products appear, which did not exist in the base year, the new price series are linked to series for products with approximately similar characteristics.

116. In some cases, however, countries explore or use quantitative methods in allowing for quality changes. These methods consist of isolating physical or other

characteristics of the new and old items with which their economic worth can be expected to be correlated and evaluating the quality changes from the relative magnitudes of these pertinent characteristics.

117. This approach has been used most frequently when a simple linear relationship can be expected between economic worth and a single, measurable characteristic of the two items. Examples are the weight of chocolate bars, bread or soap, the metal content per unit of ore, the alcohol content of beer, or the fat content of milk. In the USSR, this technique has also been applied to operating characteristics when introducing new items into price series, as for instance price or cost per unit of energy content in the case of peat or wood, or per unit of power that can be generated in the case of turbines, electric generators or steam boilers.

118. Sometimes, countries collect information from producers on the cost of adding new components to a product, which, for instance, change its performance because of an increase in the horsepower available, and use the cost of the addition as a measure of the economic worth of the change in the product, i.e., as a measure of the quality change.

119. The use of quantitative relationships between physical and operating characteristics and economic worth can be extended to much more complicated situations than those mentioned above. In these cases, the relationship between the price of the product and a number of relevant characteristics is determined by means of regression. Specific models are then priced based on the regression obtained; the characteristics of these models are kept constant over time. Countries which have used this method are the Federal Republic of Germany (passenger cars and compressors movable by road), France (refrigerators and washing amachines), Sweden (ships and residential buildings), United States (various types of construction). In other cases, prices are collected directly for important components of standardized models, and are weighted and combined into price indexes in terms of these models.

120. The Federal Republic of Germany based the analysis for compressors movable by road on 131 observations (variants of products). As independent numerical variables, quantity of air delivered per minute and continuous engine performance were used. The following variables were also considered: (i) screw compression, (ii) number of compression stages, (iii) type of compressor cooling, (iv) type of engine, (v) type of engine cooling, (vi) multivoltage engine, (vii) soundproofing, (viii) centrifugal clutch, (ix) infinitely variable speed regulation, (x) running-time metre, (xi) over-running brake. The equation obtained included only the more significant of these variables, and the coefficient of multiple regression was 0.99.

121. It has generally been found that a sufficiently reliable relation between the market price of a commodity and its quality characteristics can normally be expected only with regard to characteristics of products which have already been introduced on the market. If a product is given an entirely new characteristic, the method of multiple regression will not succeed. Also some commodity characteristics which are important for the level of the price are very difficult to quantify. This applies for instance to the simplicity of operation of a device, its handiness, and the prestige or status value of a commodity.

VI. INDEX NUMBER FORMULA AND WEIGHT BASE

A. Countries using the SNA

122. The available information shows that SNA countries in principle use the Laspeyres index number formula when constant-price estimates are obtained by means of extrapolation by quantity indexes, while the Paasche formula is used for the construction of price indexes.

123. In practice, however, the available price indexes are frequently based on the Laspeyres formula. Several countries therefore arrive at indicators of quantities by deflating current-price values for representative components of the series to be estimated at constant prices by the available Laspeyres-type price indexes. Price index numbers of the Paasche type are then obtained by dividing current-year values by base-year weighted quantity index numbers derived by aggregating the index numbers for the various components. In order to avoid significant distortions in the weights of the derived Laspeyres quantity indexes and Paasche price indexes, it is essential to use original Laspeyres price indexes which relate to very detailed categories of commodities.

124. The weights used in constructing constant-price series always in principle cover the total flow to which the data refer. The end result is arrived at by successive stages of aggregation, and the weights used at each stage should represent the corresponding component flow. It is also essential for the indicators used, particularly at the early stage of the work, to be truly representative of the component flows and for the estimates to be carried through in great detail. It is clear from the analysis of country practices that, because of lack of data, many countries have not been able to make their estimates in as great detail as may have been desired.

125. The weight-base year used of course affects the national accounts flows at constant prices. The base year chosen should be one in which relatively normal conditions prevailed and should not be too distant from the current year. The relative prices as well as the composition of the flows will change considerably over time, particularly in periods of rapid over-all price change. Since the relative prices of new products to old products often decline as the output of the new product grows, Laspeyres quantity indexes tend to overstate the increases when an old base year is used. Correspondingly, Paasche price indexes will overstate the decline in prices when the comparison years are far apart. It is therefore advisable to change the base year at about five-year intervals. However, most of the countries studied still use weight-base years which are 10 years or more in the past in the case of Laspeyres-type indexes.

126. In view of the above considerations, chain indexes with moving weight-base years have obvious advantages. Among the countries studied, France, Italy, Ireland and Sweden apply this procedure. The amount of data needed to shift the base year annually is considerable and the work involved is great. It is also difficult to interpret the chained series because of the mixture of weights used. However, direct comparison between years with different weight-bases in the case of chain

indexes may be less misleading than comparisons between years distant from the base where the Paasche formula is used.

B. Countries using the MPS

127. In the case of the MPS countries also, the Laspeyres index is in virtually general use in the case of quantity indexes and the Paasche index in the case of price indexes. In Czechoslovakia, all price indexes are compiled according to the Laspeyres formula, and these indexes are also used for deflation purposes. In principle, this leads to Paasche quantity indexes, but since the deflation is undertaken by very detailed categories, the over-all quantity indexes obtained approximate quite closely to over-all Laspeyres quantity indexes.

128. In all MPS countries some aggregates are estimated at constant prices by means of chained price indexes, using moving weights from year to year. This is, for instance, the case with consumption by the population or at least with the part of this consumption which is purchased. Since the chained indexes are applied on the expenditure side only, this causes some discrepancies between the production and expenditure sides. These differences are not considered important, however, since it is assumed that chained indexes with moving weights approximate sufficiently well to indexes with fixed weights.

129. New constant-price series are introduced at intervals of 5 or 10 years in MPS countries. Changes in the weight base year may be connected with the periodicity of the long-term plan or with the extent of the price changes. When new constant-price series are introduced, comparability with old constant-price series is usually obtained by chaining the indexes.

ANNEX

Table 1. National accounts series at constant prices compiled by countries

Country	Gross domestic product by kind of economic activity			Gross domestic product by type of expenditure	Private final consumption expenditure by object	Gross fixed capital formation in purchasers' values		Increase in stocks		Consumption of fixed capital	Present base weight year	Correlative price index numbers for gross domestic product by type of expenditure
	In producers' values	In approximate factor values	In approximate basic values	In purchasers' values	In purchasers' values	By type of capital goods	By kind of economic activity	By type of capital goods	By kind of economic activity			
I. Countries using the SNA												
A. Developed countries												
Australia				X	X	X			X		1966	
Austria 2/	X			X	X	X			X	X	1964	X
Belgium 2/	X			X	X	X	X	X			1963	X
Canada		X		X	X	X			X		1961	X
Denmark		X		X	X	X	X		X		1963	X
Finland 2/		X		X	X	X	X	X			1964	X
France 2/	X			X	X	X	X	X			1963 3/	X
Germany, Fed. Rep. of 2/	X			X	X	X		X		X	1963	X
Greece 2/		X		X	X	X	X	X			1958	X
Ireland 2/		X		X	X	X	X	X			1963	X
Israel 2/				X	X	X			X		1964	X
Italy 2/		X	X	X	X	X	X	X		X	1963	X
Japan 2/				X	X	X			X		1965	X
Luxembourg 2/		X		X	X	X		X			1963	X
Netherlands	X			X	X	X	X	X		X	1963	X
Norway	X		X	X	X	X	X	X		X	1963	X
Portugal 2/		X		X	X	X		X			1963	X
South Africa				X	X	X		X			1963	X
Sweden	X			X	X	X	X	X			1968 3/	X
United Kingdom		X		X	X	X	X		X		1963	X
United States	X			X	X	X			X		1963	X
B. Developing countries												
Argentina 2/		X		X		X		X			1960	X
Bolivia 2/	X			X		X	X	X			1968	X
Chile 2/	X			X	X	X		X			1965	X
Colombia 2/	X			X		X		X			1958	X
Ghana	X			X		X		X			1960	X
Guatemala 2/	X			X		X		X			1958	X
Honduras 2/	X			X	X	X		X			1966	X
India 2/		X				X		X			1960	
Indonesia 2/	X			X		X					1960	X

Table 1. National accounts series at constant prices compiled by countries 1/ (continued)

Country	Gross domestic product by kind of domestic activity			Gross domestic product by type of expenditure	Private final consumption expenditure by object	Gross fixed capital formation in purchasers' values		Increase in stocks		Consumption of fixed capital	Present base weight year	Correlative price index numbers for gross domestic product by type of expenditure
	In producers' values	In approximate factor values	In approximate basic values	In purchasers' values	In purchasers' values	By type of capital goods	By kind of economic activity	By type of capital goods	By kind of economic activity			
I. Countries using the SNA (continued)												
B. Developing countries (continued)												
Korea, Republic of 2/	X			X	X	X	X		X		1970	X
Malaysia 2/		X		X	X	X		X			1964	X
Malawi 2/				X		X		X			1970	
Mexico 2/	X			X		X	X	X			1960	X
Panama 2/		X		X	X	X		X			1960	X
Philippines 2/		X		X		X		X		X	1967	X
Sierra Leone 2/	X					X		X			1963	
Sri Lanka 2/		X		X	X	X					1963	X
Syrian Arab Republic 2/	X			X		X	X				1963	X
Turkey 2/		X									1961	
Uganda		X									1966	
Uruguay 2/		X		X		X		X			1961	
Venezuela	X			X	X		X				1957	X

Country	National income by kind of economic activity		National income by social sectors	Personal (material) consumption of population	Total consumption of population	Net fixed capital formation		Increase in stocks		Losses	Net exports	Statistical discrepancies	Present constant prices
	In producers' values	In producers' values excluding turnover taxes				By type of capital goods	By kind of economic activity	By type of capital goods	By kind of economic activity				
II. Countries using the MPS													
Bulgaria	X	X	X	X	X	X	X		X	X	X	X	1971
Czechoslovakia	X		X	X		X	X		X	X	X		1967
German Democratic Rep.	X			X			X		X	X	X	X	1967
Hungary	X		X 4/	X	X	X	X		X		X	X	1968
Poland	X		X 4/	X	X	X 5/	X	X	X	X 6/	X	X 7/	1971
Romania	X		X	X	X	X	X		X				1963
USSR	X		X	X	X	X	X		X	X	X		1965
Yugoslavia	X		X	X		X	X		X	X	X		1966

1/ The table is based on information that was available to the Statistical Office of the United Nations when the table was prepared.

2/ The estimates are shown in terms of the former SNA.

3/ Also each year's estimates expressed in previous year's prices.

4/ Partial breakdown only.

5/ Gross fixed capital formation only.

6/ Including statistical discrepancies.

7/ Including losses.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1/]

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
I. Countries using the SNA			
A. Developed countries			
Austria			
General approach	Double deflation.		No separate estimate available.
Detailed method and/or indicator used	Output: Current quantities valued at average base-year prices. Input: Price indexes available for deflation by component. Resulting volume indexes weighted together by means of the shares of each component in total expenditure on inputs in base year.		
Belgium			
General approach	Double deflation.	Price deflation of value added.	Value added extrapolated by quantum index for output.
Detailed method and/or indicator used	Output: Where information on quantities is available, current quantities valued at average base-year prices. Otherwise, current values deflated by representative price indexes. Input: Same as for output.	Current value added deflated by wholesale price index for timber.	Value added of base-year extrapolated by index for total quantities of fish landed in Belgian ports.
Canada			
General approach	No single typical approach for all components.	No single typical approach for all components.	Value added extrapolated by a volume index of output.
Detailed method and/or indicator used	Agriculture: Double deflation. Output: Detailed quantities of marketed farm products, inventory change and income in kind are combined by using base-year unit values. Input: Selected input items such as fertilizers, feed, machinery expenses, spare parts, insecticides, etc. are deflated by appropriate price indexes. Sources incidental to agriculture (including veterinary services): Value added extrapolated by volume index for output. Value added in base-year is assumed to move with the output of agriculture. Hunting and trapping: Value added extrapolated by volume index for output. The number of wildlife pelts, by type, are weighted with base-year unit values.	Logging: Double deflation. Output: Quantities of principal products are valued at base-year unit values. Input: Quantities of some inputs are valued at base-year unit values. Other inputs are deflated by special price indexes of selected inputs. Forestry services: Value added extrapolated by volume index for output. Output is assumed to move with the output of logging.	Fishing: Quantities of sea and inland fish landed are combined using base-year unit values. Direct marketing and other revenues of fishermen are assumed to move with the above. Fishery services: Value added extrapolated by volume index for fishing. Output is assumed to move with the output of fishing.
Denmark			
General approach	Double deflation.	Value added extrapolated by quantum index for output.	Double deflation
Detailed method and/or indicator used	Agriculture: Output: Current quantities valued at base-year prices of 1963/64. Input: Same as for output. Hunting: Output: Estimated output in current prices deflated by agricultural meat price index. Input: Input-output ratio in 1953 kept constant.	No further detail available	Output: Base-year output extrapolated by quantum index based on quantities of fish landed. Input: Current values deflated by specially constructed price index from wholesale and raw material price indexes.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
I. Countries using the SNA (continued)			
A. Developed countries (continued)			
Finland			
General approach	Double deflation.	Value added extrapolated by quantum index for output.	Value added extrapolated by quantum index for output.
Detailed method and/or indicator used	Output: Quantities valued at base-year prices Input: Quantities of commodities used for intermediate consumption valued at base-year prices and weighted by base-year values.	Wood cut: Volume index estimated by weighting together quantities of each type of wood cut by the corresponding costs in the base-year (price of standing timber plus cutting and transport costs). Floatation: Volume index based on quantities of wood floated. The indexes for wood cut and for floatation are weighted together by means of value added in the base-year.	Value added of base-year extrapolated by volume index obtained by valuing each type of fish caught at base-year prices and weighting the results by base-year values.
France			
General approach	Double deflation and commodity flow method based on annual input-output tables. The procedure is to calculate the estimates at the prices of the preceding year by deflating the current value series by price indexes with the preceding year as base. The constant price estimates thus obtained are subsequently converted to the prices of a fixed base year by a process of chaining. The outputs and inputs of individual industries are in most cases estimated at constant prices by means of price indicators, but in some cases, quantity indicators are used. Exception from the general method are indicated under the relevant industry. In the case of agriculture, forestry and fishing, estimates at previous year's prices are estimated by applying quantity indexes to the values of the previous year.		
Germany, Federal Republic of			
General approach	Double deflation.	Value added extrapolated by quantum index for output.	Value added extrapolated by quantum index for output.
Detailed method and/or indicator used	Output: Where information on quantities is available, current quantities are valued at base-year prices. Otherwise current values deflated by relevant index of producer prices. Input: Current values deflated by base-weighted index for purchase prices of agricultural inputs.	Current quantities at base-year prices and weighting by base-year output values.	Indicator obtained by valuing current quantities at base-year prices and weighting by base-year output values.
Greece			
General approach	Double deflation.		
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices. Input: Same as for output.	Output: Current quantities valued at base-year. Input: Same as for output.	Output: Current quantities valued at base-year. Input: Same as for output.
Ireland			
General approach	Double deflation.	Information not available.	Information not available.
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices and weighted by base-year output values. Input: Method not indicated.		
Italy			
General approach	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Each product for which price and quantity data are available valued at base-year prices. Production of flowers extrapolated by appropriate quantity indicators. Input: Quantities of fertilizers, pesticides, seed, fodder and fuel, valued at base year prices. Other item extrapolated by appropriate quantity indicators. For instance, irrigated area was used for irrigation costs, and an average of gross output and quantities of selected inputs for various transportation expenditures.	Output: Wood and other products from forestry proper valued at base-year prices. Wood products originating from agricultural production extrapolated by appropriate quantity indicators. Input: Extrapolated by appropriate quantity indexes.	Output: Current quantities valued at base-year prices and weighted by base-year output values. Input: Extrapolated by quantum indicator based on gross output and selected inputs and weighted by base-year input values.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
	I. Countries using the SNA (continued)		
	A. Developed countries (continued)		
Luxembourg			
General approach	Value added extrapolated by quantity index for output.		
Detailed method and/or indicator used	The quantity index is obtained by deflating current value series by relevant price indexes.		
Netherlands			
General approach	Double deflation.	Value added extrapolated by quantum index for output.	Value added extrapolated by quantity indicators.
Detailed method and/or indicator used	Output: Where information on quantities is available, current quantities valued at average base-year prices. Otherwise, current values deflated by rspresentative price indexes. Weighted by base-year output values. Input: Some important input categories are obtained by valuing quantities at base-year prices. Part of inputs (especially of services) deflated by representative price index.	Current quantities of output are in most cases valued at average base-year prices. Otherwise, current values deflated by representative price indexes.	Quantities of output weighted by base-year output values used as indicators.
Norway			
General approach	Double deflation and commodity flow approach to constant-price estimates employed within the framework of detailed annual input-output tables. The input-output tables which distinguish 1900 groups of commodities, 160 domestic industries, 30 producers of government services and 230 categories of final use, are arranged as industry x commodity, commodity x industry tables. Current year approximate basic values are deflated by appropriate price indexes. The price indexes used are partly unit value indexes based on domestic production and foreign trade statistics, partly price indexes based on price series calculated for wholesale and retail price indexes and from other sources, and partly implicit price indexes. On the expenditure side, two price indexes are constructed for each commodity, one relating to domestic deliveries regardless of use and one relating to exports. Exceptions from the general method, and the indicators used in deflating output from each industry are shown under the relevant industry heading.		
Detailed method and/or indicator used	Output: Crop and livestock products for sale and consumption on farms not specially mentioned below: Current quantities valued at base-year unit values. Changes in stocks of feeding stuffs: Deflated by an index based on average price of a feed unit of concentrated feed. Flowers: Deflated by consumer price index. Income from transportation services: Deflated by an index based on price per cubic metre of timber hauled. Own-account labour input: Deflated by an index based on earnings of farm-hands. Game killed: Deflated by an index based on price per kilogram of reindeer meat.	Output: Forest products for sale or consumed on farms and change in stocks of timber and wood in forests: Current quantities valued at base-year unit values. Own-account labour input: Deflated by wage index for men in forestry and logging.	Output: Sealing, whaling, registered landed fish, not registered fish for sale and for own use, coastal tramp trade by fishermen: Current quantities valued at base-year unit values.
Portugal			
General approach	Double deflation.		Double deflation.
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices.		Output: Current quantities of cod and other fish valued at average base-year prices.
	Input: Current quantities valued at base-year prices		Input: Same percentage applied as for the estimates at current prices.
Sweden			
General approach	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices. Input: Deflated by index of wholesale prices for fuel and agricultural commodity inputs. Transports and unspecified services deflated by specially constructed price index.	Output: Current quantities valued at base-year prices. Input: Deflated by index of wholesale prices for fuel.	Output: Current quantities valued at base-year prices. Input: Deflated by relevant series from wholesale price index.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1/] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
	I. Countries using the SNA (continued)		
	A. Developed countries (continued)		
United Kingdom			
General approach	Double deflation. Quality changes taken into account by using separate grades of products, and seasonal weights, where appropriate. The base is the average, of June-May of the years 1968/69 to 1971/72. Calendar year estimates obtained by taking a weighted mean of five twelfths, respectively, seven twelfths, of two consecutive crop years.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	Output: Quantities valued at base year average farm gate prices, inclusive of commodity subsidies. Other current subsidies (including fertilizer and lime subsidies) revalued at base-year rates. Change in work in progress estimated at constant prices by using livestock numbers and acreage of crops and grass as indicators. Base-year values used as weights. Input: Quantities of feed, seed, imported livestock and fertilizers valued at pre-subsidy base-year prices. Maintenance work on farms and buildings deflated by index of labour and building costs. Current quantities of other non-factor inputs valued at base-year prices. Constant price estimates of changes in stocks of purchased, but not used, feeding stuff and fertilizers are added, valued net of subsidies.	Care and planting of woodlands extrapolated by acreage of forests and of areas planted, respectively. Tree felling extrapolated by quantities of selected types of wood produced.	Weighted total landings of British taking of different types of fish used as indicator.
United States			
General approach	Double deflation.	Value added extrapolated by employment.	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	Output: Gross receipts, consisting of mainly cash receipts from farm marketings, deflated by index of prices received by farmers from crops and livestock. Farm home consumption, gross rental value of farm homes and net change in inventories deflated in great detail by appropriate indexes of prices received or paid by farmers. Input: Purchases of feed and livestock, seed, fertilizers, cost of operation of motor vehicles, cost of irrigation, purchases of other items and gross rents paid to non-farm landlords deflated by appropriate indexes for individual items of expenses from index of prices paid by farmers.	No further detail available.	Price-weighted index of quantity of catch of principal species of fish used as indicator.
	B. Developing countries		
Argentina			
General approach	Value added of agriculture, forestry and fishing extrapolated by quantity index for output.		
Detailed method and/or indicator used	The index is based on indicators for about 220 individual products covering 85 products of crop farming, 43 of stock farming and 92 of fishing and hunting. The weighting patterns used for combining group indexes into broader classes of activity are based on the values added in 1960.		
Bolivia			
General approach	Value added extrapolated by quantity index for output	Value added extrapolated by quantity index for exports.	Value added extrapolated by quantity index for quantities consumed.
Detailed method and/or indicator used	The quantum index is based on indicators for 27 products of crop farming and 16 products of livestock farming, covering approximataly 90 to 95 per cent of total production value.	The quantum index is based on indicators for 20 products.	The index is based on one quantum indicator.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
I. Countries using the SNA (continued)			
B. Developing countries (continued)			
Chile			
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	The quantity index is based on indicators for 75 products of crop farming, and 13 products of livestock farming, covering approximately 90 per cent of the gross value of production.	The index is based on indicators for 14 products.	The index is based on 27 indicators for individual products.
Colombia			
General approach	Value added of agriculture, forestry and logging, and fishing extrapolated by quantity index for output.		
Detailed method and/or indicator used	The index covers 100 per cent of gross value of production in 1958.		
Ghana			
General approach	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Current quantities rev lued at base-year prices, except in the case of cocoa for which the gross mark-up per ton in the base-year was used in conjunction with the quantitiss marketed in other years to estimate the gross output.	Output: Production of major forest products, i.e., industrial wood, firewood and charcoal valued at base-year prices. In the case of minor forest products, current price estimates deflated by the weighted indexes of the prices of the major forest products.	Output: Quantities of fish caught valued at base-year prices.
	Input: Base-year figures kept constant.	Input: Base-year figuree kept constant. Depreciation at current prices deflated by index of prices of imported machinery and equipment.	Input: Current estimates of intermediste consumption and depreciation deflated by index of machinery and equipment.
Guatemala			
General approach	No single typical approach for all components.	Value added extrapolated by quantity index for output.	Value added extrapolsted by quantity index for output.
Detailed method and/or indicator used	Fruits consumed locally extrapolated by quantity consumed. Other items: Value added extrapolated by quantity index for output based on indicators for 78 products of crop farming, 10 products of livestock farming and one product of hunting.	The index is based on quantum indicators for 10 forestry products.	The index is based on one quantum indicator.
Honduras			
General approach	Value added of agriculture, forestry and fishing extrapolated by quantity index for output.		
Detailed method and/or indicator used	The index covers 100 per cent of value added in 1948.		
India			
General approach	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Agriculture: Estimated separately for agriculture and livestock production. In respect of agriculture, production of 68 agricultural commodities valued at wholesale prices during the respective base-year harvest periods. In respect of livestock production, estimates for 35 livestock products were made by adjusting varying reference periods to each year of estimation by using a linear method of projection. Average wholesale prices were used for evaluation of output of livestock products.	Output: Major forest products such as industrial and fuel wood are valued st wholesale prices in the base-year. Minor forest products consisting of heterogeneous items such as bamboos, sanded wood etc.: Value of output at current prices deflated by specially constructed indexes of wholesale prices of major forest products.	Output: Quantities of marine fish, inland water fish and subsistence fish caught revalued at the corresponding base-year prices. Value added by fish curing and the net product from collection of pearls, chanks, oysters, etc. extrapolsted by indicator relating to quantity of fish cured for the former and the estimated number of workers engaged for the latter.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1/] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
	1. Countries using the SNA (continued)		
	B. Developing countries (continued)		
India (continued)			
Detailed method and/or indicator used	Input: Feed cost of non-service animals and cost of materials and allowance for depreciation charged to current expense deflated separately by the appropriate components of the wholesale price index in the base-year and weighted by the expenditures in the base-year. Output: Hunting: Quantity indicator estimated on the basis of a number of animals killed or caught by important species, adjustment for under-reporting being made on the basis of the number of hunters reported in 1961 population censuses. Quantities valued at base-year prices. Input: Arbitrary allowance of three per cent and two per cent of their gross value of output made for various operational costs and allowances for depreciation, respectively.	Input: Value of repairs, maintenance and operational costs and allowance for depreciation assumed to be four per cent and one per cent of gross output, respectively.	Input: Base-year cost ratios kept constant.
Indonesia			
General approach	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Farm food crops Output: Quantities produced of each crop valued at 1960 prices. Input: Seed inputs for paddy production estimated by valuing current quantities at 1960 prices. For seed inputs into other food crop productions, the same input-output ratios as for the current estimates are used. Current quantities of fertilizers are revalued at 1960 prices. For other input into food crop production, the same input-output ratios are used as for the current estimates. Commercial crops and estate crops Output: Quantities of commodities produced valued at 1960 prices for each sub-sector. Input: Quantities of fertilizers used valued at 1960 prices for each sub-sector. For seed and other inputs, the same input-output ratios as for the current estimates are used. Livestock Output: Quantities of commodities produced valued at 1960 prices. Input: The same input-output ratios as for current estimates are used.	Output: Quantities of commodities produced valued at 1960 prices. Input: For the period 1960 through 1967, intermediate consumption has been estimated at 17.8 per cent of the constant price value for recorded output and 13.2 per cent for unrecorded output. The former percentage was based on the profit and loss accounts of government forestry authorities, and the latter on a special survey. For 1968 and 1969, 23.5 per cent, and for 1970 and 1971, 24.3 per cent were used for total output at constant prices. These percentages were estimated on the basis of the profit and loss accounts of the government forestry authorities.	Output: Quantities of commodities produced estimated at 1960 prices. Input: The same input-output ratios as for current estimates are used.
Korea, Republic of			
General approach	Double deflation.	Double deflation.	
Detailed method and/or indicator used	Output: Where information on quantities is available, current quantities revalued at base-year prices. Irrigation services and agricultural co-operative services. Current values deflated by representative price indexes. Input: Similar method as for output.	Output: Current quantities revalued at base-year prices. Input: Outputs valued at base-year prices multiplied by the ratios of value added to outputs in the base-year. This method is used because current data on inputs are not easily available. The ratios are derived from input-output tables, analysis of business accounts or sample surveys. The ratios are usually obtained at the level of major groups.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1/] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
	I. Countries using the SNA (continued)		
	B. Developing countries (continued)		
Malaysia			
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantum index for output.	Value added extrapolated by quantum index for output.
Detailed method and/or indicator used	Combined trend in paddy production and the acreage series for such crops as fruits, vegetables, spices etc. used as indicator. Rubber planting: Extrapolated by index of rubber production. Oil-palm estates: Palm oil and palm kernel production, combined with base-year weights, used as indicator. Coconut estates in small holding: Extrapolated by quantity of copra produced. Tea estates: Extrapolated by quantity of tea leaves produced. Livestock production: Extrapolated by quantity of meat production weighted with base-year weights.	The quantity index used is a weighted index of the production of round timber, charcoal and firewood.	Quantity of fish landed used as indicator.
Mexico			
General approach	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Crop production: Output: The value of gross output according to the input-output table of 1960 extrapolated by means of a base weighted production index. Indicators for 75 principal products are weighted by quantities produced in the base-year. The index covers 96 par cent of the average production value during the period 1960-1970. Input: The intermediate consumption of 1960 is extrapolated by quantity indexes for the principal components, namely fertilizers, insecticides, seed, fodder, fuel and lubricants, containers, irrigation services, electricity, and maintenance and repairs. Livestock production: Output: A base weighted production index, which covers 96 par cent of gross output is obtained on the basis of data on livestock slaughtered for domestic production and exports, exports of live animals, and changes in stocks. The data cover cattle, pigs, goats and sheep. The output of milk and eggs is estimated on the basis of changes in stocks of dairy cattle and hens, with an adjustment for changes in productivity. Input: The intermediate consumption of 1960 is extrapolated by a volume index of the supply of the principal commodities used. This includes imports of medicines, fodder, parasiticides, etc., and domestic supply of fodder produced by agriculture.	Output: Extrapolated on the basis of information on quantities produced of 22 forestry products are divided into two groups, i.e., timber products and other products. The former are classified into 10 groups according to their degree of processing. Non-timber products are classified into 12 groups according to their type and to some extent according to their degree of processing. Input: For lack of other information, the input-output coefficients of 1960 are maintained constant.	Output: Extrapolated by quantity index based on 27 marine products, which cover practically the total output of the industry. Input: For lack of other information, the input-output coefficients of 1960 are maintained constant.
Panama			
General approach	No single typical approach for all components of agriculture, forestry and fishing.		
Detailed method and/or indicator used	Crop farming for domestic consumption, forestry, stock farming and fishing: Base-year estimates extrapolated by quantity indexes of output. Agricultural export commodities (bananas and cocoa): Current values deflated by indexes of export prices.		
Philippines			
General approach	No single typical approach for all components.	Price deflation of value added.	Current quantities revalued at base-year value added per unit volume.
Detailed method and/or indicator used	Current quantities of 21 items of crops valued at value added per unit volume in 1955. Current estimate of livestock and poultry are deflated by retail price index for meat. Aggregate of deflated value added in agriculture is reduced by a depreciation allowance of 2.66 per cent and remittances abroad to obtain the net value added in agriculture at 1955 price.	Current estimates deflated by composite wholesale price index weighted by the volume of timber and lumber production in 1955.	Separate estimates made for commercial, fish-pond and subsistence fishing.
Sierra Leone			
General approach	Double deflation used in the case of each component of agriculture, forestry and fishing.		
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices of 1960-64. Input: Input-output ratios in 1963-64 kept constant.		

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
I. Countries using the SNA (continued)			
B. Developing countries (continued)			
Sri Lanka			
General approach	No single typical approach for all components.	Price deflation of value added.	Information not available.
Detailed method and/or indicator used	Tea, rubber, coconuts, paddy and highland crops: Value added extrapolated by quantity index of output. Vegetables and fruits, betel and arecanuts: Current estimate deflated by appropriate group indexes of the Colombo consumer price index. Livestock: Current price estimate deflated by composite price index.	Current estimates deflated by respective component group indexes of the Colombo consumer price index.	
Syrian Arab Republic			
General approach	Double deflation		
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices of 1963. Input: Based on a number of studies conducted by various government bodies concerning the cost of agricultural production.	Value added extrapolated by quantity index for output. No further detail available.	Value added extrapolated by quantity index for output. No further detail available.
Turkey			
General approach	Double deflation	Price deflation of value added.	Price deflation of value added.
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices. Input: Mostly current quantities valued at base-year prices. For a small part of inputs, current values are deflated by the wholesale index.	Value added at current prices deflated by production price index for forestry and logging.	Value added at current prices deflated by production price index for fishing.
Uganda			
General approach	Double deflation used in the case of all components of agriculture, hunting, forestry and fishing.		
Detailed method and/or indicator used	Output: Extrapolated by means of relevant quantity indicators. Input: Extrapolated by means of relevant quantity indicators wherever possible. Inputs of items for which quantities are not available, have been deflated by appropriate price indexes.		
Uruguay			
General approach	Double deflation used in the case of all components of agriculture, forestry and fishing.		
Detailed method and/or indicator used	Output: Base-year estimates extrapolated by quantity indexes of production. The indexes cover 100 per cent of gross value of production. The weighting patterns used are based on value added in 1961. Input: Method not indicated.		
Venezuala			
General approach	Value added extrapolated by quantity indexes for output in the case of all components of agriculture, forestry and fishing.		
Detailed method and/or indicator used	Value added of base-year extrapolated by quantity indexes obtained by revaluing each product at base-year prices.		
II. Countries using the MPS			
Bulgaria			
General approach	Double deflation.	Double deflation.	
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices, except in some cases where price deflation is used. Material input: Deflated by price indexes.	Output: Current quantities valued at base-year prices. Material input: Deflated by price indexes.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity[1/] (continued)

Country and approach	1. Agriculture, forestry and fishing		
	1.1 Agriculture and hunting	1.2 Forestry and logging	1.3 Fishing
II. Countries using the MPS (continued)			
Czechoslovakia			
General approach	Double deflation.		
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices, except in the case of around 20 per cent of agricultural output which is deflated by price indexes. Material input: Deflated by price indexes.		
German Democratic Republic			
General approach	Double deflation.	Double deflation.	
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices, except in the case of around 25 per cent of agricultural output where current quantities are deflated by price indexes. Material input: Deflation by price indexes, or deduction of absolute amounts to account for price changes.	Output: Current quantities valued at base-year prices. Material input: Deflation by price indexes, or deduction of absolute amounts to account for price changes.	
Hungary			
General approach	Double deflation.	Double deflation.	
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices, except in the case of around two per cent of agricultural output where current quantities are deflated by price indexes. Material input: Deflated by price indexes.	Output: Current quantities valued at base-year prices. Material input: Deflated by price indexes.	
Poland			
General approach	Double deflation	Double deflation.	
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices, except in the case of around one per cent of agricultural production where current quantities are deflated by price indexes. Material input: Deflated by price indexes.	Output: Current quantities valued at base-year prices. Material input: Deflated by price indexes.	
Romania			
General approach	Double deflation.	Double deflation.	
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices, except in some cases where price deflation is used. Material input: Deflated by price indexes.	Output: Current quantities valued at base-year prices. Material input: Deflated by price indexes.	
Union of Soviet Socialist Republics			
General approach	Double deflation.	Double deflation.	
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices. Material input: Current quantities valued at base-year prices.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
		1. Countries using the SNA		
		A. Developed countries		
Austria				
General approach	Value added extrapolated by quantity index for output: Mining and quarrying and manufacturing (large scale).		Double deflation.	Value added extrapolated by material input index.
Detailed method and/or indicator used	The index of industrial production covering all establishments with six or more persons engaged, applied for mining and for most subgroups of large scale manufacturing. Crude petroleum and natural gas production, including refineries: Output and input extrapolated by volume indexes. Manufacture of transport equipment (excluding shipbuilding and repairing, and manufacture of railroad equipment) and manufacture of electrical machinery, apparatus, appliances and supply: Index of industrial production adjusted for secondary trading activities. For the steel industry change in the input of fuel is taken into account and value added of sawmills is extrapolated on the basis of data from other (unspecified) sources. Tobacco manufacturing: Deflation of gross output.	Manufacturing (small scale): Price deflation of value added. The price index is derived from price trends of similar large scale production and takes into account repair and secondary trading activities.	Output of electricity: Sale of current in kwh valued at average price per kwh in base-year. Input in electricity production: Important current and estimated repair and maintenance expenditures valued at base-year prices. Similar method used for gas and water supply.	Material input in calculated is calculated at base-year prices of supply of main categories of building materials, constant input-output ratios assumed.
Belgium				
General approach	Double deflation.	Large scale: Double deflation.	Double deflation.	Value added extrapolated by indicator of expenditure at constant prices.
Detailed method and/or indicator used	Output: For coal mining, current values deflated by wholesale price index. Other mining, not specified. Input: For coal mining, current values deflated by current weighted price index for a number of representative inputs. Other mining, not specified.	Output: Where current quantity data and base-year prices are available, direct valuation at base-year prices. Otherwise, deflation by representative price indexes. Input: Same as for output. In a few cases, value added extrapolated by indicator for gross output. Small scale: Value added per employed assumed to be the same as in corresponding group of large-scale manufacturing. Separate estimate made for small scale clothing industry only. Value added at constant prices obtained by multiplying the number of independent workers and helpers by value added per employed in large-scale textile and clothing industry.	Electricity: Output and input valued at average base-year prices. Input-output ratio in quantity terms in base-year assumed to have remained constant. Gas: Output as for electricity, input not specified. Water: Not specified.	Extrapolated by index of expenditures on new construction and major or minor repairs, at constant prices.
Canada				
General approach	Value added extrapolated by quantity index for output.	No single typical approach for all components but a large portion is measured by double deflation.	No single typical approach for all components.	No single typical approach for all components.
Detailed method and/or indicator used	Mines: For each mining industry, quantities of commodities produced are combined using base-year unit values. Services incidental to mining: Output is measured under contract drilling (see Construction).	The full range of commodity detail on output and inputs is deflated by industry selling price indexes or a variety of specially constructed price indexes. In some cases, outputs and inputs are valued at base-year unit values. For some industries producing unique goods such as aircraft, railway rolling stock and shipbuilding, where no selling price indexes exist, cost of production price indexes, based on material and labour costs, are used to deflate gross output values.	Electric power: Double deflation. Output: Revenue is deflated by specially constructed price indexes of average rates of domestic, commercial and industrial power service. Input: Fuel used is valued at base-year unit values. Gas distribution: Sales for commercial and industrial use are combined, on a regional basis, using base-year unit values. Water systems and other utilities: The industry is measured in total under producers of government services.	Construction: Residential contract construction is extrapolated by an index of labour adjusted for estimated productivity trends. Values of contract non-residential building and other engineering construction are deflated by cost of production price indexes based on material and labour costs. The values of highway construction and bridge construction are deflated by specially collected price indexes. Value of contract repair and maintenance is deflated by an implicit price index constructed from the above components. Contract drilling: Output is measured by footage drilled.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
Denmark				
General approach	No single typical approach for all components.	Value added extrapolated by the industriel production index.	Double deflation.	Double deflation.
Detailed method and/or indicator used	For salt mining, current values deflated by wholesale price index of salt. For peat and lignite production, value added extrapolated by quantum indicators.	The index relates to all establishments with six or more operatives. Value added weights are used in combining the production indexes for subgroups into groups and groups into total industry. For handicrafts, the sector is divided into about 160 activities and value added in each activity deflated separately by the use of wage and salary indexes, price indexes and quantity indexes. In the calculation of the subgroup indexes the current figures for value added are deflated by price indexes appropriate to the output of the subgroup (single deflation). The price material used is taken from the wholesale price index, supplemental in certain cases by unit values from foreign trade statistics.	Apart from power protection, quantity indicators are used in deflating output as well as input. However, as regards input, direct quantity data are only available for the more important parts of total input such as fuel and energy consumption, the quantity of power produced is arrived at by deflating the sales value by a sub-index of the consumer price index.	Buildings: Volume indicators estimated on the basis of the number of square metres of floor area are converted into values by means of standard cost per square metre in the base-year. Other construction: Estimates in current prices deflated by index of the development in costs, the cost index is calculated, first, by estimating the material consumption of building and construction in the base year from input-output tables. For the other years, input in constant prices is calculated as the same percentage of output in constant prices as in the base-year.
Finland				
General approach	Value added extrapolated by the industrial production index (manufacturing: large scale).		Included with mining and quarrying and manufacturing (large-scale) industry.	Building: Value added extrapolated by quantity index for output. Other construction: Double deflation.
Detailed method and/or indicator used	All industrial establishments employing five or more persons or the equivalent in terms of a combination of installed power equipment and employment are covered. Within each detailed group of industry (200 groups in all), output values are deflated by unit price indexes. The indexes are calculated for relatively homogeneous products. The unit price indexes for each product are weighted by the values of the products in the preceding year. The resulting volume indexes are weighted together by census value added for the detailed groups in order to arrive at volume indexes for major groups and the industry as a whole.	Manufacturing (small scale): Value added extrapolated by quantity index for output. Volume indexes for subgroups estimated by various methods: Output value deflated by implicit price index for large-scale industry as a whole; output extrapolated by volume index for corresponding group of large-scale industry, by employment data or by index for ralevant component of capital stock (bicycle repairs by number of bicycles, etc.). Statistics on work accidents and population statistics also applied.		Building: Volume index based on information on cubic metres of finished buildings and work in progress, separately for stone and wooden buildings and for eight building types within each of these categories (dwellings, agricultural buildings, industrial buildings, business buildings, schools, hospitals, other public buildings, other buildings). Other construction: Output deflated by a cost index obtained by weighting together price indexes for wages and salaries and for material inputs by means of input quantities in the base-year. Purchases from other industries deflated by representative price indexes, combined with weights obtained from input-output studies.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
France				
General approach	Double deflation and commodity flow method based on annual input-output tables. The procedure is to calculate the estimates at prices of the preceding year by deflating the current value series by price indexes with the preceding year as base. The constant price estimates thus obtained are subsequently converted to a fixed base-year by a process of chaining. The outputs and inputs of individual industries are in most cases estimated at constant prices by means of price indicators, but in some cases, quantity indicators are used. Exceptions from the general method are indicated under the relevant industry.			Extrapolated by applying a volume index based on value at current prices deflated by a specially estimated price index of construction costs.
Germany, Federal Republic of				
General approach	Double deflation.	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Deflated by index of producer prices for mining and quarrying re-weighted to current weights by means of production statistics. Inputs: Deflated by specially constructed price index.	Output: Deflated by index of producer prices for industrial products re-weighted to current weights by means of production statistics. For products and services of handicrafts not included in index of producer prices for industrial products, a special price index was applied based on individual series of available price statistics weighted by sales according to the statistics on sales tax. Input: Deflated by specially constructed price index.	Output: Deflated by index of base-weighted producer prices for electric power, gas and water re-weighted to current weights by means of production statistics. Inputs: Deflated by specially constructed price index.	Output: Deflated by available price index for dwelling construction. Estimate checked and supplemented by means of price indexes for various building material outputs weighted by their current share in sales. Input: Deflated by special price index based on individual series from index of producer prices of industrial products.
Greece				
General approach	Value added extrapolated by quantity indicators for output.	Price deflation of value added.	No single typical approach for all components.	Value added extrapolated by quantity indicators for output.
Detailed method and/or indicator used	The indicators are based on the index of industrial production. Supplementary information obtained from questionnaires completed by certain enterprises, which are not satisfactorily covered by the index of industrial production.	Value added deflated by price index of domestic manufacturing goods. The index is mainly based on the prices collected for the compilation of the wholesale price index. Other price sources are also used for cases which are not covered by the wholesale price index.	Electricity: Double deflation. Water: Extrapolated by indicators of gross output, i.e., the water sales, by kind of consumer, valued at the retail prices of the base-year.	The indicators are based on expenditure concerning construction and repairs, expressed at constant prices on the basis of specially constructed price indexes.
Iraland				
General approach	Value added extrapolated by the industrial production index.			Information not available.
Detailed method and/or indicator used	The index covere, in principle, all industrial establishments with three or more persons engaged. Value added weights are used in combining detailed industry groups and for combining these indexes into indexes for the broader categories of industrial activities. The indicators are mainly based on values of gross output adjusted for price changes. The weight base is a shifting one, but the indexes are chained back to the comparison base. The cross-weights used for calculating indexes for detailed industry groups and for combining these indexes into indexes for broader categories of industrial activity are based on value added during the year under review and the preceding year. However, the weights for combining these indexes into indexes for the broader classes of industrial activity are based on value added data for the most recent census year.			
Italy				
General approach	Double deflation.	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Deflated by index of wholesale prices.	Output: Printing and publishing deflated by price index for magazines, newspapers and schoolbooks; manufacture of phonographs, photographic and miscellaneous equipment deflated by index for annual earnings of workers; all other industries deflated by index of wholesale prices.	Output: Electricity and water deflated by index of consumer prices. Gas deflated by average index of consumer prices for coal-gas, methane for domestic use, and liquid gas.	Output: Deflated by a cost index for residential buildings. Demolition work deflated by a weighted index of labour and material costs. Weights obtained from input-output table of 1965.
	Input: The inputs of all non-agricultural industries deflated within the framework of an input-output table with 33 sectors referring to 1965. Price indexes calculated for each of the industries as a weighted average of price-indexes for individual inputs. Separate indexes calculated for domestic products and imports.			

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
I. Countries using the SNA (continued)				
A. Developed countries (continued)				
Luxembourg				
General approach	Value added extrapolated by the industrial production index.			Price deflation of value added.
Detailed method and/or indicator used	The index relates to all establishments except handicrafts. The weights used to combine the series of relatives into indexes for detailed categories of industrial activities and into indexes for major groups are derived from gross value of output of base-year. Value added weights are, however, used in combining major group indexes, into divisions and totals for the industry. The elementary series of relatives are based mainly on quantities of individual commodities produced and to a lesser extent, on man-hours worked. A total of 45 series, accounting for approximately 94 per cent of the value added in the base-year are used in calculating the index.			Current estimates deflated by index of construction cost.
Netherlands				
General approach	Value added extrapolated by the industrial production index.			Value added extrapolated by quantity indicators for output.
Detailed method and/or indicator used	The index covers the industrial production carried out by all establishments, irrespective of size, including handicraft establishments. The series are based on several kinds of indicators, quantum of output accounting for 51 per cent of the total weight; deflated values of output or sales (mainly for some machinery items; paper products and wooden furniture) for 21 per cent and quantities of input of basic materials (for some textile items and printing) for 13 per cent of the total weight. In addition, the movements of indexes for selected products, for the groups concerned and for the total industry are utilized, e.g., for non-alcoholic beverages and ship repairs, sugar confectionery and miscellaneous textile products, and miscellaneous wood products and publishing. Assumed trends, which are obtained by extrapolating the data over the preceding years, are used to estimate the output of transport equipment and some other machinery items. The coverage of each of these four kinds of indicator ranges from three to five per cent of the total weight. The weights used for combining subgroups and groups into divisions and the total industry are based on the value added at market prices in the base-year. The value added for each of the detailed categories is divided among the ralevant products according to the ralative importance in the value of gross production. The indicators utilized in the national accounts are annual averages calculated from monthly or quarterly series. Where possible, the averages are compared with direct estimates from annual sources. At the same time supplementary estimates are made for some lacking industry groups, such as the wood industry.			Residential and non-residential buildings, major maintenance and alterations: Output deflated by production price index. Civil engineering and normal maintenance: Output deflated by specially constructed price index based on estimates of input of wages and raw materials. Services rendered abroad: Output deflated by export price index.
Norway				
General approach	Double deflation and commodity flow approach to constant price estimates employed within the framework of detailed annual input-output tables. The input-output tables which distinguish 1900 groups of commodities, 160 domestic industries, 30 producers of government services and 230 categories of final use, are arranged as industry x commodity, commodity x industry tables. Current year approximate basic values are deflated by appropriate price indexes. The price indexes used are partly unit value indexes based on domestic production and foreign trade statistics, partly price indexes based on price series calculated for wholesale and retail price indexes and from other sources, and partly implicit price indexes. On the expenditure side, two price indexes are constructed for each commodity, one relating to domestic deliveries regardless of use and one relating to exports. Exceptions from the general method, and the indicators used in deflating output from each industry are shown under the relevant industry heading.			
Detailed method and/or indicator used	Output: Deliveries to export by commodity: Deflated by export unit price indexes. Deliveries to domestic use by commodity: Deflated by appropriate wholesale price indexes or unit value indexes based on annual production statistics.	Output: Deliveries to export by commodity: Deflated by export unit price indexes. Deliveries to domestic use by commodity: Printing, publishing and allied industries, industries producing metal products, machinery and transport equipment: Deflated by price indexes calculated on the basis of prices of inputs of materials, labour costs and consumption of fixed capital for the ralevant industries. Other industries: Deflated by appropriate wholesale price indexes and unit value indexes based on annual production statistics. Labour input into own-account construction and maintenance of buildings and machinery: Deflated by wage indexes for the relevant industries.	Output: Electricity valued at the average prices in the different market in the base year. Steam and water supply deflated by appropriate consumer price indexes.	Output: Deflated by price indexes calculated on the basis of prices of inputs of material, labour costs and consumption of fixed capital. Contract drilling measured by number of holes drilled.
Portugal				
General approach	Value added extrapolated by the industrial production index.		Value added extrapolated by quantity index for output.	Price deflation of value added.
Detailed method and/or indicator used	The index is based on quantities of output for about 200 individual products, accounting for about 60 per cent of the total value added in the base-year. The weighting patterns used for combining subgroup or group indexes into broader classes of industrial activity are based on the value added in 1958, derived from the results of the 1957-1959 Industrial Survey, which was conducted among industrial establishments with two or more persons engaged.		Consumption of electrical energy used for electricity and gas. For water and sanitation, consumption of water in densely populated areas was used.	The component "Non-metallic construction materials" of the wholesale price index used as deflator.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
		I. Countries using the SNA (continued)		
		A. Developed countries (continued)		
Sweden				
General approach	Double deflation at the level of establishment with previous year as base-year.		Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: The unit price change from previous year for the products of an establishment is used to deflate the output of the establishment. The output values in current prices and in the prices of previous year are aggregated to industrial subgroups. Implicit price indexes with the base-year of 1968 are calculated for each industrial subgroup by linking implicit price indexes with previous year as base-year. These indexes are applied in estimating output at 1968 prices. Input: Input for each establishment in the prices of previous year are calculated as the product of output in the prices of previous year times the input-coefficient for previous year. Implicit price indexes and quantity series with the base-year of 1968 are obtained by the same method as for output. As a result, the value added for establishments employing five or more persons, which are covered by these estimates, have the same growth rate in the prices of 1968 as the volume index of production. For establishments with less than five persons employed the same price indexes as for the larger establishments in the same subgroup are used.		Output: Electricity: Output valued at average 1963 prices for each consuming industry and kind of final consumption. Gas: Output valued at 1959 unit prices obtained from the 1959 Census of Production. Water and sanitary services: Extrapolated by index of local government's current rates of water, garbage and sewage disposal. Input: Deflated by relevant wholesale price index.	Output: Deflated by specially constructed price indexes for each type of construction. Input: Deflated by specially constructed price indexes.
United Kingdom				
General approach	Value added extrapolated by the appropriate components of the index of industrial production.		Value added extrapolated by components of the index of industrial production.	Value added extrapolated by component of the index of industrial production.
Detailed method and/or indicator used	Value added weights are used to combine indicators for detailed industry groups. The indicators are almost entirely based on physical quantities delivered or produced and deflated value of deliveries. Employment indicators are used for about two per cent of value added, in particular, with a productivity correction, for shipbuilding. An input indicator (consumption) is used to represent the output of the bread-making industry. The major areas which predominantly used deflated value data are engineering, metal goods, parts of the textile industry, clothing and a number of miscellaneous manufacturing industries.		For the index numbers for electricity and gas industries, domestic, industrial and commercial sales are combined with weights which reflect the differing tariff structures. For water supply, a quantity series is used.	The value of work done by the construction industry is deflated by a cost index compiled by using a weighted combination of a price index for materials with an index of building operatives' costs adjusted for productivity changes, and including an estimate of the proportion of overheads and profits to gross output. For private housing, the index is adjusted to include additional relevant data.
United States				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by volume index for output obtained by price deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Production index for separate mining activities weighted by GNP originating in each activity in the base year, used as indicator.	Specific commodity-price indexes derived from wholesale price indexes regrouped to correspond to Census product class level and industry level by means of weights derived from 1958 Census of Manufactures (from 1958 onwards) and 1954 Census of Manufactures (1947 - 1958). The indexes regrouped by product class are in most cases weighted by annual data on total valued shipments of each product class in order to arrive at current weighted indexes for industry groups. The output of a small number of industries includes a significant number of products classified in other industries and in these cases current weights are estimated from the periodic censuses of manufacture which provide detailed information on the product composition of each industry's total value of shipments. Linear interpolations yield the weighting pattern for the intercensal years.	Private owned electricity works: Output: Sales of each class of customers deflated by appropriate components of consumer price and wholesale price indexes. Input: Costs for fuels and purchased electricity deflated by components of wholesale price index. Privately owned gas industry: Separate estimates for transmission (gas pipelines) and distribution (utilities). Output: Transmission: Operating revenues deflated by index of average revenue per therm of sales of natural gas for resale. Distribution: Revenues deflated by composite index of revenue per therm of natural gas sales by type of customer. Input: Transmission: Cost of purchased gas deflated by index of average well head price of	Output: Gross product based on estimates of the value of new construction deflated by price index derived from output for all construction contractors. The construction cost indexes are implicit indexes compiled by dividing current amounts by the total expressed in constant prices. The cost indexes used for calculating the construction activity series in constant prices are composite indexes for specific types of construction which are generally derived by pricing detailed bills of quantities of materials and labour in various

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
		1. Countries using the SNA (continued)		
		A. Developed countries (continued)		
United States (continued)				
Detailed method and/or indicator used			natural gas. Distribution: Cost of purchased gas deflated by composite of pipeline revenue deflator and a weighted index of revenue per therm for various types of gas. Value added at constant prices for electricity and gas as a whole estimated by means of implicit deflator derived from above estimates. Operating revenues for waterworks and seven systems deflated by consumer price price indexes for water charges.	cities, including an allowance for contractors' overheads and profits. Maintenance and repair construction on contract deflated by consumer price index for home maintenance and repair. Input: Estimated material costs used in new construction and for maintenance and repair obtained by applying to output by type of construction ratios of inputs derived from input-output studies deflated by weighted average of wholesale price index for construction materials.
		B. Developing countries		
Argentina				
General approach	Value added extrapolated by quantity index for output.	No single typical approach for all component.	Value added extrapolated by indexes of quantum of services produced.	No single typical approach for all components.
Detailed method and/or indicator used	The index is based on indicators for 80 individual products covering coal mining, 17 metal ores, petroleum and natural gas, and 60 non-metallic products. The weights used to combine subgroup into group indexes are based on the value added in 1960.	Food industry: Extrapolated by sales at constant prices, combined with indexes of production and volume of inputs. Printing and leather industries: Extrapolated by quantum of export, combined with indexes of production and/or volume of inputs. Non-metallic mineral products and metal products: Extrapolated by commodity consumption, combined with index of production and volume of inputs. Motor vehicles and tractors: Current values deflated by indexes of producer prices. Remaining industries: Extrapolated by quantum of production and/or quantum of inputs. The indexes are based on indicators for 399 individual products and derived by weighting subgroups into groups, groups into total manufacturing by the pattern based on value added in 1960.	The weights used are based on value added in 1960.	Private construction: Value added extrapolated by indexes of quantum of inputs. Other construction: Current values deflated by indexes of producer prices. The weights used are based on value added in 1960.
Bolivia				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	The index is based on export quantum of nine metallic ores, petroleum and two non-metallic mineral products, covering 90 per cent of gross value of production.	The index is based on 240 products of manufacturing, covering 95 per cent of gross value of production.	No further information available.	The index relates the quantities of inputs and production and, in some cases, number of persons employed.
Chile				
General approach	Price deflation of value added.	Price deflation of value added.	Price deflation of value added.	Price deflation of value added.
Detailed method and/or indicator used	Current values deflated by wholesale price index, retail price index and a specially constructed export price index. The 133 products covered represent 96 per cent of the total gross value of production.	Current values deflated by index of wholesale prices, except furniture and miscellaneous industries which are deflated by price indexes relating to other products or groups of products. In total 190 products are covered. The value added of 1965 is used as weights.	Electric power generation deflated by index of producer prices. Gas, water and sanitary services deflated by index of consumer prices.	Current values deflated by index of producer prices.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Colombia				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	The index covers 100 per cent of gross value of production in 1958. Gross value of production in 1958 used as weights.	The index covers 75 per cent of gross value of production in 1958. Value added in 1958 used as weights.	No further information available.	The weighting patterns used are based on gross value of production in 1958.
Ghana				
General approach	Double deflation.	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Production of various minerals valued at average base-year prices. Input: Base-year figures kept constant. Current estimates of depreciation deflated by index of prices of the imported machinery and equipment.	Output: Current price estimatee of gross output at the major group levels of I.S.I.C. deflated by weighted indexes of ex-factory prices at the corresponding levels of the classification. Input: Base-year figures kept constant. Depreciation deflated by an index of prices of machinery and equipment.	Output: Consumers were divided into 5 groups and the average price charged from each group in the base-year was used for valuation of the quantities of electricity consumed in various years. Input: Input-output ratio in quantity terms in the base-year assumed to have remained constant. Current estimates of depreciation deflated by index of machinery and equipment used in electricity generation, transmission and distribution.	Output: Current price estimates of gross output deflated by a price index of overall construction costs. Input: Intermediate consumption deflated by an overall price index for construction materials. Consumption of fixed assets deflated by a price index covering important machinery and equipment.
Guatemala				
General approach	No single typical approach for all components.	Value added extrapolated by quantity index for output and in some caees, quantity indexes of inputs.	Value added extrapolated by quantity index for output.	No single typical approach for all components.
Detailed method and/or indicator used	Stone, eand and ealt: Value added extrapolated by quantity index for output. Other non-metallic mineral products: Value added extrapolated by index of export volume. The former index based on indicators for two products, the latter on indicators for seven products. Value added in 1958 used as weights.	Value added in 1958 used as weights.	Value added in 1958 used as weights.	Private construction: Value added extrapolated by quantity index for inputs. Public construction: Value added extrapolated by index of wages and sularies. Value added in 1958 used as weighte.
Honduras				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output or quantity index for inputs.	Value added extrapolated by quantity index for output.	Price deflation of value added.
Detailed method and/or indicator used	The index covers 100 per cent of value added in 1948.	The index covers 100 per cent of output in the case of the beverage, tobacco and textile industries, and 60 per cent of output for the rest of the industries. The weighting patterns used are based on value added in 1948.	The weighting patterns used are based on value added in 1948.	Current values deflated by indexes of wages and salaries. The weighting patterns used are based on value added in 1948.
India				
General approach	Double deflation.	Large-scale manufacturing. Value added extrapolated by the industrial production index.	No single typical approach for all components.	Price deflation of value added.
Detailed method and/or indicator used	Output: Quantity of output of each of the constituent minerals revalued at the pit head prices in the base year. Input: Same percentage applied as for the estimates in current prices.	The index covers all establishments with 10 or more persons engaged and using power or with 20 or more persons engaged and not using power. The weighting pattern used for combining subgroups into groups and large-scale manufacturing as a whole is based on value added at factor cost in 1960. However, in the case of the cotton textile industry, which is the most important industry in India, the value added for spinning	Electricity: Value added extrapolated by quantity of electricity sold to various categories of consumers. Gas and water supply: Value added extrapolated by quantity of gas sold and number of workers, respectively.	Current price estimates deflated by index of average daily wages of rural skilled labour, i.e., blacksmiths, carpentere and cobblers, in agriculture.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
		I. Countries using the SNA (continued)		
		B. Developing countries (continued)		
India (continued)				
Detailed method and/or indicator used		was estimated by applying to the total quantities of yarn produced during 1960 the value added per unit of yarn produced in spinning mills. Value added for weaving was obtained by subtracting the value added thus arrived at for spinning from the total value added for the cotton textile industry in 1960. Elementary indicators for 449 products are used. For 307 products, data are gathered monthly, while 142 additional products are surveyed annually. Indicators for most procucts are quantities of output of products except in the case of most machinery items, for which data on gross value of production are utilized after adjusting for price changes. Five kinds of deflators (for boilers, sugar machinery, tea machinery, machine tools and machinery other than electrical) were selected from the wholesale price index data. Machinery other than the five items enumerated above is deflated by the price index of machinery other than electrical, in the absence of direct price deflators.		
		Small-scale manufacturing.		
General approach		Value added extrapolated by specially constructed indicators of physical output or input.		
Detailed method and/or indicator used		Small-scale manufacturing covers all manufacturing and processing activities, including repair and maintenance services undertaken by household and non-household small-scale manufacturing units employing less than 10 workers with the aid of power or less than 20 workers without the aid of power. The indicators of physical output or input are specially constructed for each of seven industry groups. For textiles, tailoring and leather footwear, the weighted average of tha output relatives of cloth used as textiles, cloth available for tailoring and an indicator of the output of leather footwear in small-scale manufacturing are applied. In the case of leather and leather products, except footwear, a weighted average of the production relatives of raw hides and skins and tanned hides are used as indicators. For the group covering wood, glass, stone and ceramics, the indicator is built up by taking the average of the indexes of production of non-metallic mineral industries and total population. In the case of metal manufacturing and engineering, the indicator is constructed by taking the average of the indexes of production of basic metul industries and total population. Similarly, for chemicals and chemical products, the indicator is obtained by taking the average of the indexes of production of chemicals in the large-scale manufacturing sector and total population. For the group food, drink and tobacco, the indicators used are amount of oil produced by ghanies, quantity of tobacco required for manufacture by small-scale industries, and total food grains. In the case of other industries, the weighted average of the indicators of the above six specified industry groups is used as indicator.		

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Indonesia				
		Large- and medium-scale establishments.		
General approach	Double deflation.	Different approaches used for different periods.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity indexes for inputs.
Detailed method and/or indicator used	Output: Quantities of commodities produced valued at 1960 prices. Input: For the various commodities produced by the industry, the same input-output ratios are used as in the case of the current estimates.	1960 to 1963: Gross value added at market prices deflated by a base weighted unit price index of important commodities. Information was obtained from current industrial statistics. The primary material needed to compute this index is lacking for later years. 1963-1967: Gross value added was extrapolated by unweighted employment indexes separately for large- and medium-scale establishments. 1968-1970: Gross value added at 1960 market prices calculated by extrapolating gross value added in 1967 by the trend in imports of industrial raw materials. 1971: Gross value added at 1960 market prices derived from the 1970 figure by using the increase in employment as extrapolator. Household industry Value added extrapolated by quantity indicators. Gross value added in 1960 extrapolated by using a combined index of the increase in population and the volume of agricultural production.	Gross value added originating in electricity and gas production calculated at 1960 market prices by using an unweighted volume index of electricity generated as indicator.	Building and construction is divided into two parts, i.e., other building and construction and very simple dwellings in rural areas. The constant price estimate for materials used in other building and construction is derived by extrapolating the 1960 value of domestic and imported materials by a base-weighted quantity index up to 1963. In the absence of this material for later years, the quantity index for 1963 is extrapolated by a volume index for imported raw materials. The 1960 values of domestic production and imports of these materials are marked up by 20 and 40 per cent, respectively, to take into account delivery costs. Bamboo, excluding bamboo used in handicraft production and for very simple rural dwellings, was estimated at constant prices by valuing current quantities at 1960 prices. Net value added is assumed to be 70 per cent of these material costs for all years. The percentage was derived from a study of costs of construction undertaken in 1963. Depreciation is assumed to be three per cent of net value added. The cost of materials used in the construction of very simple dwellings in rural areas is estimated on the basis of information in the surveys of household industries undertaken in 1963. The change in the rural population is used as indicator in estimating these materials costs at 1960 prices. Net value added is assumed to be 25 per cent of the value of materials for all years. Depreciation is estimated at three per cent of net value added.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Korea, Republic of				
General approach	Double deflation		Value added extrapolated by quantity index for output.	Construction of private buildings: Double deflation.
Detailed method and/or indicator used	Output: Current quantities revalued at base-year prices. Input: Outputs valued at base-year prices multiplied by the ratios of value added to outputs in the base-year. This method is used because current data on inputs are not easily available. The ratios are derived from input-output tables, analysis of business accounts or sample surveys. The ratios are usually obtained at the level of major groups.		No further information available.	Output: Current quantities revalued at base year prices. Input: Output valued at base-year prices multiplied by the ratio of value added to utput in the base-year. This method is used because current data on inputs are not easily available. The ratio is derived from input-output tables, analysis of business accounts or sample surveys.
General approach				Construction other than private buildings: Price deflation of value added.
Detailed method and/or indicator used				Composite index of unit costs reflecting price changes in each input with its weight in the base-year is utilized as a deflator. Current value of construction is divided by this composite index of unit costs to arrive at output of construction valued at base-year prices which in turn is multiplied by the input-output ratio of the base-year to obtain value added at base-year prices.
Malaysia				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity indicators for output.	Value added extrapolated by quantity indicator for output.	Current price estimates have been retained.
Detailed method and/or indicator used	The index is based on quantities of output of tin and iron-ore weighted by their output values in the base-year.	The indicators used are: Food industry: Trend in the production of rice and pineapples: Beverage industry: Trend in the production of aerated water. Tobacco industry: Trend in the production cigarettes, cigars and cheroots. Footwear and other wearing apparel industry: Quantities of rubber and canvas shoes produced. Wood and cork industry: Trend in sawn timber production. Rubber processing: Trend in rubber production. Manufacture of rubber products: Weighted index of outputs of products such as sheet and matting, foam rubber matresses, rubber compounds, bicycle tubes, other rubber products, etc. Manufacture of non-metallic mineral products: Trend in cement production. Basic metal products: Trend in tin production. For the rest of manufacturing, the current estimates have been retained.	Quantity of electricity generated used as indicator.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Mexico				
	Mining and quarrying proper			
General approach	Double deflation.	Double deflation.	Double deflation.	Double deflation.
Detailed method and/or indicator used	Output: Extrapolated by means of three basic sub-indexes of output, referring to non-ferrous metals, ferrous metals and non-metallic mineral products, respectively. The three sub-indexes are weighted together by means of output figures taken from the input-output table of 1960. The index for non-ferrous metals is based on 15 indicators, covering gold, silver, copper, lead, zinc, antimony, mercury, tungsten, cadmium, arsenic, manganese, bismuth, selenium, tin and molybdenum. The index for ferrous metals is based on one single indicator. Six indicators are used for the index on non-metallic mineral products. The indicators refer to carbon, graphite, salt, sulfur, fluorite, and lime-stone. Input: Extrapolated by a weighted quantity index for principal intermediate product listed in the input-output table of 1960.	Output: Mostly extrapolated by specially constructed quantity indexes with base-year 1960. The weights have been modified for later years in order to take into account the rapid development and diversification of manufacturing. In a few isolated cases, value series are deflated by specially constructed price indexes. Indexes have been estimated for 75 subgroups of the industry. The indexes for each subgroup have been weighted by the value of production in the base-year in order to arrive at an index for the industry as a whole. Input: Extrapolated by quantity indicators weighted by the value of each items in the base year.	Electricity only; no information for gas and water supply. Output: Extrapolated by quantity index of sales of energy to different types of consumers (households, commerce, industry, agriculture etc.) and of electricity generation for own use by producers or distributors. Input: Deflated by specially constructed price index.	Output: Extrapolated by a weighted volume index of estimated consumption of construction materials such as cement, corrugated iron, iron and steel pipes, and glass. Input: Input-output coefficients of 1960 assumed to have remained constant.
	Extraction and refining of petroleum and coke			
General approach	Double deflation.			
Detailed method and/or indicator used	Output: Extrapolated by means of a combination of three sub-indexes, referring to extraction, refining and coke production, respectively. The index for extraction refers to crude petroleum, condensed and liquefied petroleum, and natural gas, and is weighted by prices of 1960. The index for refining covers all final and some semi-manufactured products sold by the government petroleum company. The output is adjusted for crude petroleum used in production in order to avoid double-counting. Changes in productivity are taken into account to some extent, and the series for each product are weighted together with average sales prices of 1960. The index for output of coke is constructed on the basis of information obtained from the producing establishments. Input: The input-output coefficients of 1960 are assumed to have remained constant.			
	Basic petro-chemicals			
General approach	Double deflation.			
Detailed method and/or indicator used	Output: Extrapolated by quantity index based on series for output of basic primary products of the petro-chemical industry. Weighted by prices of 1960. Input: The input-output coefficients of 1960 are assumed to have remained constant.			

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Panama				
General approach	Value added extrapolated by quantity indicators of output.	Value added estimated by quantity indicatore of output.	Value added extrapolated by quantity indexes of output.	Value added extrapolated by quantity indexes of inputs.
Detailed method and/or indicator used	Salt: Base-year estimate extrapolated by quantity index for output. Sand: Base-year estimate extrapolated by kilometres of highways constructed. All other: Base-year estimates extrapolated by indexes of tax on sand extracted.	Manufacture of bakery products, made-up textile goods and printing: Base-year estimates extrapolated by indexes of quantities of inputs. Repair of motor vehicles: Base-year estimates extrapolated by number of vehicles in circulation. All other: Base-year estimates extrapolated by quantum indexes of output.	No further information available.	No further information available.
Philippines				
General approach	Value added extrapolated by quantity indsx of output.	Value added extrapolated by quantity index of output.	No information available.	Price deflation of value added.
Detailed method and/or indicator used	The index covers the aggregate output of gold chromite, manganese, copper and iron. This includes approximately 70 per cent of total value of mining production in 1955. The elementary series of relatives are combined into indexes for mining as a whole using as weights gross value of production in 1952. Series beginning 1953 are estimated by using 1955 quantities as weights.	The index covers the production of durable goods (12 groups including 408 products), and non-durable goods (8 groups including 169 products). At each stage of calculation of the index, the weighted used are based on the gross value of production during 1955.		Current estimates deflated by retail price index of construction materials.
Sierra Leone				
General approach	No single typical approach for all components.	Value added extrapolated by employment data.	No single typical approach for all components.	Price deflation of value added.
Detailed method and/or indicator used	For diamonds, iron ore and bauxite, alternative estimates of value added at constant prices are made, using quantity indexes and price indexes, respectively. A simple average of the two series has been adopted. In other instances, value added is extrapolated by volume indexes for output.	No further information available.	Electricity: Value added extrapolated by the total amount of electricity generated. Water: Value added extrapolated by deflated value of water rate collection.	Current estimates deflated by index of building costs. In order to construct the index of building costs, wholesale prices of a variety of construction materials have been collected. The price relatives, with 1963 as base, derived from these prices have been averaged for commodities within broad groups, and the group average price relatives have been combined using the total availability of materials within such group as weights. The building materials price index and the construction labour wage rate index have been combined using the proportionate cost (45-35) of materials and labour.
Sri Lanka				
General approach	Price deflation of value added.	Price deflation of value added.	Value added extrapolated by quantity index of output.	Price deflation of value added.
Detailed method and/or indicator used	Current values deflated by appropriate component groups of wage-rate index for workers in industry and commerce.	Current values deflated by appropriate component groups of wage-rate index for workers in industry and commerce.	A combined index for electricity and gas production is used.	Current values deflated by a combination of an index of unit cost of floor space of building construction and the consumer price index of Colombo.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Syrian Arab Republic				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	Value added of base-year extrapolated by volume index obtained by revaluing a limited number of minerals, i.e., salt, natural asphalt, building stone, petroleum, phosphates and rock salt, at base-year prices of 1963.	Value added of base-year extrapolated by volume indexes, separately for small-scale establishments (employing less than 10 workers) and for large establishments (employing 10 or more workers). The indexes are obtained by valuing current quantities produced, at base-year prices of 1963. For industrial services, the estimates at current prices are used. Depreciation deflated by the rates used by Egypt.	The quantity index is obtained by valuing current quantities of output at average 1963 prices.	The quantity index is based on information on floor area constructed, of dwellings and other buildings.
Turkey				
General approach	Price deflation of value added used for all parts of industrial activity.			Price deflation of value added.
Detailed method and/or indicator used	Current value added deflated by appropriate components of the wholesale price index.			Current values deflated by wage index for construction workers.
Uganda				
General approach	Double deflation.	Value added extrapolated by quantity index for output.	Double deflation.	Price deflation of value added.
Detailed method and/or indicator used	Output: Extrapolated by means of quantity indicators. Input: Extrapolated by means of quantity indicators wherever possible. For the items for which quantities are not available, appropriate price indexes have been used in estimating input at constant prices.	No further detail available.	Output: Extrapolated by means of quantity indicators. Input: Extrapolated by means of quantity indicators wherever possible. For the items for which appropriate quantity indicators are not available, appropriate price indexes have been used in estimating input at constant prices.	Value added at current price deflated by an implicit price index for input. Input extrapolated by quantity indexes wherever possible. For the items for which appropriate quantity indicators are not available, appropriate price indexes have been used in estimating input at constant prices.
Uruguay				
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output.	No single typical approach for all components.
Detailed method and/or indicator used	Base-year estimates of output extrapolated by quantity index of production. The index covers 100 per cent of the production value. The weights are based on gross value of production in 1961.	Base-year estimates of output extrapolated by quantity index of production in most cases, and by man-hours worked in a few cases. The weights are based on value added in 1961.	Base-year estimates of output extrapolated by quantity index of production. The weights are based on value added in 1961.	For private construction, base-year estimates of value added extrapolated by quantity index of production. For public construction, current value added deflated by index of construction costs.
Venezuela				
General approach	No single typical approach for all components.	Price deflation of value added.	Price deflation of value added.	Price deflation of value added.
Detailed method and/or indicator used	Crude petroleum: Current value added deflated by unit value index for exports. Other mining: Value added extrapolated by quantity index for output, weighted by value added originating in the production of the various minerals in the base-year.	Laspeyres price indexes were prepared at the product, establishment and industry group levels. Simple indexes of prices were first calculated at the product level. These indexes were subsequently weighted by quantities produced in the base-year within each subgroup, group and division of industry, in order to obtain partial indexes as well as the corresponding general index. The ISIC was used in grouping the products. The prices used refer to mid-year 1968.	Electricity: The index refers to the change in the average price per kWh. It is based on monthly data on kWh produced and sales revenue, provided by the main producing establishments. Average unit prices in the base-year are calculated and a Laspeyres price index is obtained by using the sales revenue of each producing establishment in 1968 as weights.	A price index for construction is obtained by weighting together indexes for three main cost components, i.e., machinery and equipment, labour and construction materials. The weights used in estimating the global index consist of gross fixed capital formation, total compensation of employees, and apparent consumption of construction materials. Since it is difficult

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
I. Countries using the SNA (continued)				
B. Developing countries (continued)				
Venezuela (continued)				
Detailed method and/or indicator used			Water: First, simple unit price indexes per cubic metre consumed are estimated according to zone. The general index is obtained by weighting with amounts billed in each zone in 1968. The zones refer to areas within which the various reservoirs are classified. Gas: No information available.	to obtain reliable direct information on prices of machinery and equipment, the relevant component of the wholesale price index of the United States is used instead as indicator, under the assumption that most of these items are imported from the USA. Average wages for different types of construction workers are weighted together by means of data from the industrial census of 1963. Prices of construction materials are selected from a special survey of producer prices and are weighted together by means of information from the industrial survey of 1966.
II. Countries using the MPS				
Bulgaria				
General approach	Double deflation.			Double deflation.
Detailed method and/or indicator used	Output: Current quantities valued at base-year prices. Material input: Deflated by price indexes.			Output: Direct valuation at base-year prices based on cost of production. Material input: Deflated by price indexes.
Czechoslovakia				
General approach	Double deflation.			Double deflation.
Detailed method and/or indicator used	Output: Deflated by price indexes. Material input: Deflated by price indexes.			Output: Direct valuation at base-year prices for components of output. Material input: Deflated by price indexes.
German Democratic Republic				
General approach	Double deflation.			
Detailed method and/or indicator used	Output: Mostly absolute amounts accounting for price changes. In some cases, deflation by price indexes or direct valuation of current quantities at base-year prices are applied. Material input: Deflation by price indexes and use of absolute amounts accounting for price changes.			
Hungary				
General approach	Double deflation.			Double deflation.
Detailed method and/or indicator used	Output: Deflated by price indexes. Material input: Deflated by price indexes.			Output: Direct valuation at base-year prices for components of output. Material input: Deflated by price indexes.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	2. Industrial activity			3. Construction
	2.1 Mining and quarrying	2.2 Manufacturing	2.3 Electricity, gas, steam and water supply	
II. Countries using the MPS (continued)				
Poland				
General approach	Double deflation.			
Detailed method and/or indicator used	Output: Deflated by price indexes.			
	Material input: Deflated by price indexes.			
Romania				
General approach	Double deflation			Double deflation.
Detailed method and/or indicator used	Output: Direct valuation of current quantities at base-year prices			Output: Direct valuation at base-year prices based on cost of production.
	Material input: Deflated by price indexes.			Material input: Deflated by price indexes.
Union of Soviet Socialist Republics				
General approach	Double deflation.			Double deflation.
Detailed method and/or indicator used	Output: Direct valuation of current quantities of base-year prices. Turnover taxes extrapolated.			Output: state and co-operations/construction: Deflated by price indexes. Construction by the population: Direct valuation at base-year prices for components of output.
	Material input: Direct valuation of current quantities at base-year prices.			Material input: Deflated by price indexes.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
I. Countries using the SNA				
A. Developed countries				
Austria				
General approach	No single typical approach for all components.	Value added extrapolated by quantity index for output obtained by price deflation.	Double deflation for State Railways, otherwise value added extrapolated by quantum index for output.	Value added extrapolated by quantity indicators for output.
Detailed method and/or indicator used	Value added of wholesale and retail trade extrapolated by quantity index for output obtained by deflating turnover by appropriate official price indexes. This procedure implies constant ratio between trade-margins and turnover. Related activities (leasing and brokerage) deflated by wage index for employees in trade.	Turnover deflated by unweighted average of hotel prices and consumer prices used as indicator for value added. This assumes constant ratio between trade-margins and turnover.	Railways: Effective ton-kilometres, person-kilometres, or number of persons transported used as indicators for output. For the State Railways inputs revalued at base-year prices. Road transport: Consumption of diesel fuel (after deduction of consumption by agriculture, State Railways and mail services) used as indicator. No information for the rest of transportation.	The quantity indicators applied are based partly on direct information on quantities produced, and partly on price deflation of current value series for output. For instance, for post and telegraph services, use is made partly of a volume indicator based on performace statistics for postal services, and partly of an indicator obtained by deflating current values by official tarriffs.
Belgium				
General approach	Value added extrapolated by quantum index for output.	Information not available.	Value added extrapolated by quantum index for output.	Value added extrapolated by employment.
Detailed method and/or indicator used	Volume index based on estimate of private consumption used as main indicator.		Railways and street cars: Passenger-kilometres and ton-kilometres. Trucks: Number of trucks, by size, which have licence for transport, multiplied by average capacity and average annual distance run. Taxis: Number of taxis divided in those used for: (a) normal city traffic, (b) intensive city traffic and (c) service in the provinces. Buses: Average number in use. Ocean transport: Net tonnage of vessels under Belgian flag entering Belgian ports. River transport: Index of total river traffic. Ports: Loading and unloading at all Belgian ports. Air transport: Passenger-kilometres and ton-kilometres.	Indicator based on number of man-hours in the postal administration and number employed in the telephone and telegraph services.
Canada				
General approach	Value added at the individual trade level extrapolated by volume indexes of output obtained by price deflation.	Value added extrapolated by volume indexes of output obtained by price deflation.	No single typical approach for all components.	No single typical approach for all components.
Detailed method and/or indicator used	Wholesale trade: Sales of wholesale merchants by trade are deflated by specially constructed price indexes. The output of petroleum bulk tank stations is projected on the domestic disappearance of a number of refined petroleum products trend-adjusted to quinquennial census results. Other types of wholesale operations are projected on wholesale merchants with adjustment for quinquennial census results. Retail trade: Retail sales by trade are deflated by specially constructed price indexes.	Hotels, restaurants and taverns: Restaurant receipts are deflated by consumer price indexes for restaurant meals, beverages and confectionery, etc. Receipts for take-out shops, refreshment booths and caterers are estimated from the quinquennial census and a survey of family expenditures and deflated by the composite price index for restaurants. Gross output of cocktail lounges and taverns is projected on the output of hotels and adjusted for quinquennial census results. Hotel receipts are deflated by the consumer price indexes for rooms, meals, alcohol and confectionery. The output of motels, tourist courts and cabins is projected on the employment index of hotels and restaurants and adjusted for quinquennial census results. Lodging houses and residential clubs. Output is assumed to move with the index for hotels.	Railway transport: Double deflation. Output: Freight revenue is deflated with a specially constructed price index comprising considerable commodity-rate detail. Passenger revenue is deflated by the consumer price index for train fares. Constant price revenues from express privileges and switching are projected on passenger-car-miles and locomotive-miles, respectively. Other revenues are deflated with special price indexes. Input: Rail and cross-tie replacements and fuel are weighted with base-year unit values. Other inputs are deflated with special price indexes. Bus transport - interurban and rural: Double deflation. Output: Passenger revenue is deflated with the consumer price index for inter-city bus fares. Charter revenue is projected on charter-vehicle-miles. Other revenues are deflated with a special price index. Input: Volumes of fuel and oil are combined using base-year unit values. Tire, tube and repair expenses are deflated with special price indexes. Urban transit: Double deflation. Output: Passenger revenue is deflated by an index of urban transit fares. Charter revenue is derived by projecting base-year revenue on charter-vehicle-miles. Other revenue is deflated with the implicit price index of the charter and passenger revenue. Input: Fuel, oil and electricity used are weighted by base-year unit values. Maintenance and repair materials are deflated with appropriate price indexes.	Telephone systems: Local service revenue is derived using the number of telephones by type weighted by the appropriate base-year unit charge. Long distance revenue is projected on the number of long distance calls. Advertising revenue is deflated by an index of advertising rates. Telegraph and cable systems: Total operating revenue is deflated with an implicit price index based mainly on the unit charges for cablegrams, telegrams, press messages, and money orders transmitted. Post office: Double deflation. Output: Quantities of various types of mail services are valued at base-year unit costs. Input: Quantities are valued at base-year unit service charges.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
Canada (continued)				
Detailed method and/or indicator used (continued)			Taxicab operation: Estimated revenue is deflated by the consumer price index for taxi fares. Truck transport: Labour income is deflated by an index of average weekly earnings for the industry. Pipeline transport: Gross revenue from oil pipeline operations is deflated by a price index derived from a sample of major establishments. Output of gas pipeline transport is derived by using the volume of gas sales valued at base-year unit values, less volume of gas purchased valued at base-year values. Water transport: Freight revenue is extrapolated by using total tons handled by ships of Canadian registry. Passenger revenue is deflated by an index of fares from a special survey. Other revenue is deflated with a special price index. Services incidental to water transport: Stevedoring is based on cargo tons handled by stevedores at major ports. Selected indicators, such as tons handled and numbers of employees, are used to measure the remainder of the industry. Air transport: Double deflation. Output: Passenger miles, commodity ton-miles by type, and hours flown for bulk transport (including passenger charter) are valued at their relevant base-year unit values. Input: Volumes of fuel consumed are weighted with base-year values. Other inputs are deflated by relevant price indexes. Services incidental to air transport: Output is assumed to move with Air Transport. Services incidental to transport and other transportation: Labour income is deflated by an index of average weekly earnings. Grain elevators: Volumes of grain for which storage, drying, cleaning and elevation services are provided are weighted with the base-year average charges. Other storage and warehousing: Labour income is deflated by an index of average weekly earnings.	
Denmark				
General approach	Price deflation of value added	Price deflation of value added	Double deflation	Double deflation
Detailed method and/or indicator used	Value added deflated by specially constructed price indexes.	Sales of food and drinks, receipts from room rental and boarding houses deflated by appropriate components of consumer price index.	Railway transportation: Output: Passenger-kilometres and ton-kilometres valued at base-year unit values. Input: Fuel consumed valued at base-year prices. Tramways and buses: Output: Partly price deflation, partly number of passengers. Input: Power and fuel consumed valued at base-year prices. Private motor cars: Output: Number of motor cars adjusted by their sizes and degree of utilization. Input: Oil and petrol consumed valued at base-year prices. Ocean transport: Output: Extrapolated by means of gross freight tonnage. Input: Intermediate consumption estimated as a fixed percentage of the deflated gross freight.	Post and telegraph services: Output: Value added divided into a number of items and extrapolated separately; i.e., number of letters, parcels handled, newspapers handled and number of telegrams are used for extrapolation. Input: Expenditure paid to railways and airlines for transporting letters, parcels, etc. extrapolated by indicators of volume of mail transported by rail and by air. Telephone services: Output: Extrapolated by number of subscribers and by number of calls. Input: The input-output ratio of the base year assumed to have remained constant.
Finland				
General approach	Value added extrapolated by volume index for output obtained by price deflation.	Value added extrapolated by volume index for output obtained by price deflation.	Value added extrapolated by quantity index for output.	No single typical approach for all components.
Detailed method and/or indicator used	Sales values by branch of wholesale and retail trade deflated by representative price indexes. The resulting volume indexes weighted together by the contribution of each branch to value added.	Indicators: Sales of food deflated by subgroup "Serving of food outside the home" of the cost-of-living index. Sales of alcoholic drinks, deflated by price index based on information from the alcohol monopoly. Sales of tobacco, soft drinks, etc. deflated by representive price indexes.	Indicators: Railways: Tons and average distance transported by type of goods; for persons. Number and average length of journey by type of ticket; for mail, wagon-axle km of mailcars. Buses and tramways: Traffic incomes of private bus companies and public enterprises deflated by price indexes tariffs. Trucks and taxis: Number in operation combined with estimate of average haul. Ocean transport: Volume of freight incomes estimated on the basis of physical quantities of transported goods. Passenger fares deflated by special index of fares, based on separate estimates for travel between Finland and foreign countries and for domestic travel. Air transport: Number of passenger km and freight ton-km weighted by corresponding base-year income shares. Ports: Volume index based partly on employment in loading and unloading and partly on volume of exports (weight 0.62) and imports (weight 0.32). Price index being developed. Other industries serving ocean shipping: Net tonnage of arriving and departing ships. Travel agencies: Total sales value deflated by combined price index for railway, ship and airplane travel, with corresponding sales values in base-year used as weights. Bus station: Traffic incomes deflated by implicit price index for bus traffic.	Post, telegraph and telephone incomes of government: Each deflated by its own price index.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
France				
General approach	Double deflation and commodity flow method based on annual input-output tables. The procedure is to calculate the estimates at prices of the preceding year by deflating the current value series by price indexes with the preceding year as base. The constant price estimates thus obtained are subsequently converted to a fixed base year by a process of chaining. The outputs and inputs of individual industries are in most cases estimated at constant prices by means of price indicators, but in some cases, quantity indicators are used. Exceptions from the general method are indicated under the relevant industry.			
Detailed method and/or indicator used	Trade margins are deflated by specially constructed price indexes. The prices used in establishing these price indexes are estimated for each product group as the difference between representative prices on the uses side (producers' prices) and supply side (approximate factor values), of the commodity balance.			
Germany, Federal Republic of				
General approach	Double deflation	Double deflation	No single typical approach for all components	Double deflation
Detailed method and/or indicator used	Output: Sales by commodity group deflated by components of indexes of wholesale and retail prices, reweighted according to the share of the various groups in total sales. Input: The ratio between purchases and sales in the base year assumed to have remained constant, with adjustment made for changes in prices charged by main suppliers.	Output: Deflated by specially constructed price index. Input: The input-output ratio of the base year assumed to have remained constant, with adjustment made for changes in prices charged by main suppliers.	Passenger and goods transport in road traffic and by railways, transportation by pipelines, inland waterway transport, inland harbours: Output: Extrapolated by quantity indexes of passenger- and ton-kilometres, respectively tone. Input: Railways: Deflated by specially constructed input price index. Other: Input assumed to be same proportion of output as in base year, with adjustment for changes in prices charged by main suppliers. Seaports, ocean shipping, air transport, storage, services incidental to transportation: Output: Deflated by specially constructed price indexes. Input: Air transport, storage, services incidental to transportation: Deflated by specially constructed price indexes. Seaports and ocean shipping: Input assumed to be same proportion of output as in the base year, with adjustment for changes in prices charged by main suppliers.	Output: Where information on quantities is available, base-year estimates extrapolated by quantity indicators in in the case of telephone, telegraph, postal cheque and postal saving services. Otherwise, current estimates deflated by price index for special postal services. Input: Deflated by specially constructed price index.
Greece				
General approach	No single typical approach for all components	Information not available	Value added extrapolated by quantity indicators for output.	Value added extrapolated by quantity indicators for output.
Detailed method and/or indicator used	The values at constant prices of output of goods produced and traded in the home market are estimated from various sources and totalled. An estimated percentage is applied to this total in order to arrive at total trade margins at constant prices. Value added originating in import and export trade is deflated by the unit value indexes for imports and exports, respectively.		The values added of both sea transport, road transport, railways and air transport extrapolated by indicators based on passenger-kilometres and ton-kilometres.	The indicators are based on number of letters and parcels delivered, telephone calls made and telegrams sent.
Ireland				
General approach	Information not available	Information not available	Value added extrapolated by volume indicators for output. The indicators are based on passenger-miles and freight ton-miles. No further information available.	Information not available

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
Italy				
General approach	Double deflation	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Output: Extrapolated by quantity index obtained as a weighted average of constant-price estimates of final consumption, intermediate consumption and exports. Data from the input-output table of 1965 used as weights.	Output: Restaurants: Deflated by component of consumer price index. Hotels: Revalued at base-year prices.	Output: Railways: Extrapolated by weighted volume index of passenger-kilometres and ton-kilometres. Road transport: Extrapolated by quantity index based on employment adjusted for change in productivity (output per unit of labour). Water transport: Extrapolated by weighted volume index of quantities loaded and unloaded by ships under Italian flag. Air transport: Extrapolated by weighted quantity index of number of passengers embarked and disembarked and tons of goods loaded and unloaded by Italian aircraft. Weights in all cases obtained from input-output table of 1963. Services incidental to transport: Deflated by index of wages and salaries.	Output: Extrapolated by a combination of quantity indexes weighted by 1963 receipts. Indicators used: Post and telegraph: Number of prices of ordinary mail, parcels, telegrams. Telephone: Number of telephones in use and units of long-distance conversations.
	Input: The inputs of all non-agricultural industries deflated within the framework of an input-output table with 33 sectors, referring to 1965. Price indexes calculated for each of the industries as a weighted average of price indexes for individual inputs. Separate indexes calculated for domestic products and imports.			
Luxembourg				
General approach	Price deflation of value added		Value added extrapolated by quantity indicators for output.	Information not available
Detailed method and/or indicator used	Value added deflated by an appropriately weighted price index based on the data collected for the consumer price index.		Railways: Value added extrapolated by net ton-kilometres of freight transported, i.e., by the sum of the products of the weight of each of the consignments multiplied by the freight rate for the distance transported.	
Netherlands				
General approach	No single typical approach for all components	Value added extrapolated by quantity index of output.	No single typical approach for all components	Value added extrapolated by quantity indicators of output.
Detailed method and/or indicator used	Wholesale trade: Value added extrapolated by quantity indicators of the output of goods producing industries, imports, and components of expenditure. Retail trade: Trade margins deflated by consumer price index.	The quantity index is obtained by deflating components of output by the relevant components of the consumer price index.	Railway transport: Passenger and goods traffic: Extrapolated by indicators of passenger-kilometres and ton-kilometres transported. Other receipts from railway transport: Current value added deflated by implicit price index for goods transport. Tramways and buses: Urban and inter-urban passenger transport: Value added extrapolated by number of passengers or passenger-kilometres. Transport of goods: Current value added deflated by implicit price index for goods transport by railway. Ocean transport: Value added deflated by index of freight rates. Air transport: Current value added extrapolated by ton-kilometres of goods and passenger-kilometres transported. Inland waterway shipping: Value added extrapolated by ton-kilometres of goods transported. Other transport: Goods transport by road: Value added extrapolated by ton-kilometres of goods transported. Taxis and rented cars: Value added extrapolated by number taxis. Airports: Value added extrapolated by number of landings and take-offs. Pipelines: Value added extrapolated by tons transported. Toll roads: Current value added deflated by implicit price index for gross domestic product.	Postal services: Value added extrapolated by number of items or weight of mail. Telegraph services: Value added extrapolated by number of telegrams for telegraph services and number of minutes or units of telex communications for telex. Telephone services: Value added extrapolated mainly by number of telephone calls or number of subscribers' lines. Wire broadcasting services: Value added extrapolated by number of connexions.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
Norway				
General approach	Double deflation and commodity flow approach to constant-price estimates employed within the framework of detailed annual input-output tables. The input-output tables which distinguish 1900 groups of commodities, 160 domestic industries, 30 producers of government services and 230 categories of final use, are arranged as industry x commodity, commodity x industry tables. Current year approximate basic values are deflated by appropriate price indexes. The price indexes used are partly unit value indexes based on domestic production and foreign trade statistics, partly price indexes based on price series calculated for wholesale and retail price indexes and from other sources, and partly implicit price indexes. On the expenditure side, two price indexes are constructed for each commodity, one relating to domestic deliveries regardless of use and one relating to exports. Exceptions from the general method, and the indicators used in deflating output from each industry are shown under the relevant industry heading.			
Detailed method and/or indicator used	Output: The output of wholesale and and retail trade is calculated as the total of trade margins. The trade margins are taken to include transport costs. The estimates at current prices start with a distribution of commodities at purchasers' prices classified by receiving sectors and categories of end use. For each commodity the values at purchasers' prices are decomposed into producers' values and trade margins. Both producers' values and trade margins are further subdivided into approximate basic values, value added tax, other commodity taxes, and subsidies. For each commodity, the approximate basic value is deflated by an appropriate price index. This constant price estimate for each commodity is used as a basis for the calculation of trade margins at constant prices by using the same percentage addition for each component (approximate basic value, value added tax, other commodity taxes and subsidies) as in the base year. By adding the trade margins at constant prices, the output of wholesale and retail trade in constant prices, as well as output, subdivided into approximate basic values, value added tax, and other commodity taxes and subsidies are arrived at.	Output: Hotels and other lodging services: Indicator based on number of guest nights. Beer, wine and spirits: Extrapolated by a volume index of alcoholic beverages delivered for serving. Food: Extrapolated by weighted index of number of guest nights, and the volume of alcoholic beverages delivered to hotels and other lodging places.	Output: Railways: Passenger transport deflated by component of consumer price index. Goods transport extrapolated by net ton-kilometres carried. Scheduled road transport: Passenger transport deflated by consumer price index for passenger transport by scheduled motor bus. Goods transport extrapolated by net ton-kilometres carried. Tramway, subway and suburban railway transport: Deflated by component of consumer price index. Taxis and sightseeing buses: Extrapolated by number of taxis, and values deflated by consumer price index for taxi transport, reepectively. Unscheduled freight transport by road: Extrapolated by weighted average of total transport capacity in tons, production index for manufacturing and net ton-kilometres carried. Services of transport centrals: Output assumed to move with output in constant prices of railway and road transport. Other supporting services to land transport: Extrapolated by number of automobiles. Ocean transport: Passenger transport deflated by component of consumer price index. Goods transport extrapolated by weighted average of active tonnage of tankers, active tonnage of dry cargo and total number of active ships. Coastal and inland water transport: Passenger transport deflated by consumer price index for passenger transport by vessels. Goods transport extrapolated by net ton-kilometres. Harbour administration and shipping agent services: Extrapolated by weighted average of metric tons loaded in Norway on vessels departed to foreign countries, metric tons unloaded in Norway from vessels arrived from foreign countries, production index of manufacturing and tons of goods transported in coastal trade. Loading and unloading: Extrapolated by number of man-hours. Other supporting services to water transport: Extrapolated by weighted average of net tonnage of vessels with cargo arrived from foreign countries, net tonnage of vessels with cargo departed to foreign countries, gross tonnage at end of year of merchant vessels of 100 gross tons and over, and gross tonnage in regular coastal trade. Air transport: Passenger transport deflated by component of cost-of-living index. Goods transport extrapolated by net ton-kilometres carried. Services allied to transport and storage: Travel agencies: Extrapolated by number of persons arrived in Norway from non-Nordic countries by air and sea. Ship brokerage: Extrapolated by weighted average of average gross tonnage of vessels in ocean transport, production index for manufacturing and mining, number of metric tons loaded on vessels departed to foreign countries and number of metric tons unloaded from vessels arriving from foreign countries. Aircraft brokerage services: Extrapolated by transport of goods by aircraft at constant prices. Freight forwarding: Extrapolated by weighted average of volume index for imports excluding ships, volume index for exports excluding ships and production index for mining and manufacturing. Tourist offices, quartering offices and cabin-renting offices: Extrapolated by number of persons arriving from non-Nordic countries by air and by sea. Other services incidental to transport and storage: Extrapolated by weighted average of volume index excluding ships, volume index of exports excluding ships and production index for mining and manufacturing.	Output: Postal services: Value of postage deflated by consumer price index for postage. Telecommunications services: Value deflated by consumer price index for expenditures on telephone and telegrams.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
Portugal				
General approach	Price deflation of value added		No single typical approach for all components	Value added extrapolated by quantity index for output.
Detailed method and/or indicator used	Current value added deflated by combination of general wholesale price and consumer price indexes.		Railway transport: Value added extrapolated by index of passenger-kilometres and ton-kilometres carried, weighted by relative shares in income in the base year. Urban tramway and bus transport of passengers: Value added extrapolated by passenger-kilometres carried. Truck transport of goods: Value added extrapolated by number of vehicles registered. Taxis: Value added extrapolated by number of licensed vehicles. Ocean transport: Value added extrapolated by combined index for goods loaded and unloaded and passengers embarked and disembarked, weighted by shares of cargo and passenger transport in the income of main shipping companies in the base year. Air transport: Value added extrapolated by passenger-kilometres carried. River transport: Value added extrapolated by number of passengers transported across the river Tejo. Services incidental to transport: Value added deflated by consumer price index.	Index obtained by weighting together number of postcards and letters sent and received, number of local and long distance telephone calls, number of international telegrams sent and received by value added originating in the base year in postal, telephone, and telegraph services, respectively.
Sweden				
General approach	Double deflation	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Output: Estimates of trade margins (excluding indirect taxes) for 1968 subdivided into 5 major user categories (consumption, investment, exports, inputs in construction and machinery), on the basis of information obtained from input/output study for 1968, extrapolated by relevant volume index. Input: Extrapolated by trade margin at constant prices.	Output: Deflated by appropriate components of index of consumer prices. Input: Deflated by appropriate components of index of consumer prices and by specially constructed price index for various kinds of services.	Railway transport: Output: Private passenger and goods transport; deflated by consumer price index of railway fares. In other cases, as for instance for goods and mail transport, output extrapolated by means of available volume indicators. Input: Deflated by weighted unit value index of electric power, steam locomotive and motor engine fuel. Tramway, omnibus transport and taxicab transport: Output: Deflated by index of consumer prices and, in some cases, by price index of hourly freight rates. Input: Same as for railway transport, except taxicabs deflated by consumer price index of motor gasoline. Lorry transport: Output: Deflated by weighted price index of hourly and ton-kilometre freight rates. Input: Deflated by appropriate component of wholesale price index. Water transport: Output: Deflated by price index of passenger fares, weighted freight rate index and, in some cases, extrapolated by postal dispatches. Input: Deflated by weighted unit value index of hard coal, and freight rate index of harbour services. Harbours, inland waterways, etc.: Output: Deflated by unit value index of harbour services. Input: Deflated by unit value index of harbour services. Air transport: Output: Deflated by price index of air passenger fares and, in some cases, volume index of freight ton-kilometres in international traffic. Input: Deflated by unit price index of imported aviation gasoline.	Postal services: Output: Deflated by index of consumer price, and, in some cases, extrapolated by volume index of printed matters. Input: Extrapolated by volume index of postal dispatches. Telecommunications: Output: Deflated by consumer price index of telephone and telegram fees. Input: Deflated by specially constructed price index.
United Kingdom				
General approach	Value added extrapolated by quarterly indicators and volume indexes obtained by pride deflation.	Value added extrapolated by quantity index for output.	No single typical approach for all components	Value added extrapolated by quantity index of output.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
I. Countries using the SNA (continued)				
A. Developed countries (continued)				
United Kingdom (continued)				
Detailed method and/or indicator used	Estimates of value added for broad headings are further broken down by gross margins (total turnover less purchases for resale adjusted for stock exchanges) and extrapolated by the following indicators: Wholesale trade where goods are supplied to retailers and caterers: Volume of retail trade and catering trade, respectively, by kind of business. Other wholesale trade: Home market deliveries for production or consumption and the volume of exports of various goods. Retail trade: Volume of retail trade by kind of business.	The index obtained by deflating total expenditures in hotels and restaurants by representative price indexes.	Indicators of value added used: Railway transport: Passenger transport: Passenger miles in ordinary, reduced and seasonal traffic. Freight: Net ton miles, i.e., loaded wagon miles times average loads of forwarded and received traffic, of coal and coke, iron and steel and other freight. Parcels transported: Deflated receipts. Mail: Number of letters posted and parcels carried. Road transport: Passenger transport: Passenger miles or number of passenger journeys. Freight: Ton-miles carried, estimated on the basis of sample surveys for benchmark years, extrapolated by means of traffic counts. Taxis and private rental cars: Consumers' expenditure at constant prices. Ocean transport: Tankers: Active tonnage adjusted for increase in average speed. Dry cargo: Freight receipts less the cost of charter paid deflated by indexes of freight rates. Passenger transport: Number of passengers by sea between UK and Continent and non-European countries, respectively. Coastal trade: Export and import volume indexes. Inland water transport: Net ton miles. Air transport: Passenger-miles and freight ton-miles. Charter operations: Passenger mile capacity flown. Airport services: Air transport landings at UK airports. Ports: Net tonnage of shipping arrived and departed at UK ports. Miscellaneous transport and storage: Numbers employed used as indicators.	Indicators used in constructing the index: Postal services: Number of letters and parcels posted, number of saving bank and giro transactions, number of postal orders cashed and number of pensions and allowances paid. Telegraph services: Broadcast receiving licences issued, number of overseas telegrams, private wire rentals and telex calls. Telephones services: Number of telephone exchange connexions, local and international calls, private wire rentals. Cable companies: Number of telegrams handled.
United States				
General approach	No single typical approach for all components	Value added extrapolated by volume index for output obtained by price deflation.	No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Receipts of each type of retail stores and wholesale outlet deflated by indexes based on price series of consumer and wholesale price indexes. Deflated sales are aggregated to total wholesale using base-year gross margins as weights. Deflator derived from these series and the corresponding series at current prices used to deflate value added originating in wholesale trade. Volume index for retail trade considered valid measure of change in value added and used directly as indicator. Double deflation applied for State and local liquor stores. Sales deflated by consumer price index and costs by the appropriate component of wholesale price index.	Hotels and lodging places: Receipts for room rentals calculated separately for hotel and motel room; trailer space and clubs, schools and institutions deflated by weighted index of the average rate per occupied room in hotels and motels (85 per cent) and by consumer price index for rents (15 per cent). Receipts for meals compiled for hotels and motels, fraternities and sororities deflated by consumer price index for "meals away from home".	Railway transport: Double deflation: Output: Passenger and freight revenue deflated by price index for receipts on passenger travel and special freight rate index. Input: Cost of fuels, materials and supplies deflated by special price index, remaining costs by consumer price index for services. Local and highway passenger transportation: Inter-city passenger transit: Passenger miles travelled. Taxis: Gross receipts deflated by specially constructed price index of taxi service. Local passenger transportation: Revenues deflated by consumer price index for transit fares. Composite index for group as a whole constructed from these series weighted by percentage of respective charges derived from input-output study. Highway freight transportation: Value added deflated by index for average revenue per ton miles for class 1 carriers, which represent more than 70 per cent of traffic. Deflator for unregulated inter-city traffic and intra-city traffic is assumed to move similarly. Water transportation: International: Data on dry cargo and tanker cargo ton-miles and passenger miles, combined by data on operating revenues derived from input-output study. Domestic deep-sea and inland water traffic: Composite indexes of freight-ton miles. Services incidental to water transportation (stevedoring, canal operation, etc.): Index of cargo tonnage, foreign and domestic. Composite index for group as a whole constructed from these three series using payrolls as weights. Other transportation: Airline transport: Passenger miles and freight-ton miles combined with base-year operating revenues as weights. Pipeline transportation: Ton miles of crude and refined oil flowing through trunk and gathering lines. Transportation service industry: Tons of freight received from shippers and mileage for rental freights weighted by base-year operating revenues. Warehousing: Combined with highway freight transportation.	Telephone, telegraph and related services: Revenue data for intra-state telephone calls deflated by consumer price index for telephone service and for interstate calls deflated by special index based on effective rate changes. Telegraph revenues deflated by special index for each type of message. Implicit price index derived from the above used as deflator for group as a whole. Radio broadcasting and television: Revenue data for radio and television broadcasting extrapolated by index of audience hours listened and viewed, respectively.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	1. Countries using the SNA (continued)			
	B. Developing countries			
Argentina				
General approach	Information not available	Information not available	No single typical approach for all components	No single typical approach for all components.
Detailed method and/or indicator used			In most cases, value added extrapolated by indicators of quantity carried. For taxis the indicators are obtained by deflating current income by index of producer prices or rates. The weighting patterns are in all cases based on value added in 1960.	In most cases, value added extrapolated by indicators of the quantity of services rendered. Value added of telephone services extrapolated by number of telephones installed. The weighting patterns are in all cases based on value added in 1960.
Bolivia				
General approach	Value added extrapolated by quantity index of marketed production.	Information not available	Value added extrapolated by index of quantum of services rendered.	Value added extrapolated by index of quantum of services rendered.
Detailed method and/or indicator used	The index covers approximately 75-80 per cent of the gross value of production.		No further information available	No further information available
Chile				
General approach	Value added extrapolated by quantity index of marketed production.	Information not available	Price deflation of value added	Price deflation of value added
Detailed method and/or indicator used	The index covers 100 per cent of the gross value of production.		Rail, lorry and maritime goods transport: Current value added deflated by index of producer prices. Passenger transport by rail, bus, taxi and air, and services incidental to transport: Current value added deflated by appropriate components of the consumer price index. Storage: Current value added deflated by price indexes for relevant products or product groups.	Current value added deflated by the "Miscellaneous" component of the index of consumer prices.
Colombia				
General approach	Value added extrapolated by quantity index of marketed supply of goods.	Information not available	Value added extrapolated by quantity index of services rendered.	Value added extrapolated by quantity indicators for value added.
Detailed method and/or indicator used	The index covers 100 per cent of the marketed supply. The weighting pattern is based on gross domestic product in 1958.		The weighting pattern is based on gross revenue in 1958.	Postal services: Extrapolated by number of letters carried. Telephone services: Extrapolated by number of telephones installed. Telegram services: Extrapolated by number of words transmitted. Cablegram services: Extrapolated by number of persons employed. The weighting patterns are in all cases based on value added in 1958.
Ghana				
General approach	Value added extrapolated by quantity indexes of output.	Price deflation of value added.	No single typical approach for all components.	Value added extrapolated by quantity index for output.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Ghana (continued)				
Detailed method and/or indicator used	The quantity indexes relates to (i) imported goods, (ii) locally manufactured goods excluding petroleum and aluminium, (iii) petroleum products, (iv) agricultural products, (v) fish, (vi) forest products and (vii) minerals. The gross output at current prices in distribution trade relating to these commodity groups in 1968 is extrapolated to other years by means of these quantity indexes. The gross value added relating to each group is estimated by assuming the same ratio between gross output and gross value added as in the base year. Sales and other indirect taxes are deflated by the implicit price index for gross output in distributive trade, net of these taxes.	Current price estimates of gross output are deflated by specially constructed price indexes based on data collected for the consumer price index. In the case of restaurants and hotels in the modern sector, a weighted urban price index of domestic food, imported food and drink, and tobacco is used, while in the case of eating places in the unorganized sector, the urban price index of domestic food is used. The ratio between gross output and gross value added is assumed to have remained constant as in the base year in both cases. An estimate of depreciation at constant prices is obtained by deflating the current price estimates by an index based on the prices of machinery and equipment.	Road passenger transport (taxis, short and long journey buses): Gross output extrapolated by number of vehicles. Goods transport by road: Extrapolated by quantity index based on gross output at constant prices of imported goods, domestically produced goods excluding petroleum and aluminium, petroleum products, agricultural products, fish, forest products, cocoa, and minerals. Services incidental to transport: Value added deflated by index of earnings per person employed in transport, storage and communication. Intermediate consumption assumed to be same ratio of value added as in the base year in the case of these services. Current price estimates of depreciation deflated by price index of machinery and equipment. The implicit price index for the above transport services (which accounted for 70 per cent of gross output in 1968) is used for deflating the gross output of unspecified transport services. The value added of each type of transport (except services incidental to transport) is assumed to be the same percentage of gross output as in the base year.	Gross output extrapolated by specially prepared index covering number of letters sent and number of telephone calls. The ratio between gross value added and gross output assumed to be the same as in the base year. Depreciation in current prices deflated by price index of machinery and equipment.
Guatemala				
General approach	Value added extrapolated by quantity index for marketed production.	Information not available	Value added extrapolated by quantity indexes for output.	Information not available
Detailed method and/or indicator used	The index covers 100 per cent of the gross value of production. The weighting pattern is based on gross domestic product in 1958.		Ocean and inland waterway transport: Value added extrapolated by quantity index for exports. All other transport: Value added extrapolated by quantity index of services rendered. The weighting patterns are in all cases based on value added in 1958.	
Honduras				
General approach	No single typical approach for all components.	Information not available	Value added extrapolated by quantity indexes for output.	Value added deflated by index of wages and salaries.
Detailed method and/or indicator used	Current value of imports marketed deflated by unit value index of imports used as indicator of value added. All other items: Value added extrapolated by quantity index of marketed production. The weighting patterns are based on gross domestic product in 1958.		Value added extrapolated by quantity indexes for service rendered, except ocean and inland waterway transport which are extrapolated by quantity index for exports. The weighting patterns are in all cases based on value added in 1958.	The weighting pattern is based on value added in 1958.
India				
General approach	Value added extrapolated by volume index for output obtained by price deflation.	Information not available	Value added extrapolated by specially constructed volume indicators.	Value added extrapolated by quantity index of output.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
India (continued)				
Detailed method and/or indicator used	The index used is a weighted index of the deflated value of the marketable surplus of the commodity producing industries.		Railways: Extrapolated by volume indicators relating to number of passenger-kilometres in the case of passenger traffic and net ton-kilometres in the case of freight traffic. Earnings from passenger and freight traffic in the year 1960-61 are used as weights in combining the two indicators. Tramway and bus transport: Extrapolated by number of public service vehicles other than taxi-cabs. Motor vehicles (other than buses): Extrapolated by aggregate number of goods vehicles, taxi-cabs and auto-rickshaws. All categories of non-mechanized road transport except transport by man: Extrapolated by combined index of agricultural and industrial production. Transport by man in urban areas: Extrapolated by indicators relating to gross output of transport by tramway and bus at constant prices. Organized ocean transport: Extrapolated by index of number of passengers and total cargo handled by Indian shipping companies, weighted by earnings from the two sources in the base year. Unorganized ocean transport: Extrapolated by volume of cargo handled by sailing vessels. Air transport: Extrapolated by weighted index of passenger-kilometres and net ton-kilometres. Freight revenue and passenger revenue in the base year 1960-61 used as weights. Services incidental to transport: Extrapolated by indicator based on estimates of earnings in transport by rail, water and air at 1960-1961 prices.	The index covers number of postal articles, total number of domestic and foreign money orders, number of telegrams (excluding service telegrams) and total number of telephones. The weights used in constructing the combined index are the corresponding receipts, i.e., postage and message revenue of post offices, miscellaneous postal receipts which are mainly on account of money orders, and telegraph and telephone receipts.
Indonesia				
General approach	Value added extrapolated by quantities of products handled by trade.	Information not available	No single typical approach for all components.	Value added extrapolated by quantity indicators of output.
Detailed method and/or indicator used	The estimates are derived from the value of the marketed surplus of production at constant 1960 prices in agriculture, fishing, forestry, manufacturing and the marketing of exports and imports of merchandise at constant 1960 prices. The marketed proportions are assumed to have remained constant throughout the period. The trade margins also have been assumed to have remained fixed at 50 and 20 per cent for imports and exports, respectively, and 20 per cent for domestically purchased goods.		Railways: Value added extrapolated by weighted quantity index covering passenger-kilometres, cargo ton-kilometres, baggage and ferry passenger-kilometres. Buses, lorries, taxis, oplets and becak: Value added extrapolated by number of vehicles in operation. Shipping: Value added extrapolated separately for ocean, inter-insular and local shipping by means of dead weight tonnage engaged in each type of operation. Other transport, including services incidental to transport: Constant price estimates of value added obtained by using as indicator the average earnings per employed person in the base year multiplied by the total number of persons engaged in the relevant periods.	The indicators include number of letters handled, words cabled, telephone connexions, minutes of local calls and minutes of radio telephone calls.
Korea, Republic of				
General approach	Double deflation	Information not available	No single typical approach for all components	Price deflation of value added
Detailed method and/or indicator used	Output: Output valued at base year prices obtained in two steps. First the value of goods handled by trade is estimated at constant prices, and is multiplied by the ratio of goods transacted to total goods produced, of the current year, in order to arrive at the value of goods transacted at base-year prices. Next, the value of goods transacted is multiplied by the mark-up ratio of the base year to arrive at total mark-up at base year prices in wholesale and retail trade. Input: The input-output ratios of the base year are assumed to have remained constant.		Railways: A component fare index covering three categories of passenger transport and two categories of goods transport weighted by fares in the base year is prepared. This index is used to deflate current revenue of railway transport as a whole, and the resulting quantity series is used as indicator for value added. Tramway and air transport: Value added extrapolated by quantity index for output. Storage: Value added deflated by implicit price index for transport and communication as a whole.	Current value added deflated by appropriate components of the consumer price index.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1/] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Malaysia				
General approach	Current value estimates have been used	Information not available	Value added extrapolated by quantity indicators of output	Value added extrapolated by quantity indicators of output.
Detailed method and/or indicator used			Railways: The trend in passenger-miles and ton-miles of goods used as indicators. Road transport: Number of lorries, taxis, buses, etc., used as indicator. Water transport: An average index of trend in outward and inward cargo handled, number of ferry passengers carried and number of motor vehicles, used as indicators.	The number of postal articles handled and the number of telephones used as indicators.
Mexico				
General approach	Double deflation	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Output (trade margins): Extrapolated by means of indicators of the supply of commodities classified according to major destination. The trade margins in 1960 for each source of supply and each destination are used as weights. The indicators for domestic production are weighted production indexes for agriculture, forestry, mining and manufacturing estimated separately for goods used as intermediate consumption, exported and used for final consumption. Imported goods classified according to destination are deflated by relevant price indexes for the United States. Input: Extrapolated by a weighted quantity index covering electricity, transport, rent, insurance and financial costs, which cover about 65 per cent of total intermediate consumption.	Output: Deflated by special price index for hotels, based on information on changes in room rents charged. Input: The input-output coefficient of the base year assumed to have remained constant.	Output: The following indicators are used. Railways: Weighted index of passenger-kilometres and ton-kilometres of freight. Motor transport: Indirect estimate based on apparent consumption of gasoline and diesel and combined with the number of motor vehicles in circulation. Tramways and trolley buses: Number of passenger-kilometres transported. Underground: Number of passengers transported. Ocean transport and harbour services: Tonnage of freight transport in coastal and ocean traffic. Air transport: Passenger-kilometres and tons of freight transported. Services incidental to transport: Deflated by appropriate price index. Input: Extrapolated by appropriate quantity indexes, except in the case of motor transport and ocean transport, where the input-output coefficients are assumed to have remained constant.	Output: Extrapolated by volume indicators. Postal services: Extrapolated by number of items received and sent: Telecommunications services: Number of telegrams received and sent. Telephone services: Number of telephone calls. Input: Deflated by a weighted index of the relevant wholesale prices.
Panama				
General approach	Value added extrapolated by quantity index for output	Value added extrapolated by quantity indicators for output	Value added extrapolated by quantity indicators of output	Value added extrapolated by quantity indicators of output
Detailed method and/or indicator used	Wholesale and retail marketing of imports: Base-year estimate extrapolated by a combination of commodity consumption indexes. All other: Base-year estimate extrapolated by quantity indexes of marketed production. The indexes cover 100 per cent of the value of sales in 1960.	Hotels and guest houses: Quantity index of tourist expenditure in Panama used as indicator. Restaurants and bases: Extrapolated by combined index of tourist expenditure in Panama at constant prices, and the quantity of imports and domestic output of food and beverages.	Transport by motor vehicles: Base-year estimated extrapolated by number of vehicles. Ocean and inland water transport: Extrapolated by indexes of gross tonnage of registered shipping. Air transport: Extrapolated by number of passengers. All other: Base-year estimates extrapolated by quantity index of services rendered.	Base-year estimate extrapolated by number of telephones installed.
Philippines				
General approach	Price deflation of value added	Information not available	Price deflation of value added	
Detailed method and/or indicator used	Value added of wholesale trade (37 per cent of total) deflated by general wholesale price index for Manila. Value added of retail trade (63 per cent of total) deflated by overall consumer price index.		Current value added for transport and communication as a whole deflated by overall consumer price index.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Sierra Leone				
General approach	Value added extrapolated by quantity index of output	Value added extrapolated by employment data	Value added extrapolated by quantity indicators for output	Value added extrapolated by quantity indexes for output
Detailed method and/or indicator used	The quantities of all commodities handled by trade have been valued at base-year prices of 1963/64, and base-year trade margins have been applied to these series.	No further details available	Railroad transport: Extrapolated by index derived by combining passenger-miles and freight-ton miles carried by the Sierra Leone Government Railway, using the base-year revenue as weights. Lorries, taxis: Mostly extrapolated by number of vehicles operating. Bus services undertaken by the Road Transport Department: Extrapolated by passenger-miles. Road services: Current revenues deflated by transport labour wage rate index. Ports authority: Indexes derived by combining general cargo and produce handled, oil produce bunkered and discharged, water supplied to shipping, passengers embarking and disembarking, vessels worked, vessels not worked but calling at port and ferry services rendered (number of foot-passengers, private cars, lorries and other vehicles transported by ferry) using base year respective revenues as weights are used as indicators. Air transport: Indexes derived by combining passenger-miles, freight-ton miles and mail ton-miles using base-year revenues as weights are used as indicators. Services incidental to transport: Number of passengers departing (international air services) and the quantity of cargo (sea-borne trade) handled, combined in the proportion 1:4 used as indicator.	External telecommunications: Extrapolated by volume indexes based on the number of paid words of telegraph messages, paid minutes of radio telephone calls outgoing, ship-shore telegraph messages and shipshore radio telephone calls outgoing, combined by using as weights the base-year revenue figures. Other communications: Extrapolated by volume indexes based on the numbers of ordinary letters, postcards, etc. dealt with, registered articles dealt with, parcels handled, money orders issued and paid, postal orders issued and paid, telephone exchange levies and extensions, trunk-calls, and telegrams sent, combined by using as weights the base-year respective revenues.
Sri Lanka				
General approach	Price deflation of value added		Value added extrapolated by quantity indicators for output	Price deflation of value added
Detailed method and/or indicator used	Current value added deflated by a combination of wage rate index of employees in industry and commerce, and the consumer price index for Colombo.		The following indicators were used. Passenger transport: Passenger mileage of bus and railway services, number of passengers carried by Air Ceylon, number of rental cars and private cars. Goods transport: Mileage of goods transport by railway, number of lorries, number of ships entered and cleared at all ports of Ceylon.	Current value added deflated by wage rate index for central government employees.
Syrian Arab Republic				
General approach	Information not available			
Turkey				
General approach	Value added extrapolated by volume index for output	Value added extrapolated by number of employees	No single typical approach for all components	Price deflation of value added
Detailed method and/or indicator used	The volume index covers commodities produced by agriculture and industrial activity, and imports of commodities valued including customs duties.	No further information available	Railways: Output deflated by index of passenger and freight rates used as indicator for value added. Freight transport by road and cargo shipping: Value added extrapolated by volume index estimated on the basis of marketed agricultural and industrial products in constant prices, including imports including customs duties.	The index is a weighted unit price index for letters, telegrams and telephone conversations.
Uganda				
General approach	Double deflation	Price deflation of value added	Value added extrapolated by quantity index for output	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
	I. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Uganda (continued)				
Detailed method and/or indicator used	Output (trade margins) mainly extrapolated by quantity indicators of commodities traded. When quantities are not available, a price index derived from the Kampala cost-of-living index has been used. Input has been split into rent, transport, stationery and other. Rent is deflated by an index based on average wages for non-Africans. Transport extrapolated by quantity index for that industry. Stationery extrapolated by quantity index for communications. Other inputs deflated by price index for imports from outside East Africa.	Value added deflated by component of cost-of-living index for Kampala relating to higher income groups.	No further information available	
Uruguay				
General approach	Value added extrapolated by quantum index for output	Information not available	Value added extrapolated by quantum indexes for output and imports	Value added extrapolated by quantity index for output
Detailed method and/or indicator used	For domestically produced industrial goods, the trend in the quantum index of the output of manufacturing is used for extrapolation. A specially constructed quantity index has been used for domestically produced and imported primary commodities bought and sold. The weights are based on the gross domestic product in 1961.		Base-year estimates extrapolated by quantity index for services rendered except in the case of services incidental to transport which are extrapolated by the quantity index for imports. Storage is extrapolated by indexes of the quantity of agricultural commodities warehoused or kept in cold storage chambers. The weights are based on value added in 1961.	The weights are based on value added in 1961.
Venezuela				
General approach	Price deflation of value added		No single typical approach for all components	Information not available
Detailed method and/or indicator used	A specially constructed, price index based on the data collected for the consumer price index is used as deflator.		Price deflation of value added used for road transport. Value added of the rest of transport extrapolated by quantity indexes. A current weighted price index for passenger transport by automobile is constructed on the basis of tariffs using number of passengers transported as weights. The information is obtained from an annual survey. For freight transport by road a current weighted price index is constructed on the basis of unit values per ton-kilometre of goods transported between Caracas and eight other major cities. The quantities transported are used as weights. An index of prices for transport of school children is based on monthly tariffs using number of children transported as weight. This index is also current weighted. For air transport a base-weighted quantity index is constructed which covers both domestic and foreign airlines. Number of passengers transported is used as indicator and gross passenger revenues are applied as weights. The index is assumed to cover both passenger and freight transport by air. Ocean transport by domestic shipping lines is extrapolated by an unweighted index of the volume of freight transported and freight transported by foreign lines is extrapolated by the quantity index for harbour services. Railway transport is extrapolated by an unweighted index of ton-kilometres transported. Value added of toll roads is extrapolated by a quantity index using number of vehicles using the roads as indicator and revenue in the base year as weights. Harbour services are deflated by an unweighted unit value index based on incomes and quantity of cargo handled. The index for harbour services is also used for canal traffic.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	4. Wholesale and retail trade, and restaurants and hotels		5. Transport, storage and communication	
	4.1 Wholesale and retail trade	4.2 Restaurants and hotels	5.1 Transport and storage	5.2 Communication
II. Countries using the MPS				
Bulgaria				
General approach	Double deflation	Double deflation	Double deflation	
Detailed method and/or indicator used	Output (trade margins): Differences between sales and purchases of goods for resale, both deflated by price indexes. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	
Czechoslovakia				
General approach	Double deflation	Double deflation	Double deflation	
Detailed method and/or indicator used	Output (trade margins): Differences between sales and purchases of goods for resale, both deflated by price indexes. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	
German Democratic Republic				
General approach	Double deflation	Double deflation	Double deflation	
Detailed method and/or indicator used	Output (trade margins): Differences between sales and purchases of goods for resale, both deflated by price indexes. Material input: Deflation by price indexes or use of absolute amounts representing price changes.	Output: Deflated by price indexes. Material input: Deflation by price indexes or use of absolute amounts representing price changes.	Output: Deflation by price indexes or use of absolute amounts representing price changes. Material input: Deflation by price indexes or use of absolute amounts representing price changes.	
Hungary				
General approach	Extrapolation by quantity indexes.	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Net output of the base year extrapolated by quantity indexes for trade turnover obtained by deflation.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	Output: Extrapolated by indexes for ton-kilometres transported. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes.
Poland				
General approach	Double deflation	Double deflation	Double deflation	
Detailed method and/or indicator used	Output (trade margins): Deflated by price indexes. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes	Output: Deflated by price indexes. Material input: Deflated by price indexes.	
Romania				
General approach	Double deflation	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Output (trade margins): Differences between sales and purchases of goods for resale, both deflated by price indexes. Material input: Deflated by price index.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	Output: Deflated by price indexes. Material input: Deflated by price indexes.	Output: Information not available. Material input: Deflated by price indexes.
USSR				
General approach	Double deflation	Double deflation	Double deflation	
Detailed method and/or indicator used	Output (trade margins): Extrapolated by an index of quantities of sales. Account taken of changes in the composition of sales. Material input: Deflated by price index.	Output: Deflated by price indexes. Material input: Deflated by price indexes	Output: Deflated by price indexes. Material input: Deflated by price indexes.	

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity[1] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA		
	A. Developed countries		
Austria			
General approach	Value added extrapolated by means of employment data.	Double deflation method applied for ownership of dwellings.	No single typical approach for all components.
Detailed method and/or indicator used	Number of employees in banks and insurance companies, adjusted for productivity changes, used as indicator for value added. For lack of a better measure, cash book entries per employee in representative large banks was used as a measure of change in productivity.	Ownership of dwellings: Gross rents in base year extrapolated by index for stock of dwellings adjusted for increasing size. Maintenance expenditure at constant prices deducted and real estate taxes at constant prices added (method of estimation not explained). Other business services: Method not explained.	Community and social services: Education, art and recreation: Value added extrapolated by output deflated by appropriate price components of consumer price index. Health services: Value added deflated by index with the following components: Average cost per patient for medical care, the cost of a day in hospital and the cost of medicine. Other community services: Employment used as indicator for value added. Personal services: Value added extrapolated by volume index for output obtained by price deflation. Laundry and cleaning services, barber and beauty shops: Turnover deflated by the relevant subgroup of the consumer price index used as indicator for value added.
Belgium			
General approach	Value added extrapolated by quantity index.	Value added extrapolated by quantity index for output.	No single typical approach for all components.
Detailed method and/or indicator used	Volume index derived from estimate of private consumption at constant prices used as indicators for value added.	Ownership of dwellings: Number of households used as indicator for the extrapolation of value added. Business services: Volume index based on values at current prices deflated by appropriate price index used as indicator for value added.	Community and social services: Price deflation. Education: Value added deflated by retail price index adjusted for salary increases. Medical profession: Value added deflated by price index for income of doctors and pharmacists. Personal services: Value added extrapolated by quantity index derived from estimate of private consumption at constant prices.
Canada			
General approach	Value added extrapolated by quantity indexes for labour input.	No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Financial institutions: Salaries and wages are deflated by an index of average weekly earnings. Insurance carriers: Salaries and wages are deflated by an index of average weekly earnings.	The following indicators used for value added. Insurance and real estate agencies and real estate operators and developers: Salaries and wages deflated by an index of average weekly earnings. Rents: Real estate rents received by individuals, and imputed farm and non-farm residential rents deflated by appropriate price indexes and weighted with base-year value added. Royalties: Base-year royalties received by governments and individuals extrapolated by quantities of selected natural resources produced, valued at base-year royalties per unit. Legal services: Numbers of selected services provided weighted by estimated base-year earnings. Accountancy services: Numbers of accountants and non-professional employees combined using estimated base-year earnings. Engineering and scientific services: Base-year receipts extrapolated by employment index. Advertising services: Net advertising revenues deflated by a composite index of advertising rates by media. Other business services: Base-year receipts extrapolated by employment index. Miscellaneous services (excluding labour organizations and trade associations: Output extrapolated by employment adjusted for productivity trends based on quinquennial census results. Productivity measured is output per employee.	The following indicators used for value added. Health services: Offices of physicians: Earnings deflated with an index of doctors' fess. Offices of dentists: Earnings deflated with an index of dentists' fees. Other health services: Numbers in practice for selected professional categories weighted by base year average earnings. Labour organizations and trade associations: Output extrapolated by an index of membership. Motion picture theatres and film exchanges: Gross revenue deflated by appropriate components of the consumer price index. Other recreational services: Output extrapolated by employment adjusted for productivity trends based on quinquennial census data. Radio and television broadcasting: Gross revenue deflated with an appropriate price index. Laundries, cleaners and pressers: Double deflation. Annual receipts of power laundries and power dry-cleaners deflated by components of the consumer price index. Main inputs deflated by industry selling price indexes for soaps and cleaning compounds. The output of "other laundries and cleaners" extrapolated by quantity index for power laundries with an adjustment for productivity based on quinquennial census results. Self-service laundries and cleaners extrapolated on the basis of data from family expenditure surveys. Barber and beauty shops, shoe repair shops and other personal services: Census receipts are extrapolated on the basis of population trends. Funeral directors: Census receipts are extrapolated by number of registered deaths.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity [1] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA (continued)		
	A. Developed countries (continued)		
Denmark			
General approach	Price deflation of value added	No single typical approach for all components	Value added extrapolated by employment
Detailed method and/or indicator used	Current value added deflated by index relating to the development of the salaries of the employee concerned.	Real estate: Value added extrapolated by quantity index based on the yearly numbers of real estate sales. Business services: Value added extrapolated by employment.	No further information available
Finland			
General approach	Value added extrapolated by quantity index for output.	Value added extrapolated by quantity index for output (ownership of dwellings).	No single typical approach for all components
Detailed method and/or indicator used	Value added extrapolated by means of quantity index based on deflated gross output. Gross output which is included in private final consumption expenditure is deflated by consumer price index and the remaining part by the wholesale price index.	Ownership of dwellings: Value added extrapolated by changes in the dwelling stock taking into account estimated changes of the quality of dwellings, separately for urban and rural areas.	Community and social services: Value added extrapolated by volume index for output obtained by price deflation. Indicators generally obtained by deflating sales value by the appropriate group of the cost-of-living index or wages by a wage index. Incomes of private teachers and doctors deflated by the general cost-of-living index. For broadcasting, number of licences is used as indicator for value added. Personal services: Value added extrapolated by volume index for output obtained by price deflation.
France			
General approach	Double deflation and commodity flow method based on annual input-output tables. The procedure is to calculate the estimates at prices of the preceding year by deflating the current value series by price indexes with the preceding year as base. The constant price estimates thus obtained are subsequently converted to a fixed base-year by a process of chaining. The outputs and inputs of individual industries are in most cases estimated at constant prices by means of price indicators, but in some cases, quantity indicators are used. Exceptions from the general method are indicated under the relevant industry.		
Detailed method and/or indicator used		Owner-occupied dwellings: Extrapolated by volume index based on values at current prices deflated by appropriate price index.	
Germany, Fed. Rep. of			
General approach	Value added estimated directly, input added to arrive at gross output.	Double deflation	Double deflation
Detailed method and/or indicator used	Value added: Number of employees adjusted for increase in productivity used as indicator. Increase in productivity measured by quantity series per head, for instance number of book entries, counter transactions, etc. in banking, and number of new contracts, damages etc. in insurance. Inputs: Deflated by specially constructed price index.	Output: Rents deflated by available price indexes for old, new and newly built houses. Value added of business services extrapolated by employment. Input: Assumed same proportion of output as in base year.	Output: Cinemas, advertising on television, laundry services: Deflated by specially constructed price indexes for output. Theatres, private schools: Deflated by specially calculated price indexes of labour and material costs. Other items extrapolated by quantity indexes (e.g. private doctors by number of cases treated). Input: Assumed same proportion of output as in the base year, with approximate adjustment for changes in prices charged by main suppliers.
Greece			
General approach	Value added extrapolated by indicators of employment.	Value added extrapolated by quantity indicator for output (ownership of dwellings).	Price deflation of value added.
Detailed method and/or indicator used	Wages and salaries extrapolated by employment index. Non-labour income deflated consumer price index.	Base-year estimates extrapolated by indicator for number of dwellings existing at mid-year.	Current price estimates deflated by the consumer price index.
Ireland			
General approach	Information not available	Information not available	Information not available

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices, according to kind of economic activity [1] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	1. Countries using the SNA (continued)		
	A. Developed countries (continued)		
Italy			
General approach	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Output: Credit: Extrapolated by average of quantum indexes for employment, number of debtors, number of current accounts and number of savings bank books, and number of postal orders and money drafts. Financial services and insurance: Deflated by average of consumer and wholesale price indexes.	Output: Base-year values extrapolated by index of number of rooms in dwellings existing at the middle of each year.	Output: Liberal professions: Deflated by implicit price index of GDP. Private instruction: Deflated by appropriate component of consumer price index. Public education: Extrapolated by number of pupils graduated. Health services: Deflated by component of consumer price index. Theatres etc.: Deflated by component of consumer price index relating to recreational services. Domestic services: Partly deflated by component of consumer price index and partly extrapolated by employment. Various personal services: Deflated by appropriate price indexes.
	Input: The inputs of all non-agricultural industries deflated within the framework of an input-output table with 33 sectors, referring to 1965. Price indexes calculated for each of the industries as a weighted average of price indexes for individual inputs. Separate indexes calculated for domestic products and imports.		
Luxembourg			
General approach	Value added extrapolated by means of employment data, with adjustment of two per cent for productivity changes.		
Detailed method and/or indicator used	No further information available.		
Netherlands			
General approach	Value added extrapolated by means of quant index for output.	Value added extrapolated by quant index for output.	Value added extrapolated by output or related indexes.
Detailed method and/or indicator used	Gross output in current prices deflated by specially constructed price index from wage index and general index of wholesale prices used as indicator for value added.	The following indicators used for value added. Real estate: Extrapolated by number of houses. Business services: Estimated production value deflated by relevant price index.	Social and related community services: Hospital etc.: Extrapolated by number of days of treatment. Other medical services: Estimated output value based on number of persons employed deflated by relevant price index. Recreational and cultural services: Cinemas, theatres, concerts, etc.: Extrapolated by number of tickets sold per industry. Dancing and sports schools, radio, television, etc.: Output deflated by price index. Personal services: Bathing establishments: Extrapolated by number of baths taken. Other services: Estimated output value deflated by relevant price index.
Norway			
General approach	Double deflation and commodity flow approach to constant-price estimates employed within the framework of detailed annual input-output tables. The input-output tables which distinguish 1900 groups of commodities, 160 domestic industries, 30 producers of government services and 230 categories of final use, are arranged as industry x commodity, commodity x industry tables. Current year approximate basic values are deflated by appropriate price indexes. The price indexes used are partly unit value indexes based on domestic production and foreign trade statistics, partly price indexes based on price series calculated for wholesale and retail price indexes and from other sources, and partly implicit price indexes. On the expenditure side, two price indexes are constructed for each commodity, one relating to domestic deliveries regardless of use and one relating to exports. Exceptions from the general method, and the indicators used in deflating output from each industry are shown under the relevant industry heading.		

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity [1] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
I. Countries using the SNA (continued)			
A. Developed countries (continued)			
Norway (continued)			
Detailed method and/or indicator used	Output: Accident insurance: Deflated by appropriate components of consumer price index. Other: Extrapolated by index of employment.	Output: Buildings of all types, including owner-occupied dwellings: Rent deflated by consumer price index for rent. Business services: Extrapolated by number employed.	Output: Sanitary services: Extrapolated by number employed. Education services: Extrapolated by number of teaching staff. Scientific services: Gross expenditures deflated by an index of wages in corresponding government activities. Medical, dental, other health and veterinary services: Physicians and physiotherapists: Gross income deflated by appropriate components of the consumer price index. Dental care: Extrapolated by number of dentists. Hospitals: Extrapolated by number of beds. Veterinary services: Deflated by unit price of consultations. Welfare institutions. Extrapolated by a weighted index based on number of beds in old peoples homes, children's homes and children in nursery schools. Business, professional and labour associations, other social and related community services: Extrapolated by number employed. Recreational and cultural services: Motion picture production, distribution and projection: Gross income deflated by appropriate components of the consumer price index. Theatres, museums and sports and athletic facilities: Extrapolated by number employed. Authors: Gross income deflated by an index of wages. Bathing: Gross income deflated by unit prices. Personal and household services: Repair of vehicles, household appliances and commodities for personal use, laundries, laundry services and cleaning and dyeing plants: Gross incomes deflated by appropriate components of the consumer price index. Domestic services and miscellaneous personal services except funeral services: Extrapolated by number employed. Funeral services: Extrapolated by number of deaths.
Portugal			
General approach	Price deflation of value added.	Value added extrapolated by quantum index for output.	Price deflation of value added.
Detailed method and/or indicator used	Current value added deflated by appropriate component of consumer price index.	Number of new buildings at the middle of each year multiplied by rent per new dwelling in base year used as indicator.	Community and social services: Current value added deflated by appropriate component of consumer price index. Personal services: Current value added deflated by appropriate component of consumer price index.
Sweden			
General approach	Double deflation	Double deflation	Double deflation
Detailed method and/or indicator used	Banking: Output: Base-year value extrapolated by employment index adjusted for productivity changes. Input: Deflated by cost index of rented premises (rents), consumer price index of postage (postal services) and implicit price index of services (unspecified services). Private insurance: Output: Base-year value extrapolated by employment indexes adjusted for productivity changes. Input: Deflated by specially constructed price indexes, e.g., implicit weighted price index of certain transports and communications, cost index of rented premises and implicit price index of services.	Real estate: Output: Rents deflated by consumer price index. Input: Deflated by relevant series from consumer price and wholesale price indexes. Business services: Output: In general, base-year values deflated by salaries index for technical personnel in the case of construction industry and deflated by relevant price indexes of advertising in the case of advertising and publishing. Input: Deflated by price index of office supplies, price index as of rented premises and of business services.	Output: Deflated by relevant series from consumer price index. Input: Deflated by price index of office machinery and, in some cases, by wholesale price index and price index of rented premises.
United Kingdom			
General approach	Value added extrapolated by quantity indexes for output obtained by price deflation.	No single typical approach for all components.	No single typical approach for all components

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity [1/] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA (continued)		
	A. Developed countries (continued)		
United Kingdom (continued)			
Detailed method and/or indicator used	Banking: Weighted index covering number of cheques cleared, amount of total deposits and amount of outstanding bank advances, the two latter items deflated by retail price index; and amount outstanding on bank advances also deflated by retail price index, used as indicators. Other finance: Building societies: Unweighted average of mortgage advances and value of mortgages outstanding deflated by price index of new houses and total liability deflated by price index of new houses, used as indicator. Stock brokeraging: Number of transactions on Stock Exchange and stamp duty on shares transferred deflated by index of share prices. Finance houses: Amount of hire purchase debt outstanding deflated by durable goods price index used as indicator. Insurance: Consumers' expenditure on life insurance at constant prices, and other insurance premiums less claims deflated by total expenditure price index, used as indicators.	The following indicators for value added are used. Real estate: Ownership of dwellings: Consumers' expenditure on rent at constant prices. Real estate: Stock of commercial and industrial buildings at constant prices. Estate agents: Transfer costs of land and building at constant prices. Business services: Accounting services: Weighted index of number of assessments to tax for individuals, partnerships and companies. Legal services: Weighted average of kinds of cases tried and number of proceedings by solicitors (probate work). Advertising, market research and other business services: Employment used as indicator.	The following indicators for value added are used. Education services: Weighted average of teachers' salary bill deflated by index of salary rates, and number of pupils registered. For universities, the number of full-time teaching staff is used as indicator. Health services: General practice: Number of doctors. Dental services: Weighted average of number of treatments. Hospitals: Same method as described for producers of government services. Other medical services: Assumed to move with rest of health services. Recreational services: Cinemas and theatres: Number of admissions. Radio and television: Weighted average of number of radio and television licences in force. Other entertainment: Receipts deflated. Personal services: Extrapolated by number employed or by index of employment.
United States			
General approach	No single typical approach for all components	No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Banking: Base year imputed interest for demand and time deposits of commercial, stock and mutual savings banks extrapolated by type of deposit series separately, which are calculated by deflating deposits by consumer price index for all items. Implicit price index for banking as a whole derived by summing series by type of bank and by deposit applied to value added. Credit agencies, holding and other investment companies: Saving and loan associations: Same procedure used for time deposits of commercial banks. All other activities: Value added deflated by consumer price index for all services. Security and commodity brokers, dealers and exchanges: Value added extrapolated by number of persons engaged in production, i.e., the full-time equivalent of all employees and proprietors. Insurance: Value added extrapolated by volume indexes for output obtained by price deflation. Insurance carriers: Insurance charges by type of insurance (life and non-life), deflated by appropriate consumer price indexes, summed and indexed and used as indicator for value added. Insurance agents, brokers and services: Value added for insurance agents, brokers and related service organizations extrapolated by number of persons engaged.	Real estate: Price deflation of value added. Value added divided in three categories which are deflated separately. Tenant-occupied and owner-occupied non-farm real estate deflated by consumer price index for rent; non-residential non-farm real estate deflated by index of office building rental income (cents per square foot); farm real estate deflated by personal consumption expenditure deflator for farm rent. Business services: Value added extrapolated by employment.	Social and related community services: Education services and non-profit membership organizations: Deflated by index of average annual earnings per employee. Medical and other health services: Deflated by implicit price index derived from various kinds of medical care services, privately controlled hospitals and sanatoria. Deflators used are consumer price index for "physicians' fees" for physicians and other professional services, for "dental fees" for dental expenditure and for "hospital daily service charges" for privately controlled hospitals and sanatoria. Recreational and cultural services: Motion pictures: Deflated by weighted index of consumer price index for motion picture admissions and index of average annual earnings per person engaged in motion picture production and distribution. Weights used are the wages and salaries for each type of activity in the base year. Amusements and recreation, except motion pictures: Deflated by implicit price index of six different series; admissions to legitimate theatres, opera and entertainment of non-profit institutions (except athletics), admissions to spectator sports, amount spent on commercial participant amusements, commercial amusements, n.e.c., and other recreations, n.e.c. Deflators used for each of the series vary; e.g., consumer price index for "all items" for commercial amusements, n.e.c., and other recreation, n.e.c.; index of average annual earnings for employees concerned for commercial participant amusements. Museums and galleries: Deflated by special price index derived from average annual earnings per full-time employee concerned. Personal services: Deflated by implicit price index from seven different series, i.e., shoe cleaning and repair; cleaning, dyeing, pressing, etc.; laundering in establishment; barber shops, beauty parlours and baths; funeral and burial expenses; photo studios; and related miscellaneous services. Deflators used for each of the series are corresponding consumer price index or specially constructed price index.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity 1/ (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA (continued)		
	B. Developing countries		
Argentina			
General approach	No single typical approach for all components	Value added extrapolated by quantity index of output (ownership of dwellings).	No single typical approach for all components
Detailed method and/or indicator used	Banking: Value added extrapolated by number of employees. Insurance: Value added extrapolated by quantity index of services rendered. Precise method not indicated. The weights used are based on value added in 1960.	A combination of indexes is used. Precise method not indicated. The weights based on value added in 1960.	Cinemas, football games and personal services: Value added extrapolated by quantity indexes for the production of services. Radio, television and independent professions: Value added extrapolated by employment.
Bolivia			
General approach	Value added of banking extrapolated by quantity index of output.	Value added of ownership of dwellings extrapolated by total population growth.	Value added extrapolated by quantity index for output
Detailed method and/or indicator used	No further information available	No further information available	No further information available.
Chile			
General approach	Price deflation of value added	Price deflation of value added	Price deflation of value added
Detailed method and/or indicator used	Current values deflated by implicit price index for expenditure.	Ownership of dwellings: Current values deflated by housing component of the consumer price index. No further information available.	Public education and health services: Current values deflated by combination of index of wages and salaries and the wholesale price index. Cinemas: Current values deflated by consumer price index.
Colombia			
General approach	Value added extrapolated by quantity index of output.	Price deflation of value added.	No single typical approach for all components
Detailed method and/or indicator used	No further information available	Current value added of ownership of dwellings deflated by index of rents. No further information available.	Public education and domestic services: Value added extrapolated by number of persons employed. Entertainment services: Value added extrapolated by number of spectators.
Ghana			
General approach	No single typical approach for all components	No single typical approach for all components	No single typical approach for all components.
Detailed method and/or indicator used	Banks: Specially constructed index number based on the number of cheques cleared and the amounts cleared on chequing accounts used to extrapolate value added in 1968. Depreciation deflated by price index for machinery and equipment. Insurance: Value added in 1968 extrapolated by index of employment. Depreciation deflated by same method as for banks.	Real estate: Net value added deflated by index number of the rate of interest. Depreciation of buildings assumed to have remained the same percentage of net value added as in the base year. Intermediate consumption was estimated at 1/11 of gross value added at constant prices. Business services: Accounting, auditing and engineering services: Gross output deflated by consumer price index used as indicator for value added. Machinery rental: Gross output deflated by price index for machinery and equipment used as indicator. Legal services: Value added extrapolated by number of persons engaged. Depreciation deflated by price index for machinery and equipment in the case of business services as a whole.	Education and recreation services: Value added at current prices deflated by the consumer price index. Private medical services: Value added extrapolated by number of persons engaged. Barbers and hairdressers, photographers and laundries: Value added extrapolated by number of persons engaged. Depreciation in all cases deflated by price index for machinery and equipment.
Guatemala			
General approach	Value added extrapolated by quantity index of output.		
Detailed method and/or indicator used	The weights are based on value added in 1968. No further information available.		

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity [1/] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA (continued)		
	B. Developing countries (continued)		
Honduras			
General approach	Price deflation of value added	Value added extrapolated by quantity index of output	No single typical approach for all components
Detailed method and/or indicator used	Current value added deflated by index of wages and salaries. The weights are based on value added in 1948.	The weights are based on value added in 1948. No further information available.	Private education and personal services: Value added extrapolated by number of persons engaged. Private medicine: Value added extrapolated by number of doctors. Public education and health services: Current value added deflated by indexes of wages and salaries. Cinemas: Value added extrapolated by number of attendants. Value added in 1948 is used as weights in all cases.
India			
General approach	No single typical approach for all components	No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Banks including post office savings bank: Value added deflated by general index of wholesale prices. Non-banking financial companies: Value added extrapolated by indicator obtained by deflating total net receipts by the general index of wholesale prices. Co-operative credit societies: Value added extrapolated by number of members of credit societies at the end of each year. Life insurance including postal life insurance: Value added extrapolated by a combined index of amounts assured and the total amount of life funds, both deflated by the general index of wholesale prices. Non-life insurance: Value added extrapolated by indicator obtained by deflating annual premium receipts less claims and surrenders, by general index of wholesale prices.	Ownership of dwellings: Gross rents in the base year extrapolated by increase in number of dwellings adjusted for the cost of repairs and maintenance and for depreciation, deflated by indexes of the cost of construction of urban and rural dwelling, respectively. Other real estate: Value added extrapolated by number of urban dwellings. Business services: Value added extrapolated by indicators of employment.	The following indicators for value added were used. Education services: Extrapolated by a combined index of students enrolled and number of teachers. The individual indicators were weighted by type of institution. Medical and health services: Extrapolated by a weighted index of medical personnel according to category, and number of hospital beds. Others: Extrapolated by employment data.
Indonesia			
General approach	No single typical approach for all components	Value added of ownership of dwellings assumed to be two per cent of total value added of other activities at constant prices.	Value added extrapolated by increase in population.
Detailed method and/or indicator used	Banks: Current value added deflated by consumer price index. Insurance: Value added extrapolated by employment.	No further information available	No further information available
Korea, Republic of			
General approach	Price deflation of value added	No information available	No single typical approach for all components
Detailed method and/or indicator used	Compensation of employees and other costs deflated separately. In the case of banking, compensation of employees is deflated by index of salaries of bank employees and other costs by the index of wholesale prices.		Education services: Value added extrapolated by index of students and employees (teachers and other staff members), with same weight given to each of the two indicators. Medical services: Value added extrapolated by index of number of patients and doctors, with same weight given to each of the two indicators. Motion picture production and distribution, cinemas, theatres and related services: Value added deflated by indexes of admission fees. Radio and television broadcasting: Value added deflated by component of consumer price index. Other recreational services: Value added deflated by fees paid.
Malaysia			
General approach	A 10 per cent growth rate has been assumed.	The current price estimates have been retained (ownership of dwellings only).	No single typical approach for all components
Detailed method and/or indicator used	No further information available	No further information available	Education: The trends in the number of pupils and teachers have been used. Health: The trends in the number of doctors, nurses and other personnel have been used. For the rest of the industry, the current price estimates have been retained.

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity [1/] (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA (continued)		
	B. Developing countries (continued)		
Mexico			
General approach	Double deflation	Double deflation (real estate only).	No single typical approach for all components
Detailed method and/or indicator used	Output: Extrapolated by indicator of employment with an adjustment of one per cent for increase in productivity Input: Deflated by price index of principal intermediate products.	Output: Extrapolated by volume index for private construction. Input: The input-output coefficient of the base year (1960) assumed to have remained constant.	Recreation services. Double deflation: Output: Production, distribution and exhibition of motion pictures: Extrapolated by number of motion pictures produced. Radio and television: Extrapolated by number of stations. Theatres and other shows: Extrapolated by number of admissions. Spas, billiard-rooms, bowling alleys, etc.: Extrapolated by number of establishments. Input: The input-output coefficients of the base year assumed to have remained constant. Other private services. Four major services are selected as indicators for the constant price estimates of this part of the industry. These are medical services, funeral services, domestic services and cleaning and dyeing services. The following indicators for value added are used for each of these services. Medical services: Number of patients attended to. Funeral services: Extrapolated by number of deaths. Domestic services: Extrapolated by volume index obtained by deflating remunerations by average wages. Cleaning and dyeing services: Extrapolated by index of the urban population.
Panama			
General approach	Value added extrapolated by balance of loans and deposits at the end of each year (banks only).	Value added extrapolated by indexes of output or population.	No single typical approach for all components.
Detailed method and/or indicator used	No further information available	Ownership of dwellings only. Urban areas: Constant-price estimate for construction of new dwellings used as indicator. Rural areas: Base-year estimate extrapolated by index of rural population growth.	Services of doctors: Value added extrapolated by number of practising doctors. Nursing services: Value added extrapolated by number of practising nurses. Hospital services: Value added extrapolated by number of patients attended at public and private hospitals. Education services: Value added extrapolated by number of students enrolled in public and private schools. Hairdressing establishments and beauty parlours: Value added extrapolated by quantity index of imports of perfumery and toilet articles. Legal services: Value added extrapolated by number of divorces before court. Commercial services: Value added extrapolated by gross value of construction at constant prices. Accounting and auditing: Value added extrapolated by number of licences in force. Domestic services: Value added extrapolated by household expenditure on domestic services at constant prices. Miscellaneous services: Value added extrapolated by gross product at constant prices in the private sector. Cinemas and public shows: Current values added deflated by entertainment component of the consumer price index. Horse racing: Value added deflated by consumer price index for low- and middle-income families in Panama City.
Philippines			
General approach	Information not available	Price deflation of value added	No single typical approach for all components
Detailed method and/or indicator used		Owner-occupied dwellings: Rental value deflated by consumer price index for house rent. Others: Deflated by component of consumer price index relating to miscellaneous expenditure.	Education and professional services: Not deflated since 1960 because average income per school and per professional has remained unchanged. Others: Current value added deflated by component of consumer price index relating to miscellaneous expenditure. (This method also used for education and professional services prior to 1960).

Table 2. National practices in compiling the contribution of industries to the gross domestic product at constant prices according to kind of economic activity 1/ (continued)

Country and approach	6 Financing, insurance, real estate and business services		7 Community, social and personal services
	6.1 Financial institutions and insurance	6.2 Real estate and business services	
	I. Countries using the SNA (continued)		
	B. Developing countries (continued)		
Sierra Leone			
General approach	Value added extrapolated by quantity indexes of output obtained by price deflation.	Value added extrapolated by quantity indexes of output obtained by price deflation.	Value added extrapolated by quantity indexes of output or by employment.
Detailed method and/or indicator used	Banking services: Total amount of deposits and loans of banks deflated by miscellaneous group component of Freetown consumer price index. Insurance services: Total premium income deflated by same index as used for banking services.	Ownership of urban dwellings: Estimated annual rental value of Freetown houses deflated by rent group component of Freetown consumer price index. Provincial houses: Estimated annual rental value deflated by the rent group component of the consumer price index relating to mining areas.	Education services: Extrapolated by combined index of the number of students and the number of teachers, separately for primary schools, secondary schools, technical and vocational schools, teacher training and university colleges, using the expenditures of the respective institutions in the base year as weights. Medical and health services: Extrapolated by index derived as a simple average of indicators for in-patients treated, out-patients treated and number of medical personnel. Remaining community and social services: Extrapolated by index of employment. Personal services: Extrapolated by index of employment.
Sri Lanka			
General approach	Price deflation of value added	Price deflation of value added	No single typical approach for all components
Detailed method and/or indicator used	Current value added deflated by wage rate index for employees in industry and commerce.	Real estate: Current value added deflated by combined index of urban and rural rental values. Business services: Domestic services: Deflated by Colombo consumer price index. Professional services subject to tax: Current value added deflated by wage rate index and Colombo consumer price index.	Education and health services: Base-year value added extrapolated by indexes of number of employees in the respective services. Personal services: Current value added deflated by wage rate index.
Syrian Arab Republic			
General approach	Current values not deflated	Current values not deflated	Price deflation of value added
Detailed method and/or indicator used			Current value added deflated by index of wages and salaries
Turkey			
General approach	Value added extrapolated by employment	Value added extrapolated by quantity index of output	Price deflation of value added
Detailed method and/or indicator used		Value added of ownership of dwellings extrapolated by number of dwellings. No further information available.	Current value added deflated by implicit price indexes. No further information available.
Uganda			
General approach	Price deflation of value added		Price deflation of value added
Detailed method and/or indicator used	All items except rent are deflated by Kampala cost-of-living index, higher income group. Rent (monetary) deflated by index based on average wages for non-Africans. Rent (non-monetary) deflated by price index of subsistence agriculture.		Value added of all items deflated by the component relating to higher income groups, of the Kampala cost-of-living index.
Uruguay			
General approach	Value added extrapolated by quantity index of output	Value added extrapolated by quantity index of output (ownership of dwellings).	Information not available
Detailed method and/or indicator used	No detailed information available	No detailed information available	
Venezuela			
General approach	Value added deflated by appropriate components of the consumer price index		
Detailed method and/or indicator used	No detailed information available		

1/ The table is based on the information that was available to the Statistical Office of the United Nations when the table was prepared.

Table 3. National practices in compiling the contribution of producers of government and of private non-profit services to the gross domestic product at constant prices based on the SNA[1/]

Country and approach	1. Producers of government services	2. Producers of private non-profit services to households
	I. Developed countries	
Austria		
General approach	No single typical approach for all components.	No separate estimate available.
Detailed method and/or indicator used	The following indicators are used in extrapolating value added. Police: Number of identified perpetrators and traffic accidents. Judiciary: Number of civil actions settled and penal suits settled. Education: Number of pupils registered in schools run be government. Finance: Gross tax receipts deflated by price index composed of price trends of government consumption, construction and consumer prices. Construction: Compensation of government employees engaged in construction affairs extrapolated by government construction at constant prices. Health services: Number of hospitalizations multiplied by duration of care (days of treatment). Amenities and other social services: Extrapolated by gross domestic product at constant prices. Social security: Number of insured pensions. Defence: Number of military personnel (permanent staff) and others. Other purposes: Extrapolated by average of all purposes above. Depreciation: Nominal values deflated by price index of construction and equipment.	
Belgium		
General approach	Value added deflated by index of wage and salary rates.	Information not available.
Detailed method and/or indicator used	No further information available.	
Canada		
General approach	No single typical approach for all components.	No single typical approach for all components.
Detailed method and/or indicator used	The following indicators are used in extrapolating value added. Local and provincial government: Wages and salaries are deflated by an index of wage rates. Constant dollar depreciation estimates are added to the measure. Federal government (excluding defence): The number of employees, classified by occupational category, are weighted with base-year average earnings. Constant dollar depreciation estimates are added to the measure. Defence: Numbers of Armed Forces personnel, classified by rank, are weighted with base-year average earnings. The numbers of civilian employees, classified by occupational category, are weighted with base-year average earnings. Education and related services: Wages and salaries are deflated by a Paasche price index of average earnings weighted by occupational levels. In the cases of elementary and secondary schools, and universities and colleges, constant dollar estimates of depreciation are added to the measure. Librariss, museums and other repositories: Wages and salaries are deflated by a Paasche price index of average earnings weighted by occupational levels. Hospitals: Numbers of personnel by class are weighted with the base-year wage rates. Constant dollar depreciation estimates are added to the measure. Highway and bridge maintenance: Labour income is deflated by an index of average weekly earnings for the industry. Water systems and other utilities: Output is extrapolated by population and annual average daily pumpage of water of major municipalities, combinnd by using base-year unit costs.	The following indicators are used in extrapolating value added. Religious organizations: Labour income deflated by the consumer price index. Welfare organizations: Labour income deflated by an index of average weekly earnings in selected service industries. Private households: Labour income deflated by the consumer price index.
Denmark		
General approach	Output deflated by specially constructed deflators, and the deflated series are used as indicators for value added.	Information not available.
Detailed method and/or indicator used	Different cost elements are added up to the total output in the following way: Compensation of employees deflated by price index derived from civil servant salaries. Government commodity purchases deflated by appropriate component of consumer price index. Value of military construction activity deflated by price index of building costs. Consumption of fixed capital deflated by price index relating to gross capital formation.	
Finland		
General approach	Value added extrapolated by volume index for output obtained by price deflation.	Price deflation of value added.
Detailed method and/or indicator used	Public administration and defences: Wages and salaries deflated by earnings of civil servants and workers in municipal employment, imputed rent and depreciation by index of building costs; repairs and maintenance by combined index for cost of construction work and house building. For central government services cost indexes or physical quantity indexes are used. For public education and medical services, the same method is used as for public administration and defence.	Deflated by means of cost indexes which are of the same type as for central government services.

Table 3. National practices in compiling the contribution of producers of government and of private non-profit services to the gross domestic product at constant prices based on the SNA[1/] (continued)

Country and approach	1. Producers of government services	2. Producers of private non-profit services to households
	I. Developed countries (continued)	
France		
General approach	Value added deflated by index of wage rate.	
Detailed method and/or indicator used	Each year's estimates of wages and salaries are based on the wages and salaries of the previous year and are subsequently converted to constant values of a fixed base year by a process of chaining.	Information not available.
Germany, Fed. Rep. of		
General approach	Value added estimated directly, input added to arrive at gross output.	Employment used as indicator.
Detailed method and/or indicator used	Value added: Wages and salaries deflated by index of agreed wages, adjustment made for increase in productivity. Depreciation deflated by price index for corresponding investment goods. Input: Deflated by indexes of input prices related to government expenditure on materials.	Value added in base year extrapolated by persons engaged with an addition for increases in productivity.
Greece		
General approach	Value added extrapolated by employment, adjustment made for increase in productivity.	Information not available.
Detailed method and/or indicator used	Public administration and defence and public education: The estimates at constant prices are based on a combination of two indexes, one representing employment figures and one conventionally taken as reflecting the increase in productivity. The magnitude of the last index (one per cent annually for public administration and two per cent for public education) is not based on any specific study of the Greek case, but is based on the experience of some other countries.	
Ireland		
General approach	Value added extrapolated by employment.	Information not available.
Detailed method and/or indicator used	No further detail available.	
Italy		
General approach	No single typical approach for all components.	No separate estimate available.
Detailed method and/or indicator used	Public administration and defence: Price deflation of value added Wages and salaries: Deflated by arithmetic mean of index for contractual salaries of civil servants in central government, classified by category and rank, and index of average salaries for all civil servants. Wages and salaries in kind: Deflated by implicit price index for commodities involved. Depreciation: estimates based on perpetual inventory method. Imputed rent: Deflated by implicit price index for gross fixed capital formation. Social, recreational and related community services: Double deflation. Output: Education: Extrapolated by index of number of pupils in various types of schools. Health services: Hospitals extrapolated by index of bed-day. Other sanitary services deflated by price index for doctors' examinations, etc. Other items: Deflated by general cost-of-living index. Input: Deflated by specially constructed index numbers.	
Luxembourg		
General approach	Value added extrapolated by means of employment data, with adjustment of 0.5 per cent for productivity change.	No separate estimate available.
Netherlands		
General approach	Extrapolated by means of output index.	No separate estimate available.
Detailed method and/or indicator used	Output extrapolated by quantity data of factor services (manpower). No further detail available.	

Table 3. National practices in compiling the contribution of producers of government and of private non-profit services to the gross domestic product at constant prices based on the SNA[1/] (continued)

Country and approach	1. Producers of government services	2. Producers of private non-profit services to households
	I. Developed countries (continued)	
Norway		
General approach	Output deflated by price indexes for inputs.	
Detailed method and/or indicator used	For each of the 16 accounts of central government and the 14 accounts of local government services output is deflated by price indexes computed for inputs of materials, wages and salaries and consumption of fixed capital. Wages and salaries are deflated by Laspeyres' indexes of wage rates based on earnings of employees in different occupational levels in the base year.	No separate estimate available.
Portugal		
General approach	Price deflation of value added.	No separate estimate available.
Detailed method and/or indicator used	Current value added deflated by indicators which reflect the changes in the remuneration of government employees compared to the base year (1963).	
Sweden		
General approach	No single typical approach for all components.	Double deflation.
Detailed method and/or indicator used	Wages and salaries for the base year 1968 extrapolated by employment indexes which are based on hours worked; consumption of fixed capital has been calculated in fixed prices as the difference between gross capital formation and change in the capital stock after allowances for consumption of fixed capital during the year. The stock values after allowances for consumption of fixed capital have been obtained by adjusting the replacement values for the different types of assets with the ratio between expected residual lifetime and total expected lifetime.	Output: Deflated be relevant series from consumer price index. Input: Deflated by specially constructed price index.
United Kingdom		
General approach	No single typical approach for all components.	No single typical approach for all components.
Detailed method and/or indicator used	The following indicators are used in extrapolating value added. National government services: Armed services and women's services: Weighted indexes for number in each rank. Non-industrial civil servants: Weighted index of staff. Industrial civil servants: Number in employment. Local government services: Police and fire services: Weighted for number in each rank. Other local government services: Number in employment. Other community and social services: Number of teachers. Universities: Number of full-time teaching staff. Other educational services: Number employed. Health services: National health service hospitals: Index of wage and salary bill deflated by index of wage and salary rates. Local authority health services: Weighted index of numbers of patients for each type of service and number of school children inspected.	Education: Same method as used for government services. Scientific services, religious organizations, etc.: Number employed. Domestic service of households: Number employed.
United States		
General approach	No single typical approach for all components.	Information not available.
Detailed method and/or indicator used	Public administration and defence: Value added extrapolated by employment. Value added extrapolated by man-hour wherever possible and otherwise by employment, separately for military personnel (officers and enlisted men separately), and civilian employees except those on work relief. Community and social services: Education: Deflated by index of average annual earnings per employee. Medical and other health services: Deflated by implicit price index derived from various kinds of medical care services. Museums and galleries, etc.: Deflated by special price index derived from average annual earnings per full-time employee concerned.	
	II. Developing countries	
Argentina		
General approach	Value added extrapolated by number of persons employed.	No separate estimate available.
Detailed method and/or indicator used	The weights are based on value added in 1960.	

Table 3. National practices in compiling the contribution of producers of government and of private non-profit services to the gross domestic product at constant prices based on the SNA[1/] (continued)

Country and approach	1. Producers of government services	2. Producers of private non-profit services to households
	II. Developing countries (continued)	
Chile		
General approach	Price deflation of value added.	No separate estimate available
Detailed method and/or indicator used	Current value added deflated by index of wages and salaries.	
Colombia		
General approach	Price deflation of value added	
Detailed method and/or indicator used	Current value added deflated by index of wages and salaries.	
Ghana		
General approach	Value added estimated directly, intermediate consumption added to arrive at gross output.	No separate estimate available
Detailed method and/or indicator used	The estimates are made separately for central government (including public institutions) and local government. Valne added: Extrapolated by index numbers of employment. Intermediate consumption: Deflated by unit price index covering food, paper and paper products, chemicals and miscellaneous manufactured goods which are commonly used by government services. Depreciation: Deflated by price index for machinery and equipment.	
Guatemala		
General approach	Value added deflated by index of wages and salaries	No separate estimate available
Detailed method and/or indicator used	Current value added deflated by index of wagse and salaries. The weights are based on value added in 1968.	
Honduras		
General approach	Value added deflated by index of wages and salaries	No separate estimate available
Detailed method and/or indicator used	The weights are based on value added in 1948. No further details available.	
India		
General approach	Current price estimates are left unadjusted.	No separate estimate available
Indonesia		
General approach	Value added estimated directly, intermediate consumption added to arrive at gross output.	No separate estimate available
Detailed method and/or indicator used	The estimates are made separetely for central and local government. In both cases, number of employees is used as indicator of value added, and intermediate consumption is deflated by the consumer price index re-weighted for the purpose.	
Korea, Republic of		
General approach	No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Wages and salaries: Extrapolated by index of the number of employees weighted by rank. Imputed rent: Current estimates of repair costs deflated by index of building repair costs. The index of building repair coste is calculated by using wholesale price indexes of various building materials and wages of coustruction workers weighted by the input structure of the base year.	Research and scientific institutes: Current value added deflated by component for service charges in consumer prices for all cities. Education: Base-year estimate extrapolated by average index of numbers of teachers and students. Medical and other health services: Base-year extrapolated by index of the number of doctors and patients received. Welfare services: Services of Red Cross: Current estimates deflated by index of service charges in consumer prices for all cities. Other welfare services: Base-year estimate extrapolated by index of the number of persons admitted. Religious organizations: Base-year estimate extrapolated by index of the number of clergy and adherents. Trade Union: Base-year estimate extrapolated by average index of the number of branches and union members. Libraries, museums, etc.: Base-year estimate extrapolated by index of the number of staff members.

Table 3. National practices in compiling the contribution of producers of government and of private non-profit services to the gross domestic product at constant prices based on the SNA[1] (continued)

Country and approach	1. Producers of government services	2. Producers of private non-profit services to households
	II. Developing countries (continued)	
Malaysia		
General approach	Current price estimates have been retained (public administration and defence)	No separate estimate available
Philippines		
General approach	Value added extrapolated by index of employment	No separate estimate available
Detailed method and/or indicator used	No further details available	
Sri Lanka		
General approach	No single typical approach for all components	No separate estimate available
Detailed method and/or indicator used	Public administration and defence: Base-year value added extrapolated by index of number of employees. Other government services: Current value added deflated by wage rate index of government employees.	
Syrian Arab Republic		
General approach	Double deflation	No separate estimate available
Detailed method and/or indicator used	Output: Deflated by index of wages and salaries. Input: Deflated by retail price index for Damascus.	
Uganda		
General approach	Value added at current prices used for constant prices.	No separate estimate available
Venezuela		
General approach	Value added extrapolated by indicator of wages and salaries.	No separate estimate available

1/ The table is based on the information that was available to the Statistical Office of the United Nations when the table was prepared.

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand 1/

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
I. Countries using the SNA								
A. Developed countries								
Australia								
General approach	Revaluation at base-year prices for most items of food, beverages and tobacco, except for the latest years when price deflation is used. Most other items deflated by price indexes. Items not mentioned below extrapolated by quantity indicators or current value deflated by relevant price indexes. For the few items for which satisfactory data are not available or for which a clear concept of quantity is not readily measurable, the method of revaluation adopted is to use implicit price indexes for selected components of personal consumption expenditure.							
Detailed method and/or indicator used	Food: For all but the latest years, estimates of the quantity consumed are available for most of expenditures on food, and the revaluation of this flow is predominantly achieved by multiplying the quantities each year by the relevant average base-year prices. For the latest as well as earlier years where estimates of consumption are available in value terms only, appropriate price indexes are used. Tobacco, cigarettes and alcoholic drinks: Separate estimates are made for tobacco, etc., and for alcoholic drinks of various kinds. In every case the estimated quantity consumed is revalued at base year prices.	Current expenditure deflated by the relevant components of the consumer price index	Rent of dwellings: Special purpose indexes of the movement in the price of dwelling rent by State, for different categories of dwelling are used to revalue rent actually paid by tenants. The imputed rent of owner occupiers is revalued by applying to the estimate for each category the price index used to revalue the estimate for the corresponding category of tenanted dwellings.	Household durables: Electrical goods and furniture: Revalued by means of the relevant components of the consumer price index. Floor coverings, hardware and others: Special purpose price indexes and unit value indexes derived from production and trade statistics are used after adjustment, where appropriate, for changes in rates of sales tax.		Rail, tram, bus and other fares: Current revenues revalued partly by the use of specially constructed price indexes (e.g., rail fares, shipping fares and overseas air fares) and partly by the use of quantity indicators (e.g., estimated number of paying passenger miles is used to revalue expenditure on internal air fares). Purchase of motor vehicles and operation of motor vehicles: Revalued mainly by means of special purpose price indexes, but quantity indicators (such as the estimated number of cars owned by the personal sector and the estimated number of car miles travelled) are used to revalue some of the remaining components such as repairs and maintenance of motor vehicles. Postal and telephone services: Revalued mainly by means of special purpose price indexes.		
Austria								
General approach	Direct revaluation at base-year prices where information is available on quantities of commodities consumed. Otherwise current data deflated by available price indexes for the individual goods and services.							
Detailed method and/or indicator used	No further detail available							
Belgium								
General approach	Direct revaluation at base-year prices	Price deflation	Extrapolated by volume index	No single typical approach for all components	No single typinal approach for all components	No single typical approach for all components	No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Food and tobacco: Except for a few items extrapolated by volume index or deflated by price index, direct revaluation at base-year prices is applied. Beverages: Generally, deflated by representative price index.	Most items deflated by representative price indexes, but clothing extrapolated by volume index (derivation of index not explained).	Gross rent: Number of households. Fuel and power: Quantities consumed or delivered.	Price deflation used for durable household goods except textiles and glassware which are extrapolated by volume indexes. Other household goods: Direct revaluation or extrapolation by volume index. Domestic services: Extrapolated by number of accident insured servants.	Doctors' and dentists' fees and fees for pharmaceutical products: Price deflation. Clinics: Number existing. Hospitals: Number of days in hospital by type of establishments.	Purchase of personal transport equipment: Quantities revalued at base-year prices. Utilization of personal transport equipment: Cars extrapolated by volume index for purchases; motorcycles etc. by number in existance. Purchased transport: Deflated by representative price index except taxis (extrapolated by number existing) and boat fares (not deflated). Communications: Deflated by representative price index, except telegraph services (not deflated)	Recreation, entertainment and cultural services: Admissions and Belgian newspapers and periodicals revalued at base-year prices. Most other items deflated by representative price indexes. Expenditure on gambling and radio and television licences not deflated. Educations: Salaries deflated by salary index for the public sector as a whole. Rent extrapolated by number of school premises occupied.	Personal cares: Extrapolated by persons employed. Restaurants and hotels: Extrapolated by volume index. Financial, insurance and juridical services: Deflated by representative price indexes.

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
	I. Countries using the SNA (continued)							
	A. Developed countries (continued)							
Canada								
General approach	Price deflation is used. Current value estimates in as fine detail as possible are deflated with appropriately constructed prices and the constant dollars aggregated. The resulting implicit price index has changing quantity weights.							
Detailed method and/or indicator used	Value series at a finely detailed level of over one hundred series are deflated with fuel purchase prices. If final purchase prices are not available, in particular for some services, indexes of wage rates are used as proxies. Final purchase prices are obtained from the consumer price index, whereas wage rates are derived from an industry establishment based survey of employment, payroll and man-hours.							
Denmark								
General approach	Price deflation.							
Detailed method and/or indicator used	In most cases current value series by detailed expenditure groups deflated by appropriate components of consumer price indexes. In some cases, the information is supplemented by other price data, especially from certain series of wholesale price indexes and unit value indexes for imports. In the case of tourist expenditure foreign retail price indexes are used. In the final estimates, about 200 commodity groups within private final consumption expenditure are deflated separately.							
Finland								
General approach	Price deflation or revaluation at average base-year prices.							
Detailed method and/or indicator used	Most of the estimates are obtained either through deflating the data at current prices which are based on the primary data of the consumer price index and wholesale price index, or by multiplying the quantities of the various commodities by average base-year prices. No further details available.							
France								
General approach	For food products, clothing and footwear and imputed rent of owner-occupied dwellings, the constant price estimates are generally obtained by extrapolation by means of quantum indexes. The current price data are estimated as the product of quantum and corresponding price figures. In most cases, the basic data for other goods and services are available in value terms only, and the constant price estimates are obtained by deflation with appropriate price indexes.							
Detailed method and/or indicator used								
Germany, Fed. Rep. of								
General approach	Price deflation. About 60 per cent of total private consumption expenditure in the domestic market is estimated at current prices on the basis of detailed information on sales by retail stores, including bakers and butchers; these data are deflated by means of indexes for selling prices of retail trade. Another important part is deflated by appropriate components of cost-of-living index. Different or supplementary methods used are indicated under relevant headings.							
Detailed method and/or indicator used	Consumption of own production by farm households and direct sales by farmers to households deflated by index of producer prices for agricultural products.		Gross rent: Deflated separately for old, new and newly built dwellings, by appropriate price indexes.			Deflated by appropriate components of cost-of-living index, suitably adjusted.		
Greece								
General approach	Direct revaluation at base-year prices	Price deflation	No single typical approach for all components	No single typical approach for all components	Price deflation	Price deflation	Price deflation	Price deflation
Detailed method and/or indicator used	Annual quantities of each commodity multiplied by average prices in base year	Current estimates deflated by appropriate components of index of clothing-footwear prices, incorporated in the consumer price index.	Gross rent: Current price estimate deflated by appropriate component of consumer price index. Water charges: Annual quantities of water consumed multiplied by average prices in base year. Fuel and light: Current quantities multiplied by average consumer price in base year.	Furniture, furnishings and household equipment: Current price estimates deflated by section "durable household goods and supplies" of consumer price index. Household operation: Current price estimates deflated by section of consumer price index.	Current estimates deflated by section "medical and personal care" of consumer price index	Transport: Current price estimates deflated by section "Transport" of consumer price index. Communications: Current price estimates deflated by section "Communications" of consumer price index.	Recreation and entertainment: Current price estimates deflated by section "Education and recreation" of consumer price index. Education: Current price estimates deflated by appropriate component of consumer price index.	Current estimates deflated by the general consumer price index

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand 1/ (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
	1. Countries using the SNA (continued)							
	A. Developed countries (continued)							
Ireland								
General approach	Direct revaluation at base-year prices or price deflation.							
Detailed method and/or indicator used	Direct revaluation at base-year prices where information is available on quantities of commodities consumed. Otherwise current data deflated by available price indexes for the individual goods and services.							
Israel								
General approach	Extrapolation by quantity indexes	Price deflation	No single typical approach for all components	Price deflation	Price deflation	Price deflation	Price deflation	Price deflation
Detailed method and/or indicator used	Quantity indexes are calculated on a moving base, i.e. the quantity change in each year as compared with the preceding year, is calculated on the basis of the prices of the preceding year.	Deflated by relevant components of the consumer price index	Gross rent: Extrapolated by index of change in the stock of residential dwellings. Fuel and power: Current quantities revalued at base-year prices.	Current price data deflated by the appropriate subgroups of the consumer price index	Current price data deflated by relevant price indexes	Current price data deflated by relevant price indexes	Current price data deflated by relevant price indexes	Current price data deflated by relevant price indexes
Italy								
General approach	No single typical approach for all components	Price deflation	No single typical approach for all components	Price deflation	Price deflation	No single typical approach for all components	Price deflation	Price deflation
Detailed method and/or indicator used	Consumption from own production revalued at base-year prices. Purchased commodities deflated by appropriate components of consumer price index.	Deflated by relevant components of consumer price index	Rent extrapolated by number of dwelling units. Repairs and water supply deflated by appropriate price indexes. Solid fuels revalued at base-year prices. Liquid fuels deflated by appropriate price indexes.	Each item deflated by specially constructed price index	Deflated by appropriate components of the consumer price index	Deflated by specially constructed price indexes except expenditures on driving lessons (extrapolated by number of pupils).	Deflated by specially constructed or other relevant price indexes	Deflated by specially constructed or other relevant price indexes
Japan								
General approach	Private final consumption expenditure at constant prices is calculated separately for farm households and non-farm households. In each case, the expenditures are classified by broad sub-groups (for instance, food and beverages are divided into grain, fish, meat, vegetables etc.), and each item is deflated by an appropriate price index. Special items such as payment in kind to the Self-Defence Corps, imputed bank services are deflated by either the wholesale price index or by a combined index of urban and rural consumer prices.							
Detailed method and/or indicator used	Each item deflated by relevant component of rural, urban consumer price index. Benefits in kind to staff of defence forces deflated by food component of wholesale price index.	Similar method used as for food, beverages and tobacco	Expenditures of farm households deflated by rural price index for fuel and light: expenditures of non-farm households deflated by consumer price index of all cities for fuel and light.	Rent, repair of dwellings, and furniture of farm households deflated by components of the consumer price index for small cities. Rent and repair of dwellings for non-farm households deflated by respective components of consumer price index for all cities. Similar method used for water charges and expenditures on furniture by non-farm households.	Each detailed item of expenditure deflated by relevant components of the rural price index, wholesale price index and consumer price index.			
Luxembourg								
General approach	Price deflation for all items							
Detailed method and/or indicator used	Current estimates deflated by relevant components of the consumer price index.							

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
	1. Countries using the SNA (continued)							
	A. Developed countries (continued)							
Netherlands								
General approach	In most cases, current value series by detailed expenditure group, estimated partly on the basis of sales figures for retail trade and partly on the basis of sales figures of producers, deflated by price indexes based on cost-of-living series re-weighted by national accounts figures. Exceptions from the general method are indicated under respective headings.							
Detailed method and/or indicator used			Gross rents: Number of dwellings used as volume indicator for rents		Current value figures from social security system "blown up" to cover the whole population deflated by component of the cost-of-living index referring to "packet" provided by social security.		Education: General education practically free, fees considered as transfers.	Number of employees used as indicator for banking. Insurance services: Service charge percentage for recent years applied to premium corresponding to same benefit in real terms as in the base year.
Norway								
General approach	In current prices, the uses side of the accounts for private and government consumption, fixed capital formation, stocks and exports is derived from the estimates on the supply side. Since each of the commodity accounts at approximate basic values is deflated by appropriate price indexes, expenditures at constant prices are also expressed in approximate basic values. Data in purchasers' values for the various forms of final expenditure are built up from separate constant-price estimates of approximate basic values, commodity taxes and subsidies and trade and transport margins. The consumer price index is used to check and correct the deflated figures for private consumption expenditure at purchasers' values. For the service categories of private consumption expenditure, current values are in most cases deflated by group indexes of the consumer price index.							
Detailed method and/or indicator used	For some categories volume indicators are used to check the deflated figures, for instance quantities produced for edible fats, sales figures of producers for soft drinks and beer, sales figures based on stamp duty for tobacco consumption.		Rent of owner-occupied dwellings deflated by the consumer price index for rent.	Sales data on number of units used to check volume indexes for durable household goods. Employment data used as volume indicators for service categories such as laundering, cleaning etc., and domestic services.	Number of dentists at work used as volume indicator both on production and expenditure side. All hospital fees deflated by a weighted input price index.	New registration of motor vehicles used to check constant price estimates. Public transport services deflated by the consumer price index for the various categories and checked against volume indicators in the case of taxis, moving expenses and freight transport.	Data on number of units sold used to check deflated figures to television sets and radio receivers. Volume indicators of output used for photographers, theatres, concerts and other public performances. Employment data used for cinemas and a weighted volume index based on information from education statistics applied for education services.	Life insurance and other insurance services performed by associations, deflated by municipal wage rates. Employment data, number of guest nights and quantity of alcoholic beverages delivered to the establishments used as volume indicators for services of hotels, boarding houses and restaurants.
Portugal								
General approach	Except food, beverages and tobacco, gross rent, fuel and power, other items of private consumption are not separately estimated. Residual value obtained as the difference between the total private final consumption expenditure and the value of food, beverages and tobacco, gross rent, fuel and power in prices of 1963.							
Detailed method and/or indicator used	Current quantities revalued, item by item, at base-year prices		Gross rents: Current total number of dwellings built valued at average base-year prices. Fuel and power: Current quantities consumed revalued at base-year prices.					
South Africa								
General approach	No single typical approach for all components.							
Detailed method and/or indicator used	Where possible, base-year value added extrapolated by appropriate volume indexes. In the absence of volume indexes, appropriate price indexes are used to deflate the relevant value series to constant prices. If neither of the above methods can be applied successfully, the general consumer price index or components thereof are used to deflate the series. The latter method is used only in respect of items comprising a very small proportion of total private consumption. Use is made of a large number of different indexes, such as the available for components of the official consumer and the wholesale price indexes, retail sales and the physical volume of manufacturing production.							
Sweden								
General approach	About 60 per cent of private consumption is calculated by deflating the current values of various items by price indexes, which in most cases are obtained by weighting prices of separate goods of the consumer price index, which is a chain index with annual links where the weights are revised annually. Of the remaining part, about 35 per cent is estimated by multiplying base-year prices by consumed quantities during respective years. Food represents the most important part here.							

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
I. Countries using the SNA (continued)								
A. Developed countries (continued)								
Sweden (cont'd)								
Detailed method and/or indicator used	Consumed quantities revalued at base-year prices.	Current values deflated by group indexes of consumer price index. Current information on quality changes collected and decision made from case to case as to which part of a price change is due to quality change. Consumer price index is a chain index making possible introduction of new commodities at each early link.			Doctors' fees deflated by total consumer price index, average dentists' fees in base year extrapolated by number of dentists at work in other years.	Price ratios of two or more items weighted together used for: railway, bus and train journeys; part of running and maintenance expenditure of motor vehicles; charges for telephones and telegrams. Expenditure on taxi rides extrapolated by number of taxis.	Entertainment, recreational and cultural services (film, theatre, concerts, museums, sports, amusement park, dancing etc.): admission fees deflated by sub-item of consumer-price index reflecting cinema performance (2 hours) with seats in centre, tickets for sports events (ice hockey and soccer) without seats, entrance fees for amusement park, dancing etc. Education: No estimate because education practically all public and free.	Financial services: salaries in banking and insurance deflated by index of salaries of bank employees. Funeral expenses per deceased person in base year extrapolated by number of deceased persons. Equipment and accessories including repairs: radio and television licences: Deflated by weighted index or current fee per licence for colour television, black and white television and radio.
Switzerland								
General approanh	No single typical approach for all components.							
Detailed method and/or indicator used	Price indexes used for deflating the various expenditure components are consumer price index, wholesale price index, price index for construction costs in Zurich and Berne, several component indexes which served to calculate these global indexes and various indexes for wages and salaries. All these indexes, which are base-weighted, do not have the same base period. It was therefore not possible to construct, for each expenditure group, an ideal current-weighted deflator. Deflation was undertaken at the lowest level of aggregation; i.e., 24 sub-groups for private final coosumption expenditure. The estimates at constant prices are sometimes obtained on the basis of volume indexes. No further details available.							
United Kingdom								
General approach	Revaluation at base-year prices	Price deflated	No single typical approach for all components.	Price deflation	See table 2	No single typical approach for all components.	No single typical approach for all components.	No single typical approach for all components.
Detailed method and/or indicator used	Food, non-alcoholic beverages and tobacco revalued item by item at average base-year prices, except fresh fruit and vegetables revalued at the average price for that group in the corresponding quarter of the base year. Beer consumption deflated by unweighted mean of price indexes for bulk and standard barrels (the latter takes account of alcohol content and thus partly of quality changes). Six group of spirits and four of wines revalued separately in order to take into account quality changes.	Clothing and footwear components of retail price index used as deflator, adjusted to allow for different price movements in that part of the clothing market not covered by the index and for such factors as clearance sales which are not fully reflected in the index.	Gross rents extrapolated by the change in aggregate rateable values of domestic property in England and Wales. Maintenance, repairs and improvements by occupiers: deflated by appropriate sections of retail price indexes. Quantities of coal, coke and manufactured fuel consumed: revalued at average unit value of the base year. Electricity and gas: Deflated by the appropriate component of the retail price index. Other fuels: Paraffin, fuel oil and liquid gases: Quantities bought revalued at average price in the base year. Paraffin deflated by appropriate section of retail price index.	Durable household goods divided in as detailed sub-groups as possible and deflated by price series of the retail price index adjusted to allow for different price movements in markets outside the scope of the index. Other household goods and services: deflated by relevant components of retail price index.	Revalued by same indicators as value added.	Personal transport equipment: Motor cars and motor cycles, new and second hand: Current price estimates deflated by weighted price indexes for components. Operation of personal transport equipment: Maintenance, repairs, spare parts and accessories: Deflated by the appropriate components of the retail price index. Petrol and oil: Quantities of oil and of each graded petrol consumed revalued at average base-year prices. Other expenditures: Current price estimates deflated by consumer-price index in the case of insurance, by changes in the licensing rates in the case of licenses and by changes in test fees in the case of driving test fees. Purchased transport: Railway travel: Current estimates deflated by indexes of estimated average receipts per passenger mile. Road travel: Deflated by price index for receipts per passenger journey. Sea travel: Passenger receipts of ships deflated by an average fare index of passage receipts and journeys. For pleasure cruises and long distance travel, number of trips weighted by typical fares in base year. Air travel: Extrapolated by passenger-miles flown. Communications: Extrapolated by same indicators as value added.	Equipment and accessories: Deflated by the appropriate components of the retail price index. Recreation, entertainment and cultural services: Expenditure on admissions to cinemas and other entertainment deflated by appropriate components of the retail price index. Expenditure on books, newspapers and magazines deflated by the appropriate components of the retail price index. Education: Extrapolated by volume index. Tuition fees paid to non-profit making independent schools extrapolated by index of number of pupils.	Hairdressing, manicure and beauty care: Expenditure deflated by appropriate section of retail price index. Goods for personal care: Expenditure extrapolated by items from the miscellaneous goods component of retail price index. Expenditure on goods n.e.c. deflated by the appropriate components of the retail price index. Restaurant and hotel services deflated by the appropriate components of the retail price index and by an accommodation index. Packaged tours: Average fare in base year extrapolated by number of passengers. Expenditure on insurance deflated by the implicit index for consumer expenditure. Other items deflated by appropriate components of retail price index.

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1] (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fual and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
1. Countries using the SNA (continued)								
A. Developed countries (continued)								
United States								
General approach	Current price estimates in as fina detail as possible deflated by component price series of consumer price index for middle income families in large cities and of index for prices paid by farmers, supplemented with price series of special retail price indexes, price index utilizing mail order catalogue prices or price index constructed by adjusting information on costs to a price basis by allowing for changes in profit margins, wholesale price information and physical volume data. No further details available.							
Detail method and/or indicator used								
B. Developing countries								
Argentina								
General approach	Private final consumption expenditure ut coustant prices obtained as a residual.							
Bolivia								
General approach	Private final consumption expenditure at constant prices obtained as a residual.							
Chile								
General approach	Most domestically produced items deflated by appropriate components of the cost-of-living index. Electricity deflated by producer price index. Financial services deflated by implicit price index for consumer expenditure. Imported goods deflated by unit value index for imports.							
Colombiu								
General approach	Private final consumptiou expenditure at constant prices obtained as a residual.							
Ghana								
General approach	Private final consumption expenditure at constant prices obtained as a residual.							
Guatemala								
General approach	Private final consumption expenditure at constant prices obtained as a residual and checked with independent estimate by commodity flow method.							
Honduras								
General approach	No single typical approach for all components	Price deflation	No single typical approach for all components	Extrapolated by volume indexes for gross value added of the corresponding producing industries.				
Detailed method and/or indicator used	Food: Extrapolated by quantity index of production. Tobacco and beverages: Current value deflated by retail price index.	Current value deflated by retail price index	Rent and electric power: Extrapolated with quantity index for output. Fuels: Deflated by import price index.					
Korea, Republic of								
General approach	Food grains: Base-year estimate extrapolated by index of consumption in physical terms derived from the data on family budget surveys. Commodities other then food grains: Supplied by type of commodity at constant prices are first obtained directly from the data for the estimation of product by industry and from foreign trade statistics. The supplies are then multiplied by the consumption ratio which is derived from input-output data. To this sum, the distributive margins at constant prices are added and adjustments are made for expenditures by non-residents.							
Malawi								
General approach	Price deflation							
Detailed method and/or indicator used	Current price estimate of total private final consumption expenditure deflated by weighted average of the retail price indexes for his and low income groups.							

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
I. Countries using the SNA (continued)								
B. Developing countries (continued)								
Panama								
General approach	Base-year estimates extrapolated by detailed indexes which express private consumption at constant prices in terms of flow of goods and services.							
Philippines								
General approach	At present, private final consumption expenditure at constant prices obtained as a residual.				to 1960, total private consumption expenditure was deflated by consumer price index for all items.			
Sierra Leone								
General approach	Private consumption expenditure on imported commodities extrapolated by quantity indexes for imports of consumer goods, by category of consumption specially constructed for this purpose. Private consumption expenditure on locally produced goods: Current quantities of the various items consumed valued at 1963-64 prices.							
Sri Lanka								
General approach	No single typical approach for all components	Price deflation	Price deflation	Price deflation	Price deflation	Price deflation		
Detailed method and/or indicator used	Food: Government controlled commodities (rice, flour, sugar): Quantities sold valued at base-year market prices. Private imports: Current values deflated by food and drink component of import price index. Coconut products and tea: Current values deflated by special price index constructed from prices used for Colombo. Beverages and tobacco: Deflated by special price index.	Deflated by special price index constructed from prices used for Colombo price index.	Rent, rates and water charges: Current value deflated by the rent component of Colombo consumer price index. Fuel and light: Current values deflated by special price index constructed from prices used for Colombo consumer price index.	Imported goods: Current value deflated by the import price index for the component items. Domestically produced goods: Current value deflated by special price indexes constructed from prices used for Colombo consumer price index. Household operation: Current value deflated by Colombo consumer price index.	Deflated by relevant components of Colombo consumer price index	Deflated by transport component of Colombo consumer price index.	Deflated by specially constructed price index based on the material for the Colombo consumer price index.	Deflated by Colombo consumer price index.
Syrian Arab Republic								
General approach	Private consumption expenditure at constant prices obtained as a residual.							
Uruguay								
General approach	Private consumption expenditure at constant prices obtained as a residual.							
Venezuela								
General approach	Private consumption expenditure has not been deflated.							
II. Countries using the MPS								
Bulgaria								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from own production, where current quantities are valued at base-year prices.							
Czechoslovakia								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from own production, where current quantities are valued at base-year prices.							
German Democratic Republic								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from own production, where revaluation of current quantities at base-year prices or absolute amounts representing the effect of price changes, are used.							

Table 4, National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	2 Private final consumption expenditure according to object							
	2.1 Food, beverages and tobacco	2.2 Clothing and footwear	2.3 Gross rent, fuel and power	2.4 Furniture, furnishings and household equipment and operation	2.5 Medical care and health expenses	2.6 Transport and communications	2.7 Recreation, entertainment and cultural services	2.8 Miscellaneous goods and services
II. Countries using the MPS (continued)								
Hungary								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from own production, where current quantities are valued at base-year prices.							
Poland								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from agriculture and forestry production on own account and from purchases of agricultural products at market places. In the latter cases current quantities are revalued at base-year prices.							
Romania								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from own production, where current quantities are valued at base-year prices.							
U.S.S.R.								
General approach	Personal consumption deflated by price indexes, except in the case of consumption from own production, where current quantities are valued at base-year prices.							
Yugoslavia								
General approach	Current quantities of personal consumption valued at base-year prices.							

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		I. Countries using the SNA			
		A. Developed countries			
Australia					
General approach	Price deflation	Different methods are used for private and public gross fixed capital formation.			
Detailed method and/or indicator used	The increase in stocks at average current quarter prices is first obtained as the difference between the beginning and end of quarter of the book value of stock levels, both revalued at average current quarter prices by means of the appropriate end of quarter indexes. The increase in stocks at base-year prices, for each category, is then obtained using the appropriate average quarterly price indexes. Annual estimates at the base year prices, are obtained by summation of the quarterly estimates.	Private: Dwellings revalued mainly by special purpose price indexes for various categories of dwellings. Other buildings and construction revalued by special purpose indexes and prices of material inputs into non-residential construction.	Private: See column for residential and non-residential buildings.	Private: Motor vehicles deflated by special purpose indexes applicable to each type of vehicle (e.g., sedans, utility vehicles and trucks).	Private: This item is divided into expenditure on locally produced and imported equipment. Each of these is further subdivided by type and revalued at base-year prices, using the most appropriate price index available.
		Public: Current price estimates deflated by means of special purpose price indexes based on information relating to major repetitive processes or recurring asset types, and provided by the appropriate government department or public enterprises (e.g., main roads, and public works departments, or many of the large public enterprises including the Post Office, railways, water supply etc.). To a significant extent, the price indexes and the combining weights relate to the cost of direct labour and materials inputs. Other types of price indexes used relate to contract prices per unit of output where this information is available. Implicit price indexes are used to revalue expenditure in some functional categories for which adequate data have not been obtained.			
Austria					
General approach	Price deflation	Equals output of the construction industry adjusted by adding own account construction and subtracting maintenance.		Current quantities multiplied by base-year prices	Price deflation
Detailed method and/or indicator used	Various indexes are used for deflation according to kind of commodity or kind of stock keeping industry (e.g., output and input of manufacturing; price index of supply of building materials; price indexes of input of electricity, gas and water; wholesale price index; sub-indexes of consumer price index for stocks in restaurants and hotels).			Newly registered cars (except those for personal use), trucks, buses, tractors, trailers and special vehicles multiplied by base-year prices.	Deflated by appropriate price indexes derived from representative commodity data of industrial production statistics and price trends for exports of machinery by the Federal Republic of Germany.
Belgium					
General approach	Information not available	Revaluation at base-year prices	Information not available	Information not available	Information not available
Detailed method and/or indicator used		Information available for dwellings only. Number of dwellings built by type, revalued at average base-year prices.			
Canada					
General approach	Price deflation	Price deflation	Price deflation	Price deflation	Price deflation
Detailed method and/or indicator used	Number of poultry and livestock as well as quantities of grain in commercial channels are revalued at base-year prices. Current book values of non-farm business inventories are deflated by appropriate price indexes. Almost all the price indexes selected are component parts of the wholesale and consumer price indexes. For manufacturing and wholesale and retail trade, the price series chosen are weighted by the estimated commodity content of inventories built up from data on value of materials purchased and the destination of products (manufacturing) and sales by kind of business (trade). For other industries the price series are weighted by commodity group on the basis of available data from various sources. In accordance with assumptions made with regard to turnover periods and accounting methods, the deflators for inventory book values cover varying time periods.	The value series are deflated by weighted material labour input price indexes with adjustments for change in productivity and profit margins.	Specially constructed indexes of final bid prices for highway construction is used for this component, whereas for railways, electric utilities and other engineering components, separate indexes of material-labour inputs are used to deflate the related value series. An adjustment for productivity is made to the other engineering component.	Commercial vehicles and passenger cars purchased for business use are deflated by appropriate final product price indexes. No information for other items.	Annual value series of machinery and equipment purchases by industry are deflated with end-product prices based on the purchased cost of machinery and equipment by Canadian business and government. These price indexes, designed to reflect the import content, are adjusted for import duties and exchange rates where applicable.
Denmark					
General approach	No single typical approach for all components	No single typical approach for all components	No single typical approach for all components	Price deflation	
Detailed method and/or indicator used	Deflated in considerable detail - some 200 commodity groups - by components of wholesale price indexes and in some cases by means of unit values of imported goods. Changes in agricultural stocks and livestocks extrapolated by quantum indicators.	Government building construction deflated by index of building cost; agricultural building construction deflated by index of building costs of small farms; other construction of buildings extrapolated by quantum indicators derived from statistics of physical building activity.	Government construction works deflated by price index of road construction; agricultural construction works deflated by index of wages and materials; other private construction works deflated by price index of road construction.	Deflated in considerable detail - in some 100 commodity groups - by means of wholesale price or special price indexes.	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		I. Countries using the SNA (continued)			
		A. Developed countries (continued)			
Finland					
General approach	Obtained as the balancing items between the uses and supplies of each commodity group.	Price deflation			
Detailed method and/or indicator used	No further details available	Deflated by different cost indexes, i.e., for dwellings, non-residential buildings and other construction, or by sub-indexes of wholesale price index (machinery and equipment).			
France					
General approach	Price deflation	Gross fixed capital formation excluding dwelling is first estimated at current prices independently by branch of user and by commodity. After adjustment of the two series to arrive at identical totals, the series on gross fixed capital formation classified by commodity is deflated by appropriate price indexes.			
Detailed method and/or indicator used	Estimated by deflating current price data on stocks of commodities held by enterprises by appropriate price indexes.	The value of the construction of dwellings expressed in the prices of the preceding year is extrapolated by means of quarterly information on starting dates and average period of construction by type of dwelling. Habitable area and to some extent the quality (degree of comfort) of each type of dwelling are taken into account in making these calculations.			
Germany, Fed. Republic of					
General approach	Price deflation	Price deflation		Deflated in detail by means of individual components of producers' price index for relevant industries.	
Detailed method and/or indicator used	Value of the change in physical quantity of inventories at the beginning and end of each reference year deflated by appropriate price index. Output stocks: Deflated by producers' price index. Input stocks: Deflated by price index calculated according to type of goods contained in intermediate goods and services on the basis of producers' prices for industrial products and purchase prices for foreign goods.	Investment in buildings and other constructions: Deflated by means of prices for individual construction performances. Industrial assembling of buildings and other construction: Deflated by relevant index of producers' prices.		For deflating imported investment goods the corresponding indexes of purchase prices for foreign goods are used.	
Greece					
General approach	No single typical approach for all components	Value added extrapolated by specially constructed indicators	Price deflation	No single typical approach for all components	
Detailed method and/or indicator used	For all goods for which the change in stocks can be measured in quantity terms, the volume changes are estimated, at constant prices, according to the average prices, of each major commodity involved, in base year. For goods for which changes in volume are not practically available, the value of change in stocks expressed at current prices are deflated by appropriate sections of the wholesale price index.	Residential and non-residential buildings: Residential buildings: Estimated volume of dwellings, expressed in cubic metres in each year, multiplied by average prices per cubic metre in base year. This method of estimation is applied for each major type of dwelling and separately for greater Athen's area and for the rest of the country. Non-residential buildings: the same method used for dwellings is applied. The estimated volume of non-residential buildings classified by main categories multiplied by average prices per cubic metre in base year.	Current estimates deflated by price index per cubic metre referring to certain simple building construction.	imported vehicles, motor cycles and cycles: Annual quantities, classified by major categories, multiplied by the corresponding average c.i.f. price in base year. Thus, first, the estimates cover the c.i.f. value. Then the additional costs incurred until the capital goods reach the final user, is deflated by the consumer price index. Vehicle body works and assembling work of minor importance: Current price estimates deflated by the consumer price index. Ships: Current price estimates deflated by freight index, constructed by the International Monetary Fund. Other equipment: Current price estimates deflated by appropriate components of the wholesale price index.	
Ireland					
General approach	Price deflation	Price deflation →			
Detailed method and/or indicator used	Deflated by appropriate price index	Deflated by relevant wholesale price indexes. No further details available. →			
Israel					
General approach	Information not available	Information not available →			

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		i. Countries using the SNA (continued)			
		A. Developed countries (continued)			
Italy					
General approach	No single typical approach for all components	Price deflation	Price deflation	Price deflation	No single typical approach for all components
Detailed method and/or indicator used	Agricultural products: Based on series revalued at base-year prices. Non-agricultural products: Based on deflation of stocks by appropriate price indexes.	Construction and repairs of residential and non-residential buildings deflated by a cost index for residential buildings. Land improvement deflated by a price index for labour and material costs.	Same method as for residential and non-residential buildings.	Deflators: Motor vehicles: Index based on models of two consecutive years. Railway rolling stocks: Combined index of prices and material and labour costs. Ships and boats: Index of cost per unit by category and tonnage. Aircraft: Implicit index for land transport means.	Agricultural tractors extrapolated by new registrations. All other machinery and equipment deflated by appropriate price or unit value indexes.
Japan					
General approach	Stocks outstanding at the end of each period are deflated separately for corporations and other proprietors and according to industry group, by applying appropriate price indexes. The change in stocks is obtained as the differences in the values of stocks outstanding at the end of two consecutive periods. The deflators for stocks outstanding are derived as follows. The composition of stocks at the different times of evaluation are computed by industry and rotation rates of stocks for each industry are also estimated. Price indexes for stocks of each industry are calculated on the basis of the data collected for the wholesale price index. An index based on the harmonic mean and using the composition of stocks as weights, is used.	Constant price series are estimated for three main groups, i.e., machinery and tools, construction and big equipment and plants. Machinery and tools are divided into 43 groups, each of which is deflated by the relevant component of the wholesale price index. Construction is divided into dwelling construction and non-residential construction, each of which is deflated by an index of construction costs. The deflator for dwellings is obtained by consolidating cost indexes for wooden and non-wooden dwellings with weights derived from the input-output table of 1960. The deflator for non-residential construction is obtained by consolidating the cost indexes for site improvements, construction of harbours and fishing ports, railway tracks, telephone lines, non-residential buildings etc., with weights derived from the input-output table of 1960. The construction cost indexes cover all purchases by the construction departments of central and local government and local public enterprises, which are themselves engaged in construction works, and by construction contractors, of goods and services required to carry out construction work of all types. Big equipment and plants are deflated by a specially constructed cost index.			
Detailed method and/or indicator used	The increase in stocks of private corporations is deflated by industry and by type by relevant components of the wholesale price index. Increase in stocks of agricultural unincorporated enterprises are deflated by commodity, using relevant components of the rural price index. For other private unincorporated enterprises, the relevant components of the wholesale price index are used. Increase in stocks of government enterprises and public corporations is deflated by types of enterprise, using unit costs in the calendar year 1960.	Dwellings are deflated by a compound cost index weighted by the indexes of construction cost by type of dwelling. Non-residential buildings are deflated by a compound cost index weighted by the construction cost indexes for each type of building.	Agricultural land improvement is deflated by an index of construction costs for agriculture. Land improvement and development for general use deflated by special cost index. Other structures deflated by compound cost index weighted by construction costs for each type of structure.		
Luxembourg					
General approach	Current-value estimates are used	Price deflation		Price deflation	
Detailed method and/or indicator used		Current estimates deflated by index of construction costs.		Deflated by unit value index for imported goods	
Netherlands					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	Deflated by price index with current weights referring to goods included in the change in inventories of each year.	Deflated by estimated prices of output, constructed in some cases from input prices		Deflated by index based on wholesale price series re-weighted by means of information from input-output table	
Norway					
General approach	In current prices, the uses side of the accounts for private and government consumption, fixed capital formation, stocks and exports is derived from the estimates on the supply side. Since each of the commodity accounts at approximate basic values is deflated by appropriate price indexes, expenditures at constant prices are also expressed in approximate basic values. Data in purchasers' values for the various forms of final expenditure are built up from separate constant-price estimates of approximate basic values, commodity taxes and subsidies and trade and transport margins.				

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		I. Countries using the SNA (continued)			
		A. Developed countries (continued)			
Portugal					
General approach	Revaluation at base-year prices	Price deflation	No single typical approach for all components	Price deflation	
Detailed method and/or indicator used	Changes in physical quantities revalued at base-year prices	Non-residential buildings (other than agricultural buildings, see heading 5) deflated by component "non-metallic construction materials" of wholesale price index.	Deflated by component "non-metallic construction materials" of wholesale price index (except other construction in agriculture, see heading 5).	Output deflated by wholesale price index	
South Africa					
General approach	No single typical approach for all components	Price deflation		Price deflation	
Detailed method and/or indicator used	Agricultural stocks: obtained by multiplying the change in the physical number of the different kinds of livestock during a specific year by an average flock value applicable to the relative type of livestock. Manufacturing and trade: obtained by deflating the total value of the inventories at the end of each year by means of the average wholesale price index over the last five and four months of the relative year respectively, based on the assumption that inventories in manufacturing are turned over once every five months and those in trade once every four months. The changes in all other types of stocks are obtained by deflating the year-end stock figures for a specific sector by means of the wholesale price index for the relative years and calculating the difference between the year-end values.	Separate indexes for each of five types of assets, namely residential buildings, non-residential buildings, other construction works including land improvement and plantation and orchard development, transport equipment and machinery and other equipment are compiled. The series at current prices for each of the three types of assets are deflated by means of a separate price index of the gross value of construction. The gross value of construction consists of the cost of materials used, indirect costs, salaries and wages and gross operating surplus. Price indexes are calculated for each of these components by using inter alia components of the wholesale price indexes, average earnings per labourer per hour as well as profit margins, weighting on the basis of the value of the different components in the base year. Apart from pure price components, the indexes are adjusted for measurable changes in labour productivity.		Current expenditure deflated by separate indexes compiled by the Department of Statistics.	
Sweden					
General approach	Price deflation and reflation	Deflation made according to type within each industry by means of about 30 different price indexes, all not directly calculated for purposes of deflation.			
Detailed method and/or indicator used	Estimates at replacement prices first re-calculated into current prices and then deflated by components of price indexes of producer prices, wholesale prices or consumer prices. Covers approximately 200 commodities classified in raw materials, semi-manufactures, finished products and fuels, divided according to kind of economic activity of industry and of trade. Includes also change in standing timber (not in accordance with the recommendation of the SNA) and change in livestock. Starting 1972 the change in stocks of mining and manufacturing originates from quarterly surveys to which the reporting units deliver data of their stocks divided into that of input goods, work in progress and finished goods at prices chosen (and reported) by the reporting unit. For each reporting unit these data are deflated to 1968 prices. Divided into 35 kinds of economic activities the changes in stocks at constant prices are reflated into current prices.	Extrapolation on the basis of started and completed number of apartments, separately for one and two family and multi-family houses.	Deflated by input price indexes which measure changes in costs based on fixed budget comprising mainly raw materials and labour inputs.	Deflated by price index for railway stock; special price index for motor vehicles; components of wholesale price index for newly built ships; input price index for telecommunication equipment.	Deflated by component of wholesale price index for light machinery; unweighted average of wage indexes for maintenance of machinery; special price index for other agricultural machinery.
Switzerland					
General approach	Price deflation in most cases, and extrapolation by value index.				
Detailed method and/or indicator used	Price indexes used for deflating the various expenditure components are consumer price index, wholesale price index, price index for construction costs in Zurich and Berne, several component indexes which served to calculate these global indexes and various indexes for wages and salaries. All these indexes, which are base-weighted, do not have the same base period. It was therefore not possible to construct, for each expenditure group, an ideal current-weighted deflator. Deflation was undertaken at the lowest level of aggregation, i.e., 11 sub-groups for gross domestic capital formation. The estimates at constant prices are sometimes obtained on the basis of volume indexes. No further details available.				
United Kingdom					
General approach	Value of physical increase estimated as difference between deflated book values at beginning and end of the year	Price deflation	Price deflation	Price deflation	Price deflation
Detailed method and/or indicator used	Deflation is by price indexes applicable to commodities stocked by individual industry groups; materials and fuel, work-in-progress and finished goods generally being treated separately. The commodity composition of stocks and average length of tenure in stock are estimated from censuses of production or other sources and appropriate price indexes are selected on the assumption of book values being at lower of cost or market prices.	Current price estimates deflated by price index. A weighted combination of the price index of materials used in building and civil engineering industries with the index of building operatives' earnings adjusted for productivity changes, is used. An estimate of overheads and profits included to arrive at figures for gross output. For private housing, index adjusted to include other relevant data.	Current price estimates deflated by same index as used for new non-residential buildings (see 4.1).	Current price estimates deflated by price indexes for types of vehicles concerned. Road vehicles: Wholesale price indexes tailored to some degree to types purchased by individual industries. Ships: Estimated price changes for new ships. Railway rolling stock and aircraft: Broad price indexes for engineering groups.	Current price estimates deflated by price indexes applicable to individual industry groups. Price indexes found by combining wholesale price indexes with weights according to the commodity composition of fixed capital formation, estimated from censuses of production or other sources.

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		I. Countries using the SNA (continued)			
		A. Developed countries (continued)			
United States					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	For non-farm business inventories year-end book values were deflated, industry by industry, by composites of price indexes weighted by relative importance of the principal types of inventory goods.	Components of private and government current construction expenditure deflated by construction cost indexes derived by pricing fixed lists of construction materials and labour with a rough adjustment for changes in profit margins.		Deflated in considerable detail mainly by means of wholesale price or special price index. Wherever composite price indexes are used, weights for combining the components are taken from Census of Manufacturing or the weights used for existing indexes are applied.	
		B. Developing countries			
Argentina					
General approach	Extrapolated by quantity indexes	No single typical approach for all components		No single typical approach for all components	No single typical approach for all components
Detailed method and/or indicator used	Stocks of products in agriculture, manufacturing and some other industries extrapolated by means of indexes of quantity changes. No further details available.	Public construction: Deflated by indexes of construction costs. Private construction: Deflated by indexes of construction costs or extrapolated by volume of inputs.		Domestic products: Deflated by index of producer prices or extrapolated by volume of production. Imports: Deflatnd by appropriate world prices. Repairs: Extrapolated by volume of production.	Domestic products: Extrapolated by volume index of production. Imports: Deflated by appropriate world prices.
Bolivia					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	Deflated by implicit price index for gross fixed capital formation.	Deflated by indexes of construction costs or prices of inputs and and in some cases by index of wages and salaries.		Deflated by unit value index of imports	
Chile					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	Domestic products: Current value deflated by wholesale price index. Imported products: Deflated by unit value index of imports.	Current values deflated by producer price index		Domestic products: Deflated by wholesale price index. Imported products: Deflated by unit value index of imports, adjusted for changes in the exchange rate.	
Colombia					
General approach	Information not available	Price deflation		No single typical approach for all components	
Detailed method and/or indicator used		Current values deflatnd by producer price index		Domestic products: Deflated by appropriate indexes of producer prices. Imported products: Extrapolated by quantum index for imports.	
Ghana					
General approach	No single typical approach for all components	Price deflation		Price deflation	
Detailed method and/or indicator used	Cocoa, livestock, fish and mineral products: Current quantitative changes valued at base-year prices. Manufacturing products: Value of changes in stocks at current prices deflated by index of prices of manufactured articles. Electricity: change in stocks of raw materials at current prices deflated by index of prices of imported electrical goods. Construction activity: Change in stocks of construction materials deflated by index of prices of construction material.	Deflated by composite index of construction costs based on input of labour and materials.		Deflated by the appropriate component of the unit price index of imports	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		I. Countries using the SNA (continued)			
		B. Developing countries (continued)			
Guatemala					
General approach	No single typical approach for all components	Price deflation		Price deflation	
Detailed method and/or indicator used	Livestock: Extrapolated by volume index of production. Other items: Current value deflated by retail prices or extrapolated by volume index of production.	Private construction: Current values deflated by index of construction costs. Public construction: Current values deflated by indexes of input prices or wages and salaries.		Domestic products: Current values deflated by index of producer prices. Imported products: Current values deflated by unit value index of imports. Repair services: Deflated by index of producer prices.	
Honduras					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	Current value deflated by unit value index for imports.	Deflated by indexes of wages and salaries.		Current values deflated by unit value indexes for imports.	
Korea, Republic of					
General approach	No single typical approach for all components	No single typical approach for all components		No single typical approach for all components	
Detailed method and/or indicator used	Agricultural products: For food grains, the difference between supply and demand multiplied by the unit price in the base year. For livestock, the difference between the number of heads at the beginning of a year and at the end of the year multiplied by the unit price in the base year. Minerals and manufactured goods: The output by major group at constant prices directly obtained from the data for the estimation of value added in mining and manufacturing multiplied by the rate of inventory change. The ratio of increase in stocks to total production is derived from production and shipments data surveyed in censuses and sample surveys on mining and manufacturing. Imported raw materials: The difference between supply and demand, both expressed in U.S. dollar values is first obtained and the foreign exchange rate in the base year is multiplied by this difference. In estimating demand, the demand in the base year is derived from the input-output data and it is extended by the production index of the consuming industries by major group.	Government construction works: Current value of construction works derived from the data for the estimation of value added in construction deflated by the unit price index. The unit price index is calculated by using the wholesale price indexes of various building materials and wages in construction workers weighted by the input structure of the base year. Private construction works: The value of private building construction is obtained by multiplying the construction area by the unit price in the base year. Other private construction at current prices deflated by index of construction prices concerned.		Domestic products: The output of final capital goods in constant prices, which is obtained from production side, is applied after adjustments have been made for exports and increase in stocks. Imported products: Finished capital goods imported in U.S. dollars multiplied by the foreign exchange rate in the base year. Custom duties, commodity taxes and distributive margins are added by utilizing each rate in the base year.	
Malawi					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	Current price estimates deflated by a unit value index for exports. The index is calculated by Laspeyres formula using the average unit values for 1970 as weights.	Building and construction works: Deflated by unit value index for the input of building materials. Land improvement: Deflated by minimum wage rates in rural areas.		Deflated by unit value index for inputs	
Panama					
General approach	Information not available	Price deflation		Extrapolation by volume index obtained by price deflation	
Detailed method and/or indicator used		Current values deflated by price index for inputs		Base-year estimates extrapolated by volume index obtained by deflating current values by index based on the unit value of exports of machinery in supplier countries.	
Philippines					
General approach	Price deflation	Price deflation		Price deflation	
Detailed method and/or indicator used	Livestock and poultry deflated by retail price index for meat. Other stocks deflated by general wholesale price index for Manila.	Current estimates deflated by retail price index for construction materials		Domestic products: Deflated by wholesale price index of machinery and equipment. Imported products: Deflated by a composite price index for imported durables.	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
		I. Countries using the SNA (continued)			
		B. Developing countries (continued)			
Sierra Leone					
General approach	Valuation at base-year prices	Price deflation		Price deflation	
Detailed method and/or indicator used	Changes in physical quantities of diamonds, other minerals, rice, palm kernels, coffee, cocoa etc. valued at base-year prices.	Current estimates of total construction expenditures deflated by index of building costs.		Current estimates of expenditures on equipment and machinery deflated by unit value index for imports of capital equipment.	
Sri Lanka					
General approach	Information not available	Price deflation		Price deflation	
Detailed method and/or indicator used		Private: Building and other construction: Deflated by index of unit cost of floor space of buildings. Planting and replanting: Deflated by wage rate index for agricultural workers. Public: Dwellings: Deflated by index of unit cost of floor space of buildings. Other construction: Deflated by implicit index of construction costs.		Private: Locally manufactured machinery: Deflated by composite index of investment goods, intermediate goods and wage rate of industrial workers. Other machinery and equipment, including all public machinery and equipment: Deflated by price index for heavy machinery, other machinery and equipment and transport equipment.	
Syrian Arab Republic					
General approach	No estimate made either at current or constant prices	Price deflation			
Detailed method and/or indicator used		Total gross fixed capital formation deflated by current weighted price index based on prices for construction materials and prices of imported machines by type.			
Uruguay					
General approach	Extrapolation by volume index	No single typical approach for all components		Extrapolation by volume index	
Detailed method and/or indicator used	Base-year estimates extrapolated by index reflecting the change in the volume of stocks of wool and livestock.	Private construction: Base-year estimates extrapolated by floor area of buildings constructed. Public construction: Current values deflated by index of construction costs.		Domestic products: Base-year estimates extrapolated by volume of production. Imported products: Extrapolated by quantity index for imports.	
Venezuela					
General approach	Not estimated at constant prices	Price deflation		Price deflation	Price deflation
Detailed method and/or indicator used		Deflated by implicit price index for the output of the construction industry.		Deflated by index of purchaser prices weighted by purchases in 1968.	Deflated by implicit price index for the corresponding industries.
		II. Countries using the MPS			
		(These countries use a concept of net fixed capital formation)			
Bulgaria					
General approach		Price deflation		Price deflation →	
Czechoslovakia					
General approach		Deflation by price indexes based on the components of the objects.		Price deflation →	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	3 Increase in stocks	4 Gross fixed capital formation according to type of capital goods			
		4.1 Residential and non-residential buildings	4.2 Other construction	4.3 Transport equipment	4.4 Machinery and equipment
II. Countries using the MPS (continued)					
(These countries use a concept of net fixed capital formation)					
German Democratic Republic					
General approach		Price deflation and use of absolute amounts representing price changes →			
Hungary					
General approach		Deflation by price indexes based on the components of the objects.		Price deflation →	
Poland					
General approach		Price deflation →			
Romania					
General approach		Current quantities valued at base-year prices on the basis of costs.		Price deflation →	
U.S.S.R.					
General approach		Price deflation →			
Yugoslavia					
General approach		Current quantities valued at base-year prices, and price deflation.		Price deflation →	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
		I. Countries using the SNA		
		A. Developed countries		
Australia				
General approach	No single typical approach for all components	No separate estimate available	No single typical approach for all components	
Detailed method and/or indicator used	The current price estimates of this flow are built up by functional categories, and the revaluation at constant prices is effected within the same framework. Education: Expenditure has been split into salaries and wages and various categories of other purchases. Specially constructed indexes of salaries and wages paid to primary, secondary and technical teachers, and university staff are used to revalue the salaries and wages component. The other purchases components are revalued by special purpose price indexes of supplies, equipment and transport of school children. Defence: Expenditure on the pay of enlisted and civilian personnel revalued using data on the changes in numbers of categories of enlisted and civilian personnel. Other functional categories: A similar approach as adopted for education is used for the other functional categories specifically treated. The remaining functions revalued in combination by means of indexes of salaries and wages and of the prices of selected goods and services purchased.		Export: Obtained by direct valuation at base-year prices of quantities exported. The balance, which comprises some adjustments to recorded trade data for balance of payments purposes is revalued by means of the implicit price index of the merchandise component. Gold production: Current quantities valued at base-year prices. Imports f.o.b.: This item is divided into three components: petroleum and petroleum products, other goods (after allowance for the import valuation adjustment) and the balance. Petroleum and petroleum products and other goods: Extrapolated by quantity indexes on exports and imports of merchandise at constant prices. The balance which comprises adjustments to recorded trade figures for balance of payments purposes: Deflated by the implicit price index of the other goods.	Exports: Transportation: comprises expenditure of overseas carriers and other transportation. Expenditure of overseas carriers are further subdivided into crew's expenditure, stevedoring charges, expenditure on stores, and other expenditure; and revaluation at base-year prices is achieved using components of the consumer price index, quantities of cargo handled and fuel delivered to overseas ships and aircraft. Overseas earnings (other than earning on imports into Australia) by ships and aircraft owned or chartered by Australian operators are deflated by means of special purpose price indexes of shipping and air fares. Travel: Deflated by consumer price index. Government transactions and miscellaneous invisibles: Deflated by consumer price index and some special purpose price indexes. Imports: Transportation: Freight payable overseas: Current year quantities or the quantum of imports within specified categories (petroleum and petroleum products, phosphates and other etc.) valued at base-year prices. Other transportation relates mainly to earnings of overseas carriers and to payments overseas by Australian shipping and airline operators and is deflated by special purpose price indexes of shipping and air fares, overseas purchases etc. Travel (relates mainly to net remittances of foreign exchange by Australians visiting overseas) deflated by selected overseas price indexes. Government transactions and miscellaneous invisibles (relate to defence and other Australian government expenditure abroad as well as miscellaneous business expenses and other overseas expenditure of Australian residents) deflated by special purpose indexes of overseas prices.
Austria				
General approach	Price deflation, except for value added.	No separate estimate available	Extrapolated by volume index	Price deflation
Detailed method and/or indicator used	Value added extrapolated by output indicators wherever services are quantifiable, otherwise by means of employment date (for further details see table 3). Net purchases from other industries deflated by weighted price index for health services (doctor, hospital and medicine expenditure) and for maintenance costs (building price index). Main categories of office expense are deflated separately by price index composed of various sub-indexes of the official indexes.		No further details available	Deflated by special representative price index
Belgium				
General approach	Information not available	Price deflation	Price deflation	Price deflation
Detailed method and/or indicator used		For most activities, deflation by price indexes for construction, for purchases of machinery and equipment, and for labour costs. These price indexes are weighted together according to the importance of each type of capital formation in the various activities.	Exports and imports of both merchandise and most services deflated by the official unit value indexes for foreign trade.	Transport receipts deflated by price index reflecting both the movement of available index of ocean freight and implicit price index for the output of the transport and communication services. (See also 4.1).

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
		I. Countries using the SNA (continued)		
		A. Developed countries (continued)		
Canada				
General approach	No single typical approach for all components	No separate estimate available	Price deflation	Price deflation
Detailed method and/or indicator used	Wages and salaries in constant dollars are measured by extrapolating the base-year average wages and salaries by employment adjusted for change in the structure of employment. These estimates are prepared separately by level of government-federal, provincial and municipal. Non-wage expenditures by government are deflated with base weighted price indexes designed to reflect the content of expenditure on goods in the base year. Separate price deflations are made for defence and non-defence expenditures.		Merchandise exports and imports each revalued by specially constructed, current-weighted indexes derived from deflating the merchandise data at a fine level of detail with price relatives mostly derived from foreign trade statistics, appropriate specified selling prices from industry statistics, and specified commodity prices of foreign countries adjusted for exchange rate.	Deflated by representative price indexes
Denmark				
General approach	Price deflation	Information not available	Price deflation	No single typical approach for all components
Detailed method and/or indicator used	Wages and salaries deflated by special index derived from civil servants' salaries. Government commodity purchases deflated by appropriate component of consumer price index. Military construction activities deflated by price index of building costs. Consumption of fixed capital deflated by price index relating to gross capital formation.		Deflated by unit value indexes for exports and imports	Gross receipts from shipping extrapolated by means of modified quantum index
Finland				
General approach	No single typical approach for all components	As for gross fixed capital formation by type of capital goods	Price deflation	Price deflation
Detailed method and/or indicator used	Value added extrapolated by volume index for output obtained by price deflation (e.g., wages and salaries by wage-rate index, imputed rents and depreciation by building cost index etc.). Purchases of other goods and services deflated by sub-series of retail price index and wholesale price index.		Value series for exports and imports deflated by unit price indexes for different detailed categories of goods.	Volume of freight and transportation receipts extrapolated by index based on physical quantities. Other items of services deflated by different price indexes.
France				
General approach	Price deflation	As for gross fixed capital formation by type of capital goods	Price deflation	
Detailed method and/or indicator used	Purchases of goods and services are broken down into 29 products. Each of the products deflated by relevant indexes of producers' values or wholesale prices.		Exports and imports of goods and services are mainly deflated by means of unit value indexes built up from 421 commodity groups.	
Germany, Fed. Rep. of				
General approach	Price deflation	No separate estimate available	Price deflation	Price deflation
Detailed method and/or indicator used	Purchases for civilian purposes and for defence purposes are separately deflated. Purchases for defence purposes are further divided according to construction, equipment produced in the country and equipment from abroad and other purposes. No specific price indexes for government purchases are utilized, but the most suitable selling price indexes of the suppliers and in part also average values are used for deflation.		Deflated by respective official unit value indexes derived by dividing value of goods exported and imported by quantities.	Various price indexes used for deflation. Sea freight receipt of residents from non-residents deflated by sea-freight index. Sea-freight paid by residents to non-residents deflated by unit value index for imports. Services rendered to foreign embassies and their employees deflated by index based on implicit price indexes for government and private consumption expenditure. Other services deflated by price index of final domestic use of the national product.
Greece				
General approach	Information not available	Price deflation	Value added extrapolated by volume index	Price deflation
Detailed method and/or indicator used		Current price estimates deflated by appropriate price indexes used for deflating capital formation by type of capital goods, for each user sector.	No further information available	Current estimates deflated by unit value index of imported and exported goods

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
		I. Countries using the SNA (continued)		
		A. Developed countries (continued)		
Ireland				
General approach	Price deflation	As for gross fixed capital formation by type of capital goods	Price deflation	
Detailed method and/or indicator used	Deflated by index of the rates of remuneration of employees engaged in public administration and defence and the general wholesale price index, respectively.		Merchandise export and import deflated by official export and import unit value indexes. Invisible items deflated by consumer price index.	
Israel				
General approach	No single typical approach for all components	Price deflation	No information available	No information available
Detailed method and/or indicator used	Wages and salaries extrapolated by number of government employees. In the case of central government employees, the index of changes was adjusted to take account of the changes in grade structure subsequent to the base year 1955. Purchases of goods and services deflated in most cases by the relevant components of the consumer price indexes.	Current price estimates for the various component items deflated by appropriate price indexes. Calculation was made on the basis of a variety of indicators, such as the building cost index, input commodity price indexes, price indexes for imported commodities published in the countries of purchase, the changes in domestic customs tariffs and miscellaneous indicators of the changes in price of capital goods originating in domestic production.		
Italy				
General approach	No single typical approach for all components	No separate estimate available	Price deflation	Price deflation
Detailed method and/or indicator used	Compensation of employees by category of employment and grade deflated by appropriate wage and salary indexes. Paid rent deflated by rent index for residential buildings. Imputed rent estimated at three per cent of value of the stock of buildings at constant prices. Consumption of fixed capital in buildings estimated at two per cent of their value in constant prices and consumption of fixed capital at 10 per cent of the value of the stock at constant prices. Purchases and sales of goods and services deflated by appropriate price indexes.		Deflated by current weighted unit price indexes for exports and imports.	Transport: Deflated by freight indexes. Travel abroad: Deflated by indexes of consumer prices in countries visited by residents. Other series: Deflated by implicit price index for merchandise, transport and travel abroad. Factor incomes: Deflated by indexes for exports and imports of merchandise.
Japan				
General approach	Price deflation	As for gross fixed capital formation by type of capital goods	Price deflation	Price deflation
Detailed method and/or indicator used	Compensation of employees deflated by weighted Laspeyres type wage and salary index. The weights used are the payments of compensation of employees in 1960 according to educational attainment and length of service. Other expenditures deflated by Laspeyres type price index, using the expenditures in 1960 as weights.		Exports and imports of merchandise deflated by commodity by means of appropriate components of export and import prices index, respectively.	Exports of freight and insurance services deflated by index of freight per ton kilometre weighted by type of ship. Imports of freight and insurance services deflated by commodity by means of components of the unit price index for imports of merchandise. Other transportation deflated by compound index of consumer price indexes in main foreign countries. The consumption of non-residents in Japan is deflated by the overall urban consumer prices index, and the consumption of residents in foreign countries is deflated by a combination of the consumer price indexes of EEC countries and the U.S.A.
Luxembourg				
General approach	No single typical approach for all components	No separate estimate available	Information not available	Information not available
Detailed method and/or indicator used	Wages and salaries extrapolated by number of employees, with adjustment of 0.5 per cent for productivity changes. Purchases of other goods and services assumed to be covered by compensating incomes.			

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
Netherlands				
General approach	No single typical approach for all components	Price deflation	Price deflation	Price deflation
Detailed method and/or indicator used	Wages and salaries extrapolated by employment. The balance of other goods and services deflated by index calculated from wholesale and retail price series combined with weights from input-output table.	Deflated by same price indexes as gross fixed capital formation by type.	Deflated by unit value indexes for exports and imports	Imports: Deflated by price index for imported merchandise. Exports: Shipping deflated by freight index; air transport by index based on KLM tariffs, consumption of non-residents; other expenditure deflated by price index for exported merchandise.
Norway				
General approach	In current prices, the uses side of the accounts for private and government consumption, fixed capital formation, stocks and exports is derived from the estimates on the supply side. Since each of the commodity accounts at approximate basic values is deflated by appropriate price indexes, expenditures at constant prices are also expressed in approximate basic values. Data in purchasers' values for the various forms of final expenditure are built up from separate constant-price estimates of approximate basic values, commodity taxes and subsidies and trade and transport margins.			
Detailed method and/or indicator used			Unit value indexes are calculated for each commodity of the Brussels classification, where possible. These indexes are weighted together to obtain unit value indexes for the commodity groups of the national accounts. For the commodities where no individual price indexes exist, group indexes are calculated directly. Special price indexes are calculated for exports and imports of ships.	The main items are gross receipts from shipping and operating and repair costs of ships. Gross receipts and operating costs abroad are extrapolated by the gross tonnage of the merchant marine. The import price index of ships is used in order to deflate repair costs. As far as possible special price indexes are calculated for exports and imports of other goods and services. For some items if has been necessary to use the implicit unit value indexes for total merchandise exports and imports. Interest payments to and from abroad are not deflated. Personal expenditures by non-residents in the country are deflated by the total consumer price index. Expenditures by residents abroad are deflated by the consumer price indexes of five foreign countries.
Portugal				
General approach	Price deflation	Price deflation	Price deflation	
Detailed method and/or indicator used	Wages and salaries revalued as for value added (see table 3). Purchases of other goods and services deflated by consumer price index.	Fixed capital formation in industries other than ownership of dwellings and agriculture deflated according to type by appropriate components of wholesale price index. Government capital formation in agriculture deflated by overall wholesale price index. Capital formation by farmers: Agricultural tractors deflated by wholesale price index; other capital formation: Current values in scattered years deflated by specially constructed price index, graphic extrapolation or interpolation for other years. Gross fixed capital formation in ownership of dwellings: Deflated by index for civilian construction in Lisbon, which refers to apartment houses with three floors and two apartments per floor.	Deflated by unit value indexes for exports and imports	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
	I. Countries using the SNA (continued)			
	A. Developed countries (continued)			
South Africa				
General approach	Price deflation	Information not available	No single typical approach for all components	
Detailed method and/or indicator used	Wages, salaries and allowances including remuneration in kind and other items of current expenditure are obtained separately. Wages, salaries and allowances are converted to constant prices by deflating the payments at current prices by means of a calculated wage and salary index. This index is based on forty-five salary and wage scales in the public sectors. Weighting of the different scales is based on the salaries and wages paid in respect of each scale in the base year. The salaries and wages paid in respect of the different scales are obtained by multiplying the number of posts by the average of the minimum and the maximum of the scale concerned in the base year. Government expenditure on other goods and services is obtained by deflating the expenditures at current prices by means of an index compiled from wholesale prices of different types of goods and services. Weighting patterns used for combining individual price series are based on the value of the different type of goods as obtained from the inter-industrial flow table compiled for the year 1963/1964. In the case of some of the items, for which appropriate price series are not available, it is assumed that their prices move in line with the prices of all the other items in respect of which the necessary data are available.		Exports of goods and services: The net value of gold export at constant prices is obtained by extrapolating the value in 1963 on the basis of the number of kilograms of fine gold produced. The value of exports of merchandise and services at constant prices is calculated by deflating the value at current prices by means of a price index compiled from the index of the average unit values of merchandise exports and indexes of freight and insurance tariffs, tourist expenditure in the domestic economy etc. Imports of goods and services at constant prices obtained by deflating the value at current prices by means of a price index compiled from the index of the average unit values of merchandise inputs, price indexes of freight and insurance tariffs, consumer prices in countries where South African tourists spend their money etc.	
Sweden				
General approach	No single typical approach for all components	Price deflation	Price deflation	No single typical approach for all components
Detailed method and/or indicator used	Wages and salaries, consumption of fixed capital: see above table 3.1. Intermediate consumption: Relevant series from wholesale and consumer price indexes. Sales of goods and services: Deflated by general consumer price index. Defence expenditures: Weighted index consisting of machine price index and shipbuilding index: Maintenance of military durables: Machine maintenance index: Maintenance of roads: Index for road construction, 70 per cent of municipal maintenance deflated by a housing maintenance index.	Each type of capital formation deflated by about 30 different price indexes, according to type within each industry, all not directly calculated for purpose of deflation.	Trade figures have been deflated with adjusted export and import price indexes. These series are weighted unit-price indexes which are chained annually, and where the unit prices are calculated from the foreign trade statistics. In the export price index engineering products, excluding ships, have been removed and since 1967 replaced by the export part for these products in the producers' price index. By means of the index of quoted prices for imported engineering products, the import price index has been adjusted in a corresponding way since 1969.	Shipping revenue: Liner traffic deflated by German index of ocean-freight rates; trip charter and time-charter dry cargo by Norwegian indexes; tanker revenue extrapolated by increase in tonnage minus tonnage laid up plus two per cent estimated annual productivity increase. Expenses of foreign ships in Sweden deflated by wholesale price index. Exports of other services deflated by export unit value index. Shipping costs abroad extrapolated by index of net increase in gross tonnage. Imports of other services deflated by import unit value index.
Switzerland				
General approach	Price deflation in most cases and extrapolation by volume index	No separate estimate available	Price deflation	
Detailed method and/or indicator used	Price indexes used for deflating the various expenditure components are consumer price index, wholesale price index, price index of construction costs in Zurich and Berne, several component indexes which served to calculate these global indexes and various indexes for wages and salaries. All these indexes, which are base-weighted, do not have the same base period. It was therefore not possible to construct, for each expenditure group, an ideal current-weighted deflator. Deflation was undertaken at the lowest level of aggregation, i.e., eight sub-groups for government final consumption expenditure. The estimates at constant prices are sometimes obtained on the basis of volume indexes. No further details available.		Deflated by foreign trade price indexes. No further details available.	
United Kingdom				
General approach	No single typical approach for all components	Price deflation	Extrapolation by volume indexes	Price deflation
Detailed method and/or indicator used	Wage and salary bills deflated by wage and salary indexes, except for armed forces' pay where a weighted index of strength is used as volume indicator. Expenditure on goods and services is broken down into as many categories as currently available. A few of these categories are measured by volume indicators, but in the main they are deflated by composite base-weighted price indexes.	Current price estimates deflated by price indexes applicable to type of capital goods and industry of purchase.	Base-year export and import figures on a balance of payments basis are extrapolated by official volume indexes for external trade adjusted to a balance of payments basis.	Receipts by government services deflated by an index of administrative costs; payments by foreign consumer price indexes. The deflators for sea transport are average freight rate assessments, tramp and liner freight receipts and bunker port charges. Effective tonnage is used as running indicator for some payment items. Civil aviation deflated by indexes of passenger fares, freight rates and airport charges. Travel receipts are deflated by components of U.K. retail price index; payments by foreign consumer price indexes. Other services are deflated by various indexes which include export and import unit value indexes, the U.K. retail price index and foreign consumer price indexes.

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
		I. Countries using the SNA (continued)		
		A. Developed countries (continued)		
United States				
General approach	No single typical approach for all components	Information not available	Price deflation	Information not available
Detailed method and/or indicator used	Volume of silver purchased valued at base-year prices. Net change in inventories partly extrapolated by quantity data and partly revalued by deflating book values by composite price indexes. Munitions expenditures deflated by price index based on appropriate price series (contract prices wherever available). Other purchases from business deflated by broad group with matching price series (mostly wholesale price data). Wages and salaries revalued as for value added (see table 3).		Exports and imports deflated by official unit value indexes	
		B. Developing countries		
Argentina				
General approach	No single typical approach for all components	Information not available	Price deflation	Price deflation
Detailed method and/or indicator used	Wages and salaries extrapolated by number of persons employed. Purchases of goods and services deflated by wholesale price index.		Deflated by index based on world trade prices in U.S. dollars.	Fares and travel abroad: Deflated by indexes of wholesale and retail trade of foreign countries. No further details available.
Bolivia				
General approach	No single typical approach for all components	Information not available	Price deflation	
Detailed method and/or indicator used	Wages and salaries revalued as for value added (see table 3). Purchases of goods and services deflated by implicit price indexes for output of supplying industries or by cost-of-living index.		Deflated by unit value indexes for total export and for total import.	
Chile				
General approach	No single typical approach for all components	Information not available	Price deflation	
Detailed method and/or indicator used	Wages and salaries revalued as for value added (see table 3). Purchases of goods and services deflated by combination of index of cost of living, wholesale price index, unit value index of imports and implicit price index for expenditure.		Deflated by unit value indexes for total export and for total import, adjusted for changes in the exchange rate.	
Colombia				
General approach	No single typical approach for all components	Information not available		
Detailed method and/or indicator used	Wages and salaries revalued as for value added (see table 3). Purchases of goods and services deflated by specially constructed price index.			
Ghana				
General approach	Information not available			
Guatemala				
General approach	No single typical approach for all components	Information not available	Price deflation	
Detailed method and/or indicator used	Wages and salaries revalued as for value added (see table 3). Purchases of goods and services deflated by wholesale price index.		Current values deflated by unit value index for exports and unit value index for imports.	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
	1. Countries using the SNA (continued)			
	B. Developing countries (continued)			
Honduras				
General approach	No single typical approach for all components	Information not available	Price deflation	Price deflation
Detailed method and/or indicator used	Wages and salaries revalued as for value added (see table 3). Purchases of goods and services deflated by index of cost of living		Deflated by unit value indexes for total export and for total import.	Deflated by index of cost of living
Korea, Republic of				
General approach	No single typical approach for all components	Information not available	Value of exports and imports in U.S. dollars multiplied by the exchange rate in the base year.	
Detailed method and/or indicator used	Compensation of employees: Base-year estimates extrapolated by index of the number of employees. Other: Expenditures at current market prices deflated by appropriate components of the wholesale and retail price indexes.			
Malawi				
General approach	Price deflation	Information not available	Price deflation	
Detailed method and/or indicator used	Wages and salaries deflated by index of government wage and salary rates. Purchases of goods and services deflated the component for other goods in the wholesale price index for government stores.		Deflated by unit value indexes for total exports and for total imports.	
Panama				
General approach	No single typical approach for all components	Information not available	Price deflation	Price deflation
Detailed method and/or indicator used	Compensstion of employees: Extrapolated by number of persons employed. Purchases of goods and services: Current values deflated by combination of price indexes for imported and domestic products purchased by the government.		Deflated by unit value indexes for exports and for imports.	Exports: Fuel sales to vessels in transit deflated by price index for petroleum products. Expenditure of crews deflated by price index for main articles they purchase. Imports: Goods transport deflated by unit value index for imports. Passenger fares deflated by unit value index for railway tickets. Travel abroad deflated by indexes of consumer prices in countries visited by Panamanian nationals.
Philippines				
General approach	No single typical approach for all components	Information not available	Price deflation	
Detailed method and/or indicator used	Wages and salaries extrapolated by index of employment for government services. Other expenditure deflated by general wholesale price index.		Exports and imports of goods and services deflated by unit price indexes for exports and imports of merchandise, adjusted for changes in exchange rates.	
Sierra Leone				
General approach	No single typical approach for all components	Information not available	Price deflation	
Detailed method and/or indicator used	Wages and salaries not deflated, since there was no revision in salary scales for government employees during the period covered by the estimates. Expenditure on purchases of goods and services deflated by unit value index of imports excluding food and beverages and machinery and transport equipment.		Deflated by unit value indexes of exports and imports of all commodities specially constructed for the purpose.	

Table 4. National practices in compiling expenditures on the gross domestic product at constant prices according to category of final demand [1/] (continued)

Country and approach	1 Government final consumption expenditure	5 Gross fixed capital formation by kind of economic activity	6 Exports and imports	
			6.1 Merchandise	6.2 Other goods and services
		I. Countries using the SNA (continued)		
		B. Developing countries (continued)		
Sri Lanka				
General approach	Price deflation	Information not available		
Detailed method and/or indicator used	Wages and salaries: Deflated by wage rate index of government employees. Goods and services: Current value deflated by consumer price index for Colombo.			
Syrian Arab Republic				
General approach	Information not available		Price deflation and extrapolation by volume index.	Information not available
Detailed method and/or indicator used			An average is taken of exports, respective imports, deflated by unit value indexes and extrapolated by quantity indexes.	
Uruguay				
General approach	No single typical approach for all components	Information not available	Extrapolation by quantity indexes	Price deflation
Detailed method and/or indicator used	Compensation of employees: Extrapolated by index of population growth. Purchases of goods and services: Current values deflated by appropriate components of wholesale price index.		Base-year estimates extrapolated by quantity indexes for exports and imports.	Transport: Current values deflated by freight rate indexes. Expenditures abroad: Current values deflated by combined indexes of hotel prices, cost of living and exchange rates.
Venezuela				
General approach	Information not available			

1/ The table is prepared on the basis of material that was available to the Statistical Office of the United Nations when the table was prepared.