National Income and Expenditure 2015

1. INTRODUCTION

This document accompanies the preliminary estimates of the national accounts for the year 2015 together with revised estimates for the years 2010 to 2014. The tables relate to national income and expenditure, capital formation and savings together with details of transactions of the government sector classified in accordance with national accounting definitions.

Particular attention is drawn to the detailed definitions and notes given in this document which must be borne in mind in interpreting the various items. Thus, in considering the figures for trading profits, it should be noted that domestic trading profits as compiled for GDP purposes refer to profits arising from productive activity *within* the State; items such as receipts of national debt and other interest and income arising *outside* the State are excluded. Furthermore, all losses are taken fully into account for the year in which they were incurred. For these reasons, trading profits as computed for national income purposes differ in principle both from the aggregate of profits shown by individual concerns in their own accounts and from total profits liable for taxation purposes by the Revenue authorities.

It should be understood that most of the elements in the compilation of the national accounts are estimates subject to margins of error. Generally, more reliance can be placed on the changes between years than on the absolute level of any single figure.

The estimates for 2015 are based upon indicators for the different aggregates and must be regarded as tentative. The provisional nature of the estimates for 2013 and 2014 must also be borne in mind. In particular, the estimates for the year 2014 must be regarded as preliminary. Many of the inquiries upon which the basic compilations rest are incomplete and to the extent that figures given for 2012 and 2013 are still partly subject to revision, projections for the year 2014 are also affected. While no guarantee can be given that published figures will remain unaltered as inquiries proceed and as sources and methods are reviewed, it is expected that any changes made in future in relation to years earlier than 2010 will have a relatively insignificant effect on the year-to-year trend in these data.

Except where otherwise indicated the NIE 2015 tables relate to current money values, and therefore, the year-to-year changes include an element due to monetary inflation. Certain tables are shown in chain linked values and these indicate the *real* (or *volume* or *quantum*) changes in the various entities from year to year.

The tables have all been generated from approximately 500 base headings. As a result, in the tables, the totals may differ from the sum of components due to rounding.

Chain Linking
The volume measures are produced using annual chain linked indices. On the output side, for each pair of successive years, the volume growth measures at a detailed level are weighted together using value added weights of the first year. Similarly, on the expenditure side, annual growth estimates are weighted by previous year expenditure weights. The average of the two measures is the official level of GDP to base the previous year. The change over a period of years is then calculated by linking together the annual volume changes. The estimates in this report are referenced to 2014 values.

It should be noted that under the system of chain linking individual components are chain linked independently of their aggregates. Thus, the expenditure estimate of GDP, in constant prices on a chain linked basis, is not derived by adding the chain linked values of personal consumption, government expenditure, capital expenditure, stock changes and exports minus imports. Rather it is estimated by linking the year to year volume changes in GDP (which have been calculated to base the previous year) to the GDP value in 2014. This results in the loss of additivity for years prior to the Chain Linked reference year (i.e. for years prior to 2014 for NIE 2015) by which is meant that the sum of the chain linked components do not add to the chain linked aggregate.

In addition there is the extra complication that the official volume estimate of GDP is the average of the expenditure estimates of GDP (to base the previous year) and the output estimate of GDP (to base the previous year). Thus, before the chain linking process even begins, the GDP volume estimate cannot be derived as the sum of its components.

ESA 2010 terminology
The terminology used is in line with the conventions of the ESA 2010.
National accounts are compiled in the EU according to the European System of National and Regional Accounts (ESA) framework. In 2014, the ESA 2010 framework replaced the ESA 95 version and all EU member states are required to adopt ESA 2010.

The term *GDP* is reserved for valuation at market prices while *Value Added* is used for other valuations of the aggregate previously known as GDP. There are now three valuations being shown i.e. Market Prices, Factor Cost and Basic Prices. The first two were always provided in the publications which preceded the adoption of the ESA 2010 methodology. The third one (GVA at basic prices) equals GDP (at market prices) minus product taxes plus product subsidies. This is also equal to GVA at factor cost plus other (non product) taxes minus other (non product) subsidies see item**s** 29 to 35 onwards in Table 2. The terms *Gross National Product (GNP), Gross National Income (GNI)* and *Net National Income (NNI)* are also being used. GNP is the equivalent GDP plus or minus Net Factor Income (NFI) from the Rest of the World (while NFI can take either a positive or negative value, it has been negative for the years 1995 to 2015 that are covered in NIE 2015, both at Current Prices and Chain Linked). GNI is equivalent to GNP plus EU subsidies minus EU taxes. Alternatively it may be described as GDP minus primary income payable by resident units to non resident units plus primary income receivable by resident units from the rest of the world. NNI is equal to GNI minus depreciation.

Methodology
The National Accounts form a comprehensive framework within which economic data can be presented in a coherent, consistent manner. There are three approaches to measuring National Income, each of which theoretically gives the same answer, i.e.

- output (value added by each producer);
- income (all income generated);
- expenditure (all spending on final demand)

In Ireland, the income and expenditure approaches are used. An output estimate is available on an experimental basis on the CSO website. For the income estimate, the main components are:

- profits of companies and of the self-employed
- remuneration of employees (wages, salaries and employers' contributions to social insurance and pension funds including imputed contributions in respect of public service employees)
- rent of dwellings (imputed in the case of owner-occupied).

Adjustments are made in respect of stock appreciation i.e. to eliminate the effect of price changes on the level of stocks. Another feature of the national accounts is that interest is not regarded as part of income or expenditure in calculating GDP but a hidden margin is attributed to banks on interest accrued in the course of lending and borrowing and this hidden margin is charged or apportioned to customers. (See the paragraph on "profits of businesses" in 'Definitions and Concepts')**.**

On the expenditure side, estimates are made of:

- personal expenditure on consumers' goods and services
- expenditure by central and local government on current goods and services
- gross domestic fixed capital formation
- value of physical changes in stocks.

The value of exports is then added and imports are deducted. The two approaches (income and expenditure) should theoretically give the same answer. However, they will always diverge to some extent as they are derived from different data sources. The components of the two original estimates are shown unadjusted. The official level of GDP is taken to be an average of the expenditure and income estimates and a balancing item (statistical discrepancy) is displayed, which is half of the difference between the two estimates. This is the amount by which both estimates have to be adjusted to agree with the official level of GDP.

Volumes or Constant price estimates
Two measures of GDP (output and expenditure) are compiled annually at previous year's prices and chain linked to a reference year. The output measure is obtained by using various output indicators to project forward the previous year's value added. On the expenditure side, the current price estimates are deflated to the previous year's prices using appropriate price indices. The average of the two provides the official GDP to base the previous year and is used to produce the annual volume change in GDP. The annual volume changes are then chain linked. The chain linked values for the components of both methods are shown in Tables 4 and 6.

Definitions
Sections 2 and 3 contain detailed definitions and explanatory notes relating to all the variables contained in the various tables in this report. The following are the main features of the principal economic aggregates.

Gross Value Added at factor cost is equal to the sum of the values of the goods and services (or part thereof) produced in the country without deducting an amount in respect of capital consumption (i.e. depreciation). It excludes taxes on production and includes subsidies on production.

Net Value Added at factor cost is equal to Gross Value Added at factor cost minus depreciation.

Gross Value Added at basic prices is equal to Gross Value Added at factor cost plus other (i.e.non product) taxes on production minus other (i.e. non product) subsidies on production.

Gross Domestic Product at market prices is equal to Gross Value Added at basic prices plus taxes on products less subsidies on products. It represents total expenditure on the output of final goods and services produced in the country ("final" means not for further processing within the country) and valued at the prices at which the expenditure is incurred.

Gross National Income at market prices is equal to Gross Domestic Product minus primary income payable by resident institutional units to non resident units plus primary income receivable by resident units from the rest of the world. It therefore represents total primary income available to resident institutional units of the country.

Retrospective historical series; availability of data in spreadsheet format
A historical series of data along the lines of the main tables in NIE 2015 covering the period from 1970 to 1995 is available in Excel format on the web and in the CSO's on line database (StatBank). There is however a discontinuity in this series compared to the series post 1995 due to (a) the introduction of ESA 2010 in the post 1995 data and (b) the introduction of FISIM which is incorporated in the accounts from 1995 onwards but not for earlier years. Two sets of figures are available for the year 1995 i.e. the historical series on an ESA95 basis without FISIM and the ESA 2010 1995 to 2015 series with FISIM included. The latter series contains some revisions to the accounts stretching back to 1995.

The detailed tables are available in e-publication and spreadsheet format on the CSO website http://www.cso.ie. They are also available in the CSO's database (StatBank).

2. Explanatory Notes to Tables

The numbering of the notes refers to the numbering of the items in the tables in the e-release.

Table 1 Net Value Added at Factor Cost and Net National Income at Market Prices

1. **Value added from agriculture, forestry and fishing.** Gross receipts from the sale of agricultural produce, timber and turf (excluding inter-farm transactions) together with the value of farmers' own produce consumed in farm households without process of sale and the value of the changes in the numbers of livestock on farms and on-farm stocks of the principal crops, all valued at current agricultural prices, less expenses incurred in production, including purchased materials, maintenance of machinery, depreciation, rent (Item 8) and other expenses. The income originating from agricultural activity is measured prior to any distribution to the various factors of production, which in combination

produced it. Therefore, no deduction is made for interest on capital whether borrowed or not. The total represents income from agricultural activity only and does not, for example, include investment income of agriculturists, which is contained in items 4, 5 and 14. The item also includes income from sea and inland fisheries.

2. **Agricultural wages and salaries.** Payments in cash and kind to farm employees and to employees in forestry.

3. **Employers' contribution to social insurance.** This item consists of the contributions of employers to the State social insurance funds. These contributions are classified as part of employee remuneration and also as part of direct taxation on households.

4 to 5. **Domestic trading profits, self employed earnings, etc.** Domestic here means arising from economic activity within the State. Hence these items include the profits of subsidiaries or branches of foreign companies in respect of operations within the State (these are included also, net of corporation tax, as a negative entry in item 14), and exclude the profits of Irish concerns in respect of their operations abroad as well as investment income, etc., originating outside the State (included as a positive entry in item 14).

Trading profits are taken after payment of indirect (but not direct) taxes. For years after 1990, they are taken after net payments of royalties. In computing profits all interest payments are treated as an allocation of profit; they are not deducted as operating expenses before the trading profit is struck. For this reason, interest received as well as dividends received are excluded from trading profits. In the case of banks and similar businesses a charge is calculated on interest earned on loans and interest paid on deposits of customers. The charge, in the case of deposits, is the difference between the reference rate of interest and the actual rate paid by the bank and applied to the stock of deposits of customers. In the case of loans the charge is the difference between the reference rate and the actual loan rate charged by the banks and applied to the stock of loans of customers. This charge is also treated as intermediate consumption by business and owner occupiers of dwellings with loans. It also forms part of the final expenditure aggregates Personal Expenditure, Government Expenditure and Exports and also forms part of Imports. However the interest itself is not treated as a receipt or a cost in the calculation of domestic profits. The effect of this is that net payments (i.e. receipts minus payments) of interest (i.e. pure interest) by households and central and local government are excluded from the calculation of GDP. The provision for depreciation deducted to arrive at net profits were, up until NIE09, those allowed for tax purposes adjusted, as appropriate, for *free depreciation* etc. as distinct from either the depreciation provisions of the enterprises themselves or depreciation estimates at replacement costs. Now depreciation (or more properly "consumption of fixed capital") is taken from the CSO's estimates of the capital stock of fixed assets. The methodology is described in the background notes to the annual release on this topic. Item 4 includes, in addition to trading profits of public and private companies, the operating profits of certain corporate bodies such as the ESB Group, the Central Bank, National Lottery, etc. These bodies are also regarded as companies in items 124 and 141.

6. **Adjustment for stock appreciation.** The adjustment has the effect of replacing the total of items 154 and 155 by item 82 identical with item 156. It is included to ensure that only the value of physical change in stocks is counted as part of national product by eliminating the effects of price changes on the level of stocks.

7. **Rent of dwellings.** This represents net income from ownership of dwellings, i.e. gross receipts of rent for rented dwellings plus imputed rent of owner - occupied dwellings less depreciation, repairs and maintenance and other costs (which include bank charges, principally FISIM, on housing loans). In the case of dwellings owned by local government the amount included represents the full economic rent less depreciation, repair costs and other current expenses. In the national accounts, the difference between the economic rent and the lower rent actually paid by tenants is treated as an income transfer from Local Government to households.

8. **Rent element in land annuities.** This item represents the interest element in land annuities (forming the major part thereof) and includes both the interest element in actual payments by farmers and that met by way of subsidy under the Land Acts. This item forms part of Government trading and investment income (item 120). Letting of lands, e.g. on conacre, is considered as an inter-farm

transaction and hence the corresponding rent is not included either as an expense or as a source of income for the agricultural sector.

9. **Domestic wages and salaries.** Wages and salaries include, in addition to basic wages and salaries, all items of earnings such as overtime payments, bonuses, piecework payments, commission earnings of distribution employees, directors' fees, income in kind, etc., arising from economic activity within the State. They exclude transfer payments such as old-age pensions, unemployment benefit, etc. Earnings are measured gross, i.e. before deduction of employees' contributions to social insurance and to contributory pension funds. The value of unpaid domestic service performed by household members is excluded, although the remuneration in cash and in kind of domestic servants is included. The earnings of Irish diplomatic and consular personnel abroad are included, while those of representatives of other states in this country are excluded.

Since the item measures remuneration for current work, pensions currently paid to former employees are in principle excluded. However, current employees benefit by the provision being made by their employers for their future pensions in the form of contributions to funded pension schemes. These contributions are viewed as an implicit part of the remuneration of the employee (known as *voluntary social insurance* contributions) and are therefore included in the wages/salaries/pensions item. Where funded pension schemes do not exist, the value to the current employees of their future pension entitlements is estimated. The amount of actual pensions currently being paid directly to former employees is sometimes taken as an estimate but in the case of the Public Service an actuarial assessment is available.

10. **Employers' contribution to social insurance.** This item consists of the contributions of employers to the state social insurance funds. These contributions are classified as part of employee remuneration and also as part of direct taxation on households.

12. **Statistical discrepancy.** This arises from the fact that Gross Domestic Product is calculated in two independent ways (viz. income and expenditure methods). The two methods produce different estimates as can be seen from summing the income components in Table 1 (plus depreciation from Table 2) and the expenditure components in Table 5. The official level of GDP is taken to be the average of the two independent estimates and the statistical discrepancy is the amount by which each estimate has to be adjusted to bring it in line with the official estimate. In other words, it is calculated as the average less the sum of the relevant components from either method or one half of the difference between the two independent estimates. If the income-based estimate is higher than the expenditure-based estimate, the discrepancy will have a negative sign in the income tables (Tables 1, 2 and 3, and also item 149 in Table 11, and items in Tables 11.1 and 12) and a positive sign in the expenditure table (Table 5), and vice versa.

13. **Net value added at factor cost.** This item is the total of items 1 to 12.

14. **Net factor income from the rest of the world.** This is taken from the current account of the Balance of Payments

15. **Net national product at factor cost.** Total of items 13 and 14.

16**. National (i.e. non EU) taxes.** This covers all taxes on production except EU taxes on production as defined in item 39.

17. **National (i.e. non EU) subsidies.** This covers all subsidies on production except EU subsidies on production as defined in item 38.

18. **Net national income at market prices.** Total of items 15, 16 and 17**.**

Table 2 - Net Value Added at Factor Cost by Sector of Origin and Gross National Income at Current Market Prices

19. **Agriculture, forestry and fishing.** The total contribution of the agricultural sector to the national income equals the total of items 1, 2, 3 and 8. As indicated in the note to item 1, this total does not include the income of agriculturists from sources other than their agricultural activities and in the

estimation the value of the change in livestock numbers together with the on-farm stocks of the principal crops is taken into account.

20. **Industry (including building).** This total represents remuneration of employees (including all elements of earnings, see items 9 and 10) and profits in the case of all concerns engaged in industrial production, and building and construction. Remuneration of construction workers employed by central and local government and communication and transport companies as well as the value added of activities of these concerns covered by the Census of Industrial Production are included here and not in items 21 and 22. The contribution to national income is divided into *remuneration of employees* and *other*. *Remuneration of employees* in this item and in items 21, 22 and 23 includes, in addition to all elements of earnings, employers' contribution to social insurance.

21. **Distribution, transport, software and communication.** This total represents earnings and profits arising in distribution firms, hotels, restaurants and public houses, transport, software and communication businesses, including subsidies paid to such concerns. Earnings of workers covered by the Census of Industrial Production, or engaged in building and construction are excluded here and included in item 20. Remuneration of employees is shown separately.

22. **Public administration and defence.** This item includes payments in cash and kind to employees of the central government and local government who are engaged in administrative or regulatory activities, including those in the administrative departments and offices of government, the army and Gardaí and diplomatic and consular officials abroad. It does not include payments to employees of concerns covered by the Census of Industrial Production (included in item 20), and to employees engaged in activities, other than administrative, such as building and construction (included in item 20), forestry (included in item 19), and educational and health services (included in item 23).

23. **Other services (including rent).** The total of estimated earnings (cash and kind) and profits in the case of all professions, financial and insurance concerns, educational and health services, personal services (private domestic service, hairdressing, undertaking, etc.), entertainment and sport etc. as well as net rent (actual and imputed). Remuneration of employees is shown separately.

26. Identical with item 12.

27. Identical with item 13.

28. **Provision for depreciation.** Separate estimates are shown for the main sectors. For the agricultural sector the figure is based on the perpetual inventory method, carried forward using data on capital formation, and covers machinery, vehicles and equipment and farm buildings. In the case of business concerns included in the other sectors, depreciation up until NIE 09 was generally taken as being the amount allowed for tax purposes (adjusted appropriately for *free depreciation,* etc.). Now it is based on the estimates derived from the CSO's Capital stock of fixed assets. For central and local government an estimate of the depreciation on government buildings is included. An estimate of the depreciation on dwellings is also included. There was a significant increase to the provision for depreciation in NIE 2014 based on the higher capital stock associated with implementation of the change of economic ownership basis for trade in aircraft (see 'Definitions and Concepts' for more details). This resulted in an offsetting change in the level of Net Value Added at Factor Cost (item 13/27) and related aggregates.

29. Item 27 plus item 28.

30. **Non product taxes.** These are taxes on production excluding taxes on products as defined in item 33. Rates on commercial property and motor vehicle duties paid by businesses are examples of non product taxes.

31. **Non product subsidies.** These are subsidies on production excluding subsidies on products as defined in item 34. Grants for employment creation are examples of non product subsidies.

32. Item 29 plus item 30 plus item 31.

33. **Product taxes.** These are taxes that are payable per unit of some good or service produced or transacted. Excise duties on drink and tobacco are examples of product taxes.

34. **Product subsidies.** These are subsidies that are payable per unit of good or service produced or imported.

35. Item 32 plus item 33 less item 34.

36. Identical with item 14.

37. Item 35 plus item 36.

38. **EU subsidies.** These consist principally of all payments made under the Guarantee section of the European Guidance and Guarantee fund (E.A.G.G.F. or F.E.O.G.A.) and are gross of levies paid to the EU such as the Co-responsibility levy on milk, the Co-responsibility levy on cereals and the Super levy in the dairy sector. These tax elements form part of EU taxes.

39. **EU taxes.** This mainly consists of the annual Exchequer contribution to the EU Budget, but excludes the GNI based Fourth Own Resource contribution and EU VAT, which in ESA 2010 are treated as a Vat and GNI based EU Own Resource (D.76).

40. Item 37 plus item 38 plus item 39.

Table 3 - Gross Value Added at Factor Cost by Sector of Origin and Gross National Income at Current Market Prices

41. Item 19 plus item 28 (a).

42. Item 20 plus item 28 (b).

43. Item 21 plus item 28 (c).

44. Item 22 plus item 28 (d).

45. Item 23 plus item 28 (e).

47. Identical with item 12.

48. The total of items 41 to 47.

49 Identical with item 30.

50 Identical with item 31.

54. Item 51 plus item 52 less item 53. Identical with item 35.

55. Identical with item 14.

56. Item 54 plus item 55. Identical with item 37.

57. Identical with item 38.

58. Identical with item 39.

59. Identical with item 40.

Table 4 - Gross Domestic Product at Constant Factor Cost by Sector of Origin and Gross National Income at Constant Market Prices (chain linked to 2014)

The entries in this table have been obtained by expressing the items in Table 3 in prices of the previous year and then chain linking them. The Statistical discrepancy item 66 arises from the fact that estimates of gross domestic product at constant market prices are calculated in two independent ways (viz. the output method and the expenditure method). The two methods produce different estimates as can be seen from summing the output components in Table 4 and the expenditure components in Table 6 for the year 2014. The official level of GDP at constant prices is taken to be the average of the two independent estimates when calculated to base the previous year and the statistical discrepancy in item 66 is the amount by which either estimate has to be adjusted to bring it in line with the official estimate. The statistical discrepancy is only shown for the years 2014 and 2015 as these are the only years when the sums of the components (including the discrepancy) of either the output or expenditure methods are equal to the output or expenditure estimate of GDP. Irrespective of the official GDP being the average of two independent estimates additivity is lost for the individual estimates due to the chain linking process (see introductory text on Page 1 of these Methodology Notes). Also the two independent estimates of GDP are not chain linked. The average of the two is calculated to base the previous year and it is this average which is chain linked to give the official level of GDP, referenced to year 2014.

Table 5 - Expenditure on Gross National Income at Current Market Prices

79. **Personal consumption of goods and services at current market prices.** The consumption of personal goods and services by Irish residents. Excludes the purchase of dwellings but includes the purchase of all durable (e.g. private motor cars, furniture, etc.) and non-durable (e.g. food, etc.) goods as well as gross rent (including the gross rental value of Local Government and owner-occupied dwellings) and services. In particular this item includes the consumption of a number of goods and services, which are paid for by the state. These form part of *state transfer payments*. For national accounts purposes it is considered that the state provides the money to the households and the household pays the concern providing the good or service. They thus form part of personal income and personal expenditure. Principal among these are:

- Higher Education Grants, Scholarships, etc.
- Fees for University Education
- Free travel, electricity, telephone rental
- Medical services supplied by GP's to households.
- Medical goods supplied to households by pharmacists
- Transport Services for school children
- The difference between the lower rent paid by local government tenants and the economic rent of these dwellings
- Medical Insurance Relief paid to Insurance Companies

Also included is an imputed rent for owner-occupied dwellings, which never actually takes place as a real transaction. Here an estimated rent is assigned to households, which own their dwellings. This is done to avoid changes in the level of owner-occupied versus rented dwellings affecting the level of GDP in national or international comparisons.

The allocation of the total between different categories of expenditure, given in Table 13 at current prices and in Table 14 at constant prices, is based on a direct estimate of the expenditure in these categories. These figures include expenditure in the State by tourists and other visitors and this is deducted in aggregate at the foot of the tables to obtain the total expenditure by Irish residents. Expenditure on consumption goods by business concerns and their representatives is excluded. Taxes on income and wealth (including total contributions to social insurance) are also excluded.

In principle the life funds of assurance companies are regarded as part of the personal sector and the payments of life assurance premiums and the receipt of accrued benefits are treated as transfers within that sector. The effect of this is that the increase in the life funds of assurance companies forms part of personal savings and not part of personal expenditure. However management charges deducted by pension and life assurance managers for the management of the funds are included in personal expenditure.

80. Current Government expenditure on goods and services less miscellaneous Government receipts, plus an estimated provision for depreciation of central and local government fixed assets.
This item is made up of a number of components classified as non-market output by government and categorised in accordance with ESA2010 as follows:

Compensation of Employees (D.1)
Intermediate Consumption expenditure (P.2)
Consumption of fixed capital (P.51c)
Less Miscellaneous sales (P.131)

Data for all years from 1995 are available in the Government Income & Expenditure (GIE) release published in July to coincide with the publication of the Government Finance Statistics Quarterly release. The GIE release replaces NIE Tables 19 to 21.

81. **Gross domestic fixed capital formation** includes expenditure on building and construction work, machinery and equipment and research and produced and imported capital goods and services.

82. **Value of physical changes in stocks.**

83. **Exports of goods and services.**

84. **Imports of goods and services.**

85. **Statistical discrepancy.** Equals items 12, but with sign reversed. See the notes for item 12.

86. **Gross domestic product at current market prices.** The total of items 79 to 85. Identical with item 54.

87. **Net factor income from the rest of the world.** Identical with item 14.

88. **Gross national product at current market prices.** Item 86 plus item 87. Identical with item 37.

Table 6 - Expenditure on Gross National Income at Constant Market Prices (chain linked to 2014)

92. **Personal consumption of goods and services at constant market prices.** The constituents of personal expenditure on consumers' goods and services were separately valued at previous year's prices and chain linked to reference year 2014.

93 **Net expenditure by central and local government on current goods and services at constant market prices.** In most cases, employees' remuneration was expressed at constant prices by applying an index of employment to the base year remuneration. Where reliable employment data were not available the implied index of rates of remuneration was used to deflate current values. Other expenditure was deflated partly by the consumer price index and partly by other suitable indices.

94. **Gross domestic fixed capital formation at constant market prices.** The construction elements of item 81 were deflated using price indicators supplied by the Department of the Environment, Community and Local Government. The remaining constituents of item 81 were separately deflated by the most appropriate wholesale and import price index numbers.

95. **Changes in stocks at constant market prices.** Agricultural and intervention stocks were re-valued at individual commodity level to 2013 prices. Other non-agricultural stocks were deflated by the most appropriate price index numbers.

96. **Exports of goods and services at constant market prices.** Merchandise exports were deflated by the export price index (after taking account of the Balance of Payments adjustment) and receipts from services were deflated by the most appropriate price index in each case.

97. **Imports of goods and services at constant market prices.** Merchandise imports were deflated by the import price index and expenditures on services were deflated by the most appropriate price index in each case.

98. **Statistical Discrepancy.** Equals item 66, but with sign reversed. See the notes for Table 4.

99. **Gross domestic product at constant market prices.** The total of items 92 to 98.

100. **Net factor income from the rest of the world.** Identical with item 74. Item 87 when negative, is generally deflated by the implied price index for exports of goods and non-factor services. The rationale is that the deficit net-factor income flow must be financed by increased exports. Since 1999 exceptional adjustments for Balance of Payments purposes have been separately deflated.

101. **Gross national product at constant market prices.** Item 99 plus item 100.

Table 7 - Gross National Disposable Income and its use

105. Identical with item 35.

106. Identical with item 14.

107. Identical with item 37.

108. Identical with item 38.

109. Identical with item 39.

110. Identical with item 40.

111. **Net current transfers from the rest of the world.** Receipts less payments to the rest of the world which are not in exchange for a specified amount of goods or services. Includes, in particular, emigrants' remittances, social welfare transactions, contributions by the central and local government to international organisations and net current transfers from the European Union.

112. Item 110 plus item 111, represents the income of the nation from all sources after allowance for transfers received and paid.

113. Identical with item 79.

114. Identical with item 80.

115. Item 113 plus item 114.

116 Item 112 less item 115.

117. Identical with item 28.

118. Item 116 less item 117. Identical with item 145.

Following the convention used for deflation of net factor income from abroad the implied price index of the exports of goods and services is used to deflate net current international transfers when they are negative and the import index is used when they are positive**.**

Table 13 - Consumption of Personal Income at Current Market Prices

(See the special note on item 79 in Table 5 for background information on the scope of personal consumption.)

This Table provides a breakdown of personal consumption of different categories of goods and services.

A variety of methods are used to compile the estimates. Administrative sources provide information for some commodities, but consumption estimates for the majority of goods are estimated using a commodity flow approach. The total supply of individual commodities is derived by adding home production to imports and subtracting off any exports. Personal consumption is estimated by deducting the purchases of businesses and central and local government from the available supply.

For some well-defined products including certain foodstuffs the commodity flow exercise provides reliable estimates of the quantities of produce consumed. Personal consumption of these items is calculated by valuing the quantities at national average retail prices. For other goods the commodity flow calculations are done directly in value terms. The resulting estimates valued at producer and import prices are marked up to incorporate trade margins and taxes.

A variety of methods are used for estimating personal consumption of services, the most important sources being household budget surveys and direct inquiries.

In NIE 2004 the methods of estimating and allocating FISIM (financial intermediation services indirectly measured) were changed. FISIM represents the margin which banks withhold for themselves in paying interest on deposits or charging interest on loans. In the case of deposits it is calculated as the difference between a reference rate (calculated as the effective FISIM-free interest rate on inter-bank business) and the average interest rate, multiplied by the stock of deposits held by households. In the case of loans it is calculated as the difference between the reference rate and the average loan rate, multiplied by the stock of loans held by households. The FISIM in this table does not include FISIM charged on mortgage lending. This latter FISIM is regarded as being incurred by householders in their business capacity as landlords. Households which own their own dwellings are regarded in the national accounts as being landlords to themselves and an imputed rent is entered in respect of owner occupied dwellings under the housing heading in this table.

Consumption of all items is valued at retail prices, except for own consumption of home grown produce, which is valued at farm gate prices.

In NIE2008 an estimate of the consumption of smuggled tobacco products has been included in the "tobacco" item.

In NIE 2013 estimates for illegal activities were revisited and now include prostitution and a revised methodology for estimation of consumption of illegal narcotics. These figures are included under the heading Miscellaneous goods and services.

In NIE 2015, the CSO changed the methodology used to calculate FISIM to bring it into line with the European System of Accounts (ESA 2010) standards. This revised methodology has been applied to estimates from 2010 onwards.

158. Identical with item 79.

159. **Taxes on personal income and wealth.** This item is the difference between the total taxes on income and wealth (including contributions to social insurance) and the payments of direct tax on undistributed profits of domestic companies and on profits of foreign concerns arising from their activity within the State. Since 1987 this item includes Deposit Interest Retention Tax (DIRT). Some relatively small proportion of this tax is in fact paid by Companies and is not therefore appropriate to this heading. No adjustment has been made for this as firm information is not available on the proportion involved.

160. **Total personal consumption.** Equals the total of items 158 and 159.

Table 14 - Consumption of Personal Income at Constant Market Prices (chain linked to 2014)

(See the special note on item 79 in Table 5 for background information on the scope of personal consumption.)

The entries in this table have been obtained by valuing, at previous year's prices, each of the constituents of personal consumption in Table 13 to obtain an annual volume change. The volume changes are chain linked to 2014. When consumption quantities are not directly available expenditures at previous year's prices are estimated by deflating current value amounts by appropriate price indices.

161. **Total personal consumption (except taxes on income and wealth) at constant market prices.** Identical with item 92. This represents the total consumption, included in item 79, valued in constant prices and thus gives a measure of the changes in the volume of consumption.

Table 15 - Gross Domestic Physical Capital Formation at Current Market Prices

In this table the main constituents of item 151 and of the total of items 152 and 153 are shown separately. The figure for **dwellings** includes the total value of new building (excluding site costs), reconstruction and conversion, and is based mainly on data relating to numbers of dwellings built, estimates of capital repairs and extensions to dwellings, together with information on work done by local government. For **roads** the expenditure included relates to improvement and new construction only, ongoing repair and maintenance work being excluded. The **other building and construction** category includes the full cost of work done on land reclamation. **Transport equipment** covers aircraft, ships and boats, rail vehicles and road vehicles for business use (including the proportion of private cars estimated to be purchased for business use). **Other machinery and equipment** includes tools and durable containers as well as all industrial machinery.

162. Item 81 plus the value of changes in agricultural stocks and work in progress plus adjustment for stock appreciation.

Table 17 - Gross Domestic Physical Capital Formation at Constant Market Prices (chain linked to 2014)

164. **Total gross domestic physical capital formation at constant prices.** With the exception of construction works, the constituents of Table 15 are separately deflated to previous year's prices using the appropriate wholesale and import price index number in each case. Annual volume changes are derived in this way and these volume changes are chain linked to the 2014 figures. Construction works are valued at previous year's prices using price deflators provided by the Department of Environment, Community and Local Government and tender price indices produced by the Irish Society of Chartered Surveyors.

Tables 16 and 18 - Gross Fixed Capital Formation by Sector of Use at Current and Constant Market Prices (chain linked to 2014)

In these tables, Gross Fixed Capital Formation is broken down over the various sectors of use. The majority of the sectoral headings are self-explanatory and are as defined in the European System of Accounts. Market services include all recovery, repair and trade services, the services of transport and communication, credit and insurance institutions and all business, recreational, cultural and other personal services. Non-market services on the other hand covers general government and local government services and other services which are predominantly non market such as health, education and other public services.

Deflation to constant prices is consistent with the estimates in Table 17 and is done within the various sectors at product level.

163. Identical with item 81.

165. Identical with item 94.

Tables 19 to 22 (Discontinued)

A number of the more detailed Government Finance Statistics (GFS) tables included in previous NIE publications have been discontinued. This is mainly due to the introduction in 2013 of a dedicated GFS annual release which is consistent and contemporaneous with the bi-annual EDP notifications for Ireland. The presentation of data in the GFS release provides a more integrated view of government finances which reconciles revenue and expenditure with financing flows, and also provides a balance sheet position for the government sector.

In addition, for the first time in April 2016 the CSO published a new set of tables reporting the revenues and expenditures of both central and local government separately. These replace Tables 19 to 21 of this NIE publication. The new tables will be published as Government Income and Expenditure release again in July. The data in that release will be aligned to this NIE (e.g. net current government expenditure.)

There are plans for new thematic outputs which will provide a presentation of more detailed GFS data which was previously included in the NIE in a form that is more consistent with current international reporting formats.

3. **Definitions and Concepts**

The series of official estimates of national income and expenditure was inaugurated in the White Paper on National Income and Expenditure, 1938-44 (Pr.No. 7356) and continued in a second White Paper "Tables of National Income and Expenditure, 1938 and 1944-50" (Pr.No. 350), in the annual issues of the "Irish Statistical Survey" from 1950-51 to 1958 and in the publication "National Income and Expenditure", 1959 to 2014. The latest estimates are contained in this issue of "National Income and Expenditure" (NIE 2015). These estimates are based, not on exact information but on incomplete data collected from many sources. The estimates of different items are therefore of varying accuracy, but where exact statistics were not available it was possible in some cases to compare independent estimates from alternative sources and thus obtain a check on the accuracy of the methods used.

Definitions

Net national product at factor cost can be defined as the total of all payments for productive services provided in this country or abroad accruing to the permanent residents of this country. The exact content of this definition is best shown by reference to the Explanatory Notes to Tables. Some income accrues to Irish residents as a result of economic activity abroad or property held abroad while some income arising in the State is paid to non-residents. **Domestic income** is the total income arising from productive activity within the State. **Domestic income plus net factor income from the rest of the world equals net national product at factor cost.**

Gross domestic product at factor cost (historically under ESA79) was determined as being equal to net domestic product (domestic income) plus total provision for depreciation. **Gross national product at factor cost** (not explicitly produced in the NIE publication) is equal to net national product plus total provision for depreciation.

Gross national product at current market prices is equal to gross national product at factor cost plus taxes on expenditure less subsidies. It represents total expenditure on the output of goods and services of the national economy valued at the prices at which the expenditure is incurred plus net factor income from the rest of the world. This expenditure is made up of personal expenditure on consumers' goods and services, net expenditure by central and local government on current goods and services, gross domestic physical capital formation (comprising fixed capital and stocks) and net expenditure by the rest of the world on goods and services originating in Ireland plus net factor income from the rest of the world.

The concept of Gross Value Added at factor cost, together with the closely related concept of gross national product at current market prices, suggests that there are three different methods of summarising the total economic activity of the country. These three different presentations are given in Tables 1, 2 and 5. Table 1 shows net national product broken down by type of income. Table 2 shows net value added at factor cost broken down by sector of origin. Table 5 shows expenditure on gross national product at market prices broken down by category of expenditure.

The following are some points regarding the constituents of net national product:

Wages and salaries include all such elements of earnings as overtime payments, bonuses, piece-work payments, commission earnings of distribution employees, directors' fees, etc. as well as income in kind (food, clothing, fuel and light). These are computed without deduction of employees' contributions to social insurance and to contributory pension funds. Where pension funds exist, the employers' contributions to pension funds are included in this item. Where pension funds do not exist, the value to the current employees of their future pension entitlements is estimated. The amount of actual pensions currently being paid directly to former employees is sometimes taken as an estimate but in the case of the Public Service an actuarial assessment is available. The value of unpaid domestic services performed by spouses is excluded, whereas the remuneration in cash and kind of domestic servants is included.

Remuneration of employees includes, in addition to the above elements, employers' contributions to social insurance.

Transfer income such as emigrants' remittances and old age pensions, blind pensions, widows' and orphans' pensions, unemployment benefit or assistance and all other social welfare payments whether contributory or not, are excluded from net national product. Employees' and employers' contributions to the state social insurance funds are regarded as taxes on income. Gross national disposable income is the sum of gross national product and net current transfer payments from the rest of the rest of the world.

Profits of businesses are taken before deduction of taxes on income but are net of taxes on expenditure (including rates). Significantly, royalty service payments or receipts for businesses are not regarded as a form of investment income.

In measuring profits, receipts of investment income (interest and dividends) are in general not included in the output of businesses, and expenditures on investment income are in general excluded from their intermediate consumption. However, in the case of banks and similar businesses, output includes, in addition to invoiced fees and charges, an estimated service charge (called FISIM - financial intermediation services indirectly measured) in respect of their non-invoiced services, represented by the margin between the interest they pay on deposits and the interest they receive on loans. The estimation methodology makes use of a reference rate, approximating a pure interest rate, and calculated as the effective interest rate on inter-bank positions. In the case of loans (for which customers usually pay a higher rate than the inter-bank rate) the FISIM amount is calculated as the difference between the reference rate and the actual loan rate charged to customers, multiplied by the stock of loans of customers, and is subtracted from the original interest amount to yield the pure (FISIM-exclusive) interest amount. In the case of deposits (for which customers usually earn less than the inter-bank rate) it is the difference between the reference rate and the actual deposit rate paid by the bank to customers, multiplied by the stock of deposits from customers, and this is added to the original amount.

Of the total domestic production of FISIM, some is attributable to consumption in the form of final demand by depositing and borrowing customers (by households in their capacity as consumers, in the form of personal expenditure, by government in the form of government consumption, and by non-residents, in the form of exports). These components therefore add directly to GDP. The remainder of domestic production of FISIM is consumed as intermediate consumption by businesses or by households in their capacity as self-employed businesses and as borrowers for owner-occupation of dwellings, and has no net effect on aggregate GDP (although it does reduce the value added of the activity branches concerned, offsetting to some extent the increase in the value added of the financial services branch that produces the FISIM). FISIM, as a service, can also be imported by borrowing from and lending to banks abroad. Imported FISIM is attributed to users in the same way as domestically produced FISIM. In this edition (i.e. the NIE 2015 report), the CSO has changed the methodology used to calculate FISIM to bring it into line with ESA 2010. The details are outlined below in the section titled '**Changes in Concepts and Methods'.**

The provisions for depreciation deducted to arrive at *net profits* have been based up to NIE 2009 on those allowed for tax purposes adjusted, as appropriate, for *free depreciation,* etc. rather than the provisions made by the enterprises themselves in their business accounts. Now the depreciation estimates are based on the CSO's official estimates of the stock of fixed capital assets. The stock is calculated using a standard perpetual inventory method (PIM). The methodology used is described in the notes to the annual release on Capital Stock of Fixed Assets.

Companies include all public and private companies incorporated either in or outside the State, as well as certain corporate bodies, such as, the Electricity Supply Board, the Central Bank, etc. **Companies' Savings** comprise the undistributed income net of tax of all bodies counted as companies. In the case of subsidiaries or branches of foreign companies operating in the State the foreign direct investors' share of the total trading income (less corporation tax payable in the State) is regarded as distributed to these investors. Correspondingly, the Irish direct investors' share of trading profits of subsidiaries or branches operating abroad of Irish companies is regarded as having been distributed to these investors. [Direct investment here refers to a category of international investment that is **based on an equity ownership of at least 10%** and thus reflects a lasting interest by a resident in one economy in an enterprise resident in another economy.]

Income from dwellings is included in net national product. An imputed rent is included in respect of owner-occupied dwellings but no such element is imputed to other classes of durable goods.

Income of agriculturists is based on estimates of the value of gross output of agriculture after the deduction of estimates of various elements of costs, viz., the cost of marketing, feed-stuffs, fertilisers and seeds, petrol and oil, veterinary fees and medicines, depreciation, etc., as well as the interest element in land annuities paid. Farm produce consumed in farm households without process of sale is valued at the prices which farmers receive for similar goods sold. The value of changes in the numbers of livestock on farms and the value of the change in the stock of crops held on farms are included in agricultural income. **Income originating in the agricultural sector** includes, in addition to the above, the total interest element in land annuities, including both the interest element in annuities actually paid by farmers and that met by way of subsidy under the land acts.

Profits, interest, dividends and remuneration of employees from the rest of the world are included in national product and similar items arising in Ireland and paid to foreign residents are excluded. In the case of subsidiaries or branches of foreign companies operating in the State the foreign direct investors' share of the total trading income (less corporation tax payable in the State) is regarded as distributed to these investors in the heading "Net Factor Income" and hence excluded from National Income. Correspondingly, the Irish direct investors' share of trading profits of subsidiaries or branches operating abroad of Irish companies is regarded as having been distributed to these investors and hence included in National Income. [See the section headed "companies" for a definition of "direct investors"]

Government trading and investment income comprises (i) interest receipts, including income from foreign securities, interest on state holdings of contingent capital and preference shares in financial institutions and local authority interest income (ii) dividend payments from state sponsored bodies (such as the ESB) and payments to the Exchequer of Central Bank surplus income, (iii) rental income of local government, consisting of actual rents received plus the amounts of "subsidies" involved (really benefits in kind to households which are also imputed as income to the Local Authorities) less expenses. Depreciation is deducted in respect of item (iii).

An **adjustment for stock appreciation is deducted** in the estimation of national product for years in which changes in commodity prices have been such that non-agriculture stocks held at the beginning of the year would have increased in value if no physical change had occurred. A similar provision is **added** for years in which price changes were such as to cause a fall in value of non-agricultural stocks held at the beginning of the year. The effect of this is to include in the various aggregates only the value of the change in volume of stocks between the beginning and end of the year, as distinct from the change in the value of stocks which, in general, is brought to account as part of income according to normal accounting definitions and would thus have been included in items 4 and 5. (The value of the physical change in agricultural stocks is computed directly so no similar adjustment is required in this case.)

Personal income is the aggregate income from all sources in cash or kind, whether from productive services or not, at the disposal of individuals permanently resident in the State. It is equal to net national product plus provision for stock appreciation, less government trading and investment income, plus national debt interest and other current transfer payments, less undistributed profits before tax of companies and other corporate bodies. **Private income** is the aggregate income from all sources in cash or kind, whether from productive services or not, of all individuals, companies, charities, etc. which are permanent residents of the State. It is equal to personal income plus the undistributed profits before tax of companies and other corporate bodies.

Changes in Concepts and Methods

To take account of developments in international standards, and as part of the ongoing process of improvement, many editions of the accounts over the years have introduced methodological or data changes. Changes since the late 1970s are summarised below. In addition to these systematic changes, routine revisions in the source data usually also result in revisions for a number of years in each edition.

In the **1978** report it was possible to produce an improved classification of local government expenditure by purpose for the years from 1976 onwards. This was due to changes in the local government accounting system which took effect in 1976.

In the **1979** report a fundamental revision of methodology produced changes in the figures for gross fixed capital formation. These are described in that report. Also a more complete survey of trading profits of unincorporated enterprises, professional earnings, etc. resulted in revisions to these data.

In the **1980** report following a review of methodology, changes were made to balance of international payments data. Changes were also made to the method of recording housing subsidies. These changes are described in that report.

The **1982** report included revisions to the estimates for a number of items in the accounts arising from an ongoing review of sources and methods. These changes principally affected the Balance of International Payments estimate, company profits and the residual items personal consumers' expenditure and savings.

The **1983/1984** report incorporated the new series of estimates for agricultural output and income released in July 1985. The classification used in the analysis of personal consumers' expenditure was also changed in that report and aligned with that of the European System of Accounts. The headings are more functional in concept and some additional detail is involved. The detail of the relationship between the new and the old classification can be supplied on request.

The **1985** report introduced the concept of real gross national disposable income.

The **1988** report introduced a change in the treatment of non-commercial bodies, which were principally funded by grants from the State. Prior to this, these bodies were excluded from the scope of *Central and local government* and transactions between them and government were shown explicitly. In the 1988 report they were classified within the *Central and local government* sector and their receipts and expenditure consolidated with those of government. The net current expenditure of central and local government now includes the intermediate consumption of these grant aided bodies.

Arising from the Local Loans Fund (Amendment) Act, 1987, certain circular flows involving transfers and loan transactions between central government and local government decreased significantly.

A number of methodological improvements were introduced in the **1992** report. These changes principally involved the estimates of Wages and Salaries (mainly through the use of new surveys), Profits (using improved estimation procedures), Rent of dwellings (use of 1987 Household budget data) and Imports and Exports (new Balance of Payments surveys of International Trade in Services). These revisions significantly increased the levels of some of the key national accounting aggregates including Personal Consumption which was derived as a residual. Revisions have been made retrospectively.

The **1993** report incorporated a revised treatment of the deficit on the Local Government housing account, which was described in detail in the November 1993 issue of the Economic Series. Traditionally, in the Irish National Accounts, this deficit was treated as a subsidy. Following a legal decision published by the EU on the scope of subsidies in National Accounts (OJ L 224, 3.9.93, page 27), this deficit had to be reclassified as a current transfer payment from Local Government to households.

The **1994** report introduced the base 1990 for the constant price volume series.

The **1995** report revised the concept of Domestic Product and National Product by introducing two new points of methodology. They can be summarised as follows:

1. Royalty payments made by businesses are now excluded from profits as in normal company accounts. They are considered part of intermediate consumption and when the royalty payments are made abroad they are therefore considered as an import of services. Previously, royalty payments were included as part of profits (i.e. as a distribution out of profits). They were, however, considered part of *Factor Incomes* in the transition from GDP to GNP so while the level of GDP is affected by this change the level of GNP is unaffected.

2. In the transition from GDP to GNP the foreign direct investors' share of the profits (including net investment income) of subsidiaries or branches operating in Ireland of foreign companies are considered to have been distributed to these investors. Correspondingly, the Irish direct investors' share of the profits (including net investment income) of subsidiaries or branches operating abroad of Irish companies are considered to have been distributed to these investors. Previously only the profits actually remitted to/from abroad were taken into account in the transition from GDP to GNP.

A number of other changes were made in the 1995 Balance of Payments Statement, some of which also affected items in the main national accounts tables. The main ones were:

- Improved estimates were made of remuneration of employees working outside their country of residence
- There was improved coverage of transfers vis-à-vis the rest of the world
- A change was made to an accruals based timing for EU transfers (previously on a cash basis).

Much detailed work was done on improving the estimates of wages and salaries for the 1995 report. This led to significant revisions in several sectors. The most notable changes were as follows:

- the overall comprehensiveness of the estimates was improved by changing control totals for employment from the PES (Principal Economic Status) basis of the Labour Force Survey data to the ILO (International Labour Office) basis;
- new information from the annual CSO services inquiries was incorporated, notably in the distribution sector, leading to increases from 1992 onwards;
- revised calculations have reduced the estimate for wages in small enterprises not covered by the Census of Industrial Production.

A major revision was also made in the 1995 report to the estimates of imputed rent of owner-occupied dwellings following methodology laid down in 1994 in a Decision of the EU Commission based on the results of the 1991 Census of Population.

The full ESA95 methodology was brought into effect in the **1998** report. This widened the scope of capital formation. Computer software, original literary and musical works, unsuccessful mineral exploration, military equipment similar to that used by civilian producers e.g. hospitals, are now included as capital investment.

The output of the insurance sector was increased by regarding the income from the investment of the technical reserves as additional imputed premium contributions.

Some payments to Government which were previously regarded as transfers e.g. passport fees, are now classified as payments for services while others (e.g. stamp taxes on banking transactions) are now regarded as taxes on products.

[In NIE publications prior to NIE 2002, all food, including the food element of meals out was included under the category "Food". From NIE 2002 onwards the entire value of meals out (excluding the drinks element) is included with services under "miscellaneous goods and services"].

Rent of dwellings was revised downwards in the **2003** report based on the results of the 2002 Census of Population. The Census of Population provides details of the rent paid by all tenants in respect of their dwellings as well as details of the size of and facilities in the dwellings. This allows the imputed rent of owner occupiers to be revised in line with current rates in similar rented dwellings.

The **2004** report introduced two significant methodological changes. Firstly, the volume (constant price) measures were calculated to base the previous year rather than to a fixed base as in previous publications. The annual volume changes were then chain linked to a reference year to produce indices and values of the main aggregates in "constant" prices. This system was introduced throughout the EU to comply with EU Decision 98/715. The output and expenditure measures of GDP are calculated to base the previous year and the average of the two measures provides the official volume measure of GDP. A practical consequence of the chain linking system is that the chain linked aggregates are not equal to the sum of their chain linked components for years prior to the chain linked reference year (i.e. for years prior to 2014 for NIE 2015).

Secondly, a new method was introduced for estimating and allocating the interest margin that banks and similar entities earn by taking deposits at a relatively low nominal interest rate and making loans at a relatively high nominal rate (the so-called FISIM – Financial Intermediation Services Indirectly Measured). Under the previous methodology, this margin was presented in the accounts as though it were produced by the financial services branch, and entirely consumed, as intermediate consumption, by a notional branch which produced no output. The resulting notional loss (the item *Adjustment for financial services* in the editions before the 2004 report) completely offset the apparent profit earned by the financial services branch, and the net effect on GDP was therefore nil.

The FISIM methodology introduced in the 2004 report follows new guidelines set down in EU legislation. It involves some relatively minor changes in the method of calculating the total amount of FISIM. More importantly, the allocation to the consuming sectors was changed. Instead of being allocated to a notional sector, it is now allocated to the sectors of the depositors and borrowers, in proportion to the quantity of their deposits and loans, and to the margin between the de facto rate earned by or charged to the sector and a pure or FISIM-free reference rate, calculated as the de facto effective rate for inter-bank business. The effect on GDP depends therefore on which sectors consume the FISIM: consumption that constitutes final demand (such as by households in their capacity as consumers, by government, or by non-residents) adds to GDP, but intermediate consumption (such as by companies, or by households in their capacity as self-employed businesses or as owner-occupiers of dwellings) has no net effect. There is also some relatively small reduction in GDP arising from imports of FISIM, but the net effect for Ireland, as for most countries, is that the new methodology results in a net increase in GDP levels.

In the **2005** report some changes were made to the estimation methods for the profits of companies and self-employed. The main changes were:

- The methodology and data sources for financial enterprises were overhauled: the coverage of the branch was more accurately delimited by improvements in the activity classification codes on the register, and more explicit and detailed use was made of survey data on financial enterprises collected in the CSO balance of payments and financial sector surveys
- Other improvements in the activity coding in the register also resulted in some reclassifications between branches
- Technical improvements were made to cater for situations where companies change their accounting periods, resulting in two or no accounting periods ending in a given calendar year
- Improvements have been made in aligning the profits of both companies and self-employed persons more closely to the calendar year.

These changes were implemented for the years 2000 to 2005. For the earliest years, the effect at the overall level was quite small, and it has not been possible to carry them through to years before 2000.

Furthermore, while the effects on the branch results at the level published in this report (Tables 2 and 3) are also not very large (and in any event cannot readily be distinguished from routine revisions arising from more up-to-date source data), the effect on more detailed branch results may have been more significant.

Changes were also made to the estimation of the constant price output estimates (i.e. Table 4). New methodologies were developed for the calculation of the value added of the education and health services provided by government. The revised methodology for education uses pupil numbers, stratified by level of education in primary and second level, and by level of education and subject at third level to derive an overall volume index. This index is applied to base year unit costs. A quality adjustment is included in the calculation to take account of the number of teachers working in the education system.

The output of the health service is now being measured using a weighted index comprising measures of in-patient services, out-patient services and medical card services, applied to the base year contributions of these components to GVA. The value added for both education and health are captured as part of the total “Other Services” figure in Table 4.

Changes were also made in the estimation of company and personal savings. In previous editions, item 124 (Undistributed profits of companies before tax) was estimated independently, and personal savings (item 129) was calculated as a residual. In the 2005 edition, additional independent information on households’ investment income and savings was used, based on initial work on setting up a series of non-financial sector accounts. This allowed personal income to be derived independently in Table 12. This practice continues up to the present. Personal savings (being personal income minus personal expenditure) can now also be derived independently. Item 124 (the undistributed profits of companies) is derived as a residual.

A new table of final balance sheets for the institutional sectors of the economy was given (Table 31). This table has not been repeated in later editions as it was combined with new tables of financial flows and of non financial sector accounts in a separate publication in April 2007. Updates of these series, non financial and financial accounts on an institutional sector basis are issued in a release annually.

The **2006** report contained reclassifications due to the abolition of the Health Boards at the beginning of 2005 and their replacement by the Health Service Executive (HSE)

In the **2007** report the ESA codes for each item were introduced in the tables 1 to 7. An explanation to the codes and their background is provided in Section 4 of this document.

In the **2008** report, the National Oil Reserves Agency (NORA), Irish Rail and the Irish-language television station TG4 were reclassified within Government, having previously been included in the commercial public sector.

- NORA is a State body under the control of the Minister for Communications, Energy and Natural Resources, whose function is to arrange for the holding of national strategic oil stocks. It is financed by a levy imposed on certain oil products; this levy is now classified as a tax on expenditure, and accordingly NORA is reclassified within Government from 2001, the year in which it ceased to be a subsidiary of the commercial Irish National Petroleum Corporation.
- From 2006 onwards, the commercial revenues of Irish Rail have covered less than 50% of the company's operating costs (including depreciation), and this trend is expected to continue. As Irish Rail is publically owned, this means that in the National Accounts, the company must be reclassified within Government from that year.
- TG4 became an independent statutory entity (Teilifís na Gaeilge) on 1 April 2007, having previously been part of RTÉ. It is controlled and mainly funded by the Minister for Communications, Energy and Natural Resources, and has accordingly been classified within Government from the date of separation from RTÉ.

This reclassification means that subsidies and capital grants to Irish Rail and TG4 are now recorded in the National Accounts as intra-Government flows, which are consolidated out. As a result, a reduction in expenditure in these categories totalling some €400 million may be seen in 2006, with corresponding increases in other expenditure categories.

In NIE 2008 an estimate of the consumption of smuggled tobacco products has been included in the “tobacco “item.
A number of tables representing the receipts and expenditure of General Government) have been removed from the NIE and are instead published in a standalone publication known as the Government Income and Expenditure release. The first of these releases are due in the middle of July.

a) with the addition of ESA codes for all appropriate items;

b) through splitting the item ‘Taxes on income and wealth (including social contributions)’ into ‘Taxes on income and wealth’ and ‘Social contributions’, and through giving a breakdown of ‘Expenditure on goods and services’ between ‘Wages, salaries and pensions’ and ‘Other’; and

c) by the inclusion and derivation of two key aggregates: General Government net lending/net borrowing (given in two versions, the second of which is the General Government Balance or deficit as defined under the EU regulation governing reporting of deficit and debt levels for the Excessive Deficit Procedure), and ‘Net expenditure by central and local government on current goods and services’ (already included as item 80 in Table 5 but now shown in Table 21 derived from its components).

Finally, the Voluntary Hospitals have been reclassified from the Non-Profit Institutions Serving Households (NPISH) sector to the Central Government sub-sector of the General Government sector from 2005 onwards: this reclassification reflects the greater degree of control of these bodies exerted by Government following the creation of the Health Service Executive (HSE) on 1 January 2005.

This reclassification has the effect of increasing the levels of both receipts and expenditure for Government. Previously, only payments to the hospitals from Health Boards (to end-2004) or HSE were recorded as Government expenditure. Now, however, those payments are recorded from 2005 as intra-Government flows, but all the own-resource income of the voluntary hospitals is recorded as Government revenue, and all the expenditures of the hospitals - however funded - are recorded as Government expenditure.

The reclassification has also caused a change in the composition of Government expenditure: before, payments from HSE (including those to fund pay of hospital staff) were recorded as expenditure on goods and services, whereas now the expenditures of the hospitals are recorded directly, with wages and salaries as the largest component.

In the **2010** report estimates of depreciation (more properly called “consumption of fixed capital”) have been taken from the CSO’s estimates of the Capital Stock of Fixed Assets. A “perpetual inventory method” (PIM) is used to compile these estimates. Details of the methodology are provided in the background notes to the CSO’s annual release on the stock of fixed assets. A significant difference between the new estimates of depreciation and the former series is that property transfer costs (e.g. auctioneers’ and solicitors’ fees and stamp duties), being part of fixed capital investment, are depreciated in the year in which the charges are incurred. In the former series transfer costs on dwellings were not included at all in depreciation while transfer costs on other transactions were depreciated in line with individual company/business procedures.

The **2011** report introduced the NACE Rev. 2, classification of businesses in Tables 2 to 4. This replaces the national classification system for business activity which was used heretofore.

The results for the economy in these tables continue to be shown for five sectors whose titles remain the same as in previous releases and publications. However, the contents of the sectors have changed and conform to the NACE Rev. 2 system.

One of the main changes to the classification is that the “Publishing” industry has been reclassified from “Industry” to the sector “Distribution, transport, software and communication”. In addition, enterprises in the “Hotels and catering” sector and the “Software” industry have been reclassified from the “Other Service” sector in the former system to the “Distribution, transport, software and communications” sector. The overall effect on the tables has been that the “Distribution, transport, software and communication” sector accounts now for a much larger share of the total GVA of the economy than heretofore while the sectors classified as “Industry” and “Other Services” account for a lower share.

In Tables 2 to 4 the following is the correspondence with the relevant sections of NACE Rev. 2:

Agriculture, forestry and fishing	Section A
Industry	Sections B to F
Distribution, transport, software and communication	Sections G to J
Public Administration and Defence	Section O
Other Services	Sections K to N and P to U

For further information on the NACE Rev. 2 classification of industrial activity, visit the CSO website: http://www.cso.ie/en/surveysandmethodology/classifications/classificationofindustrialactivity.

Another new feature of this report is that the non fee paying Voluntary Secondary Schools are reclassified from the sector “non profit institutions serving households” to the Government sector. This treatment has been applied retrospectively to all years from 1995 onwards. The expenditure by such schools in providing education is now included with Net Government Expenditure e.g. items 80 and 93 whereas previously this expenditure was included in Personal Consumption Expenditure. (Items 79, 79(a), 92 and 92 (a).

Estimates were provided for the most recent year i.e. 2011 in Tables 9 and 12 unlike previous publications where figures for the latest year were not available. These tables now provide, in particular, estimates of personal income and personal savings for the most recent year.

Two new tables on Government accounts were introduced in this report (Tables 21(a) and (b)). These were intended to complement the existing government finance statistics tables (Tables 19 to 28) by detailing:

- In Table 21(a): the relationship between the audited Exchequer balance and the net lending / net borrowing of general government (‘GGDeficit’ or ‘GGB’); and

- In Table 21(b): the relationship between the audited national debt and the General Government Debt (‘GGDebt’ or ‘Maastricht debt’).

A new Table 31 was also added. This provides gross value added at basic prices in current terms for 37 sectors of the economy according to the NACE Rev. 2 classification system. A much more detailed sectoral breakdown of GVA for the economy is displayed here than the five sectors shown in Table 3. It should be noted that Table 31 provides valuations of GVA for the sectors at “basic prices” in contrast to Table 3 which uses the “factor cost” valuation. “Basic prices” is the valuation used in EU publications and differs from “factor cost” in that overhead taxes (such as rates) are included in the basic prices valuations while overhead subsidies are excluded.

In the **2012** report a new Table 32 was added. This table provided gross value added at constant prices (chain linked and referenced to 2011) for 37 sectors of the economy. The same sectors are used as in Table 31 which is in current prices. The table provides a detailed breakdown of real growth in the constituent sectors of the economy. It is similar to Table 4 but provides a greater level of detail. The valuation used in Table 32 (as in Table 31) is “basic prices”. The valuation is at “factor cost” in Table 4.

Estimates of rent of dwellings was also revised in the NIE 2012 report on foot of the results of the rents data collected in the 2011 Census of Population. Revisions to rents were made for each year back to 2007.

The seven public universities were reclassified from the Non-profit institutions serving households (NPISH) economic sector to the Non-financial corporations economic sector in NIE 2012. This change has been made following an analysis by the CSO that resulted in these entities being classified as 'market producers' – that is, they cover a majority of their costs through their own sales of education and research services. This has resulted in a number of changes to the national accounts aggregates.

The principal changes are as follows:-

1. Personal Consumption expenditure (items 79 and 92) has been reduced. This item previously included the full costs of running the universities. It now only includes the student fees. The fees include actual fees paid plus the tuition fees paid by Government on behalf of students qualifying for a student grant. The latter are regarded as a benefit in kind paid by the Government to the student and paid onwards by the student to the Universities.

2. Government expenditure (items 80 and 93) now includes an element of the costs of research and development carried out by the universities. It is considered that the Government purchases these services as intermediate consumption.

3. Subsidies (items 31 and 34) have been increased to cover subventions by the Government (apart from the grants for fees) to the cost of providing education and to cover some of the cost of research and development activities undertaken by the Universities.

The **2013** report introduced the ESA 2010 standards. National accounts are compiled in the EU according to the European System of National and Regional Accounts (ESA) framework. In 2014, the ESA 2010 framework replaced the ESA 95 version and all EU member states are required to adopt ESA 2010 by September 2014. ESA 2010 is the European version of the current UN mandated international standards for national accounts statistics, the System of National Accounts (SNA) 2008. The results for all years in this publication are published on an ESA 2010 basis. For Ireland, the ESA 2010 change with the greatest impact on gross domestic product (GDP) is the new treatment of research and development (R&D) expenditure. Under ESA95, R&D expenditure was treated as an ancillary cost to the main production of an enterprise, while under ESA 2010, R&D expenditure is recognised as capital investment.

In addition to the ESA 2010 changes, the results include additional estimates for illegal economic activities in line with the requirement from the European statistical agency, Eurostat to include such estimates in the National Accounts before September 2014.

The main ESA 2010 changes affecting the Government tables are: sector classification changes, the treatment of the transfer of pension obligations to government, the recording of payable tax credits and changes in the treatment of interest on swaps and forward rate agreements. A detailed description of these can be seen in the background notes to the July 2014 Quarterly Government Finance Statistics release and was also shown in the October 2014 Annual Government Finance Statistics release.

http://www.cso.ie/en/statistics/nationalaccounts/archive/releasearchive2014/

In the **NIE 2014** report, the publication has changed from paper to an e-publication format. In terms of data availability, some Government tables have been incorporated into the GFS publication where better sector-specific data now exists. Also, Tables **8-12** and Tables 23-26 (renumbered from 30-32) will be published in a separate release of tables in e-format with updated methodological notes.

The main methodological improvement in NIE 2014 is implementation of the economic change of ownership basis for trade in aircraft. Under the new methodology, all trade in aircraft with the rest of the world are recorded as imports and exports of goods – regardless of where the aircraft is registered for aviation purposes. There are offsetting effects as both imports and exports will increase, but generally, the new methodology has a greater effect on aircraft imports with the inclusion of purchases of aircraft by resident operational leasing companies in Ireland's imports of goods. The main effects on the statistics of the new methodology are to:

• add to imports of goods into Ireland, decreasing the Trade in Goods balance;
• decrease the Balance of Payments Current Account balance; and
• increase imports in the National Accounts, with an offsetting increase in Capital Formation.
• decrease Other Investment assets in the Balance of Payments Financial Account and in Ireland's International Investment Position;
• reduce net lending/borrowing of Non-Financial Corporations in the Institutional Sector Accounts; and
• remove Foreign Aircraft assets from operational leasing companies' Financial balance sheets and add to their Capital Stock.

The balance sheets of operational leasing companies that re-locate to Ireland are included in Ireland's Balance Sheet (International Investment Position, Financial Accounts) at the time of re-location and their aircraft fleet is also added to Ireland's capital stock.

The net increase to Imports of Goods and Services (item 84) in the National Accounts was offset by an increase in Capital Formation (item 81) and the new methodology had no effect generally on GDP and GNP. However, there was a significant increase to the National Accounts Provision for depreciation (item 28) based on the higher capital stock, which resulted in an offsetting change in the level of Net Value Added at Factor Cost (item 13/27) and related aggregates.

In NIE 2014 the Compensation of Employees (COE) is allocated slightly differently than heretofore. In previous years COE was allocated at A64 level on a national set of rules, which was a variation on Eurostat's ESA 1995 rules. From NIE 2014 the A64 classification will be strictly followed in the line with ESA2010. This will affect a number of A64 headings. The Bar trade which was previously allocated to the Retail Trade is now allocated to Hotels and Restaurant Services. The National Stud which was previously allocated to Other Services is now allocated to Agriculture. Some semi-state bodies are moved from Other Professional and Scientific Services to Public Administration. Some Local Authority Services previously allocated to Public Administration are now allocated A) to Collection, Purification and Distribution of Water, Sewage Services, B) Recreational, Cultural and Sporting Services, C) Sporting Services Amusement and Recreation.

In this edition (i.e. the **NIE 2015** report), the CSO has changed the methodology used to calculate FISIM to bring it into line with the European System of Accounts (ESA 2010) standards. This revised methodology has been applied to estimates from 2010 onwards. Up to now, the published Euro Interbank Offered Rates (Euribor) have been used as the basis for estimating the reference rate (i.e. the rate at which banks lend to each other) in the FISIM calculations. The estimates now use survey data, which provide details of loan and deposit principal amounts and their associated interest flows, to calculate both the reference rate and the loan and deposit rates charged/offered to customers. Data is collected in a joint survey by the Central Bank of Ireland and the CSO. This change in calculation methods has generally given a higher estimate of the reference rate, as Irish banks were not obtaining the very low Euribor rate prevailing for these years following the financial crisis. A higher reference rate implies a lower FISIM margin on loans. Since most of the FISIM is earned on loans, the estimate of the total domestic FISIM charge has been reduced. The revised approach has drawn on improved data for imports and exports of FISIM; there are upward revisions to both measures resulting in an overall increase in net exports. The decrease in domestic FISIM and increase in net exports offset each other in their overall GDP impact.

For the first time in April 2016 the CSO published detailed revenues and expenditures of government by sub-sector (central and local government) in the annual Government Finance Statistics release. An updated version of the new tables will be published in a new Government Income and Expenditure release in July. These replace Tables 19 to 21 of this NIE publication. The data in that release will be aligned to this NIE (e.g. net current government expenditure).

External Transactions at Constant Prices

In the external account imports and exports of merchandise are expressed at constant prices by using import and export unit value indices. Invisible (i.e. non-merchandise) non-factor items are deflated separately by the most appropriate price index on consideration of the nature of the flow in question. The aggregate value of the imports of goods and non-factor services at constant prices is then determined and a general price index for the aggregate is deduced. Similarly, a general price index for the aggregate value of the exports of goods and non-factor services is calculated.

This implied price index for exports of goods and non-factor services is then used to deflate net factor income from abroad in years when this item is negative. In years when it is positive it is deflated by the implied price index for imports of goods and non-factor services. Net current international transfers are similarly deflated. The rationale for this approach is that a positive net factor income flow can be used to finance imports while a negative net factor income flow must be met with increased exports. From the year 1999 onwards exceptional income payments have had to be deflated separately.

Gross National Product by Sector of Origin at constant prices

In the 1965 report estimates of the gross national product at constant prices subdivided by industrial sector were included for the first time. These estimates were compiled by aggregating the contributions, to the gross national product at factor cost, valued at constant prices, of the different industries, and of net factor income from the rest of the world, and adjusting to market prices by adding taxes on expenditure and deducting subsidies, both valued at constant prices.

Two principal methods have been used to derive gross value added at factor cost at constant prices as given in the tables.

The first method, which may be called the *double deflation* method, consists of valuing both the output and the input (expenses) of the sector at base year prices (now previous year prices). The difference between output and input is the gross product, *gross* signifying that depreciation has not been deducted as an expense. This is the basic approach used for the agricultural sector and for rent of dwellings.

The second method consists of estimating an index of volume of output for the sector for a series of years and then multiplying the base year (now previous year) gross value added by these index numbers to derive the gross value added figures for other years. This method is widely used since, for most sectors, there is considerable difficulty in expressing the inputs at constant prices. Clearly, if at constant prices the ratio of input to output remains unchanged, both methods would give identical results.

The estimates for agriculture incorporate the official indices for agricultural output. In the case of industry, the estimates are based on the official industrial production indices adjusted for the impact of royalties on intermediate consumption. The choice of suitable volume indicators on which to base volume index numbers in certain other sectors, however, raises conceptual problems which have not yet been solved satisfactorily. The service type industries include distribution, transport, software and communication, insurance, banking and finance, education, health, professional and miscellaneous services and public administration and defence. In certain industries, e.g. transport, suitable volume indicators such as passenger-miles and freight tonne-miles are available; in other industries it is more difficult to obtain volume indicators.

Particular difficulty is experienced in estimating the output of public administration and defence and other services provided by central and local government. In most of these cases no reasonable measure of output is available and the practice adopted is to apply an index of employment, where available, to the base year remuneration. Where reliable data are not available the implied index of rates of remuneration is used to deflate current values. The effect of using this method is to assume no increase in productivity. However, since NIE 2005, special methodologies have been developed for the calculation of the value added of the education and health services provided by government. The revised methodology for education uses pupil numbers, stratified by level of education in primary and second level, and by level of education and subject at third level to derive an overall volume index. This index is applied to base year unit costs. A quality adjustment is included in the calculation to take account of the number of teachers working in the education system.

The output of the health service is measured using a weighted index comprising measures of in-patient services, out-patient services and medical card services, applied to the base year remuneration. The value added for both education and health are captured as part of the total “Other Services” figure in Table 4.

In order to derive gross national product at constant market prices, net factor income from the rest of the world, taxes on expenditure and subsidies are also valued at constant prices. The method of expressing net factor income from abroad at constant prices has already been explained in the section *External transactions at constant prices*. Where taxes on expenditure and subsidies relate to particular goods, the rate of tax or subsidy per unit quantity of the item taxed or subsidised, if available, is used to derive an index to deflate current values. In the case of *ad valorem* duties both the rate of duty and an appropriate price index are used to compile constant price data. If neither of these methods of deflation can be used the estimation of a constant price series is made by using volume indicators appertaining to the relevant industry or by deflating by a suitable price index. In a few cases, where the taxes on expenditure or subsidies were not in operation in the base year, they are by definition, omitted from the constant price series.

4. ESA Codes

The item codes in the European System of Accounts are displayed in the second column of Tables 1 to 7. The ESA 2010 presentation is being used in the CSO releases on institutional sector accounts and is also used by Eurostat in their releases and publications on national accounts. The inclusion of the ESA 2010 codes in Tables 1 to 7 here makes comparisons with these publications more explicit. A full list of all the codes in the ESA 2010 system can be found in Chapter 23 of the ESA 2010 manual[1]. A list of the ESA 2010 codes for the variables reported in this document is given at the end of this section.

Some important aspects of the coding system are described in the following paragraphs.

Value Added and Domestic Product

The ESA 2010 recognises two valuations of the aggregate 'value added': *at basic prices* (Code B.1) and *at market prices* (Code B.1*). A previous edition of the system of accounts (ESA79) also used a third measure of value added, namely valuation *at factor cost.* It has been retained in this release for reasons of continuity of the series. Since it does not have a formal code in the ESA 2010 system it is shown as a combination of the codes of its constituents.

A further variant is the recording of the aggregates gross or net of depreciation (labelled *Consumption of Fixed Capital* in the ESA system). The two versions are distinguished by appending the letter "g" or "n" to the code. For example, Gross Value Added at Market Prices is coded B.1*g, and Net Value Added at Basic Prices is B.1n.

In the general sense, value added is defined as the value of the goods and services produced (output) less the cost of goods and services (not including labour costs) used in the production process (intermediate consumption). The concept of value added can relate to a specific sector or branch of the economy, or to the whole economy. When used of the whole economy at the market price valuation, the term *domestic product* is more often used.

The differences between the three valuation approaches (factor cost, basic prices and market prices) relate to the treatment of taxes and subsidies on production (not to be confused with taxes on income or wealth, which are not relevant in this context).

To understand the links it is necessary to note that production taxes and subsidies are divided into two categories in the ESA 2010, namely *product taxes/subsidies* and *other taxes/subsidies on production.* The term *product* is used when the tax or subsidy is proportional to the quantity or value of product on which it is levied or granted (such as VAT or excise duties) and the term *other* is used otherwise.

In the valuation at factor cost product taxes (e.g. VAT, excise duties etc.) are not included in the value of output while *other production* taxes (e.g. rates on business premises) are deducted from output in the

[1]The ESA 2010 manual is Regulation (EU) No 549/2013 in the European system of national and regional accounts in the EU Community. Chapter 23 (Classifications) of the manual begins at page 511.

same way as intermediate consumption. On the other hand the value of all production subsidies (*product* and *other*) is added to output.

In the valuation at basic prices *product* taxes (e.g. VAT, excise duties) are not included in output and *other production* taxes (e.g. rates on business premises) are not deducted from output in deriving value added as is done at factor cost. *Product* subsidies are added to the value of output but *other production* subsidies are not added to output.

In the valuation at market prices (which is technically referred to as GDP) *product* taxes (e.g. VAT, excise duties) are included in output while *other production* taxes (e.g. rates) are not deducted. None of the production subsidies (neither *product* nor *other production* subsidies) are added to output.

The link between the three versions of value added (VA) can be seen most clearly in Table 3 of this report. It can be summarised as follows:

> Adding *other taxes on production* to and subtracting *other subsidies on production* from the aggregate of the (sectoral) *value added at factor cost* gives the (economy-wide) *value added at basic prices.*
>
> Adding *product taxes* to and subtracting *product subsidies* from *value added at basic prices* gives *domestic product*.

In Table 3, the valuations are Gross (i.e. inclusive of depreciation). In Table 1, and in the first part of Table 2, all valuations (of profits and rents, for example) are Net.

Final Expenditure

In the national presentation, (Tables 5 and 6 of this report, for example) three categories of final expenditure have traditionally been distinguished: *Personal consumption of goods and services; Net expenditure by central and local government on current goods and services;* and *Gross domestic fixed capital formation*. The ESA 2010 system uses three related but slightly different categories: *Final consumption expenditure of households and non-profit institutions serving households; Final consumption expenditure of government;* and *Gross capital formation.* The detail in Table 5 (at current prices) and Table 6 (at constant prices) in this report has been expanded to clarify the relationship between the two systems.

The national concept of *personal consumption of goods and services* includes a certain amount of consumption for which the expense is borne by the government and not directly by the household. Examples are electricity and other fuels that the government provides free of charge to some households, free travel availed of by senior citizens and others, GP services provided to households and free medicines provided to holders of medical cards. These items are treated in the national system as if the government provided the money to households to purchase them. The expenditure therefore appears as household expenditure (Items 79(b) and 92(b) in Tables 5 and 6 respectively), rather than as government expenditure. The ESA 2010 system is more straightforward. Expenditure on the items provided free to households is included in Government final expenditure. Thus, Table 5 shows that 'Personal consumption of goods and services' (i.e. the national concept) in current prices is the total of item 79 in Table 5. The ESA2010 concept 'Final consumption of households and non profit institutions serving households', is the total of item 79(a) and is lower by the amount of the value of these goods and services provided by government to households (i.e. amount of item 79(b) in Table 5). The national and ESA versions of government expenditure are of course also different, for the same reason: 'Net expenditure by central and local government on current goods and services' (the national concept), is the total of item 80 in Table 5 and is lower than the ESA 2010 category of 'Final expenditure of government', by the same amount (i.e. amount of item 79(b) in Table 5).

There is also a minor difference between the national and ESA definitions of gross capital formation. The ESA definition includes net additions to the breeding stocks of farm animals whereas in the national system these are included in the value of physical changes in stocks (items 82 and 95 in Tables 5 and 6). The value of the net additions to the breeding stocks has been shown as item 82(a)/95(a) to allow the transition to be made from one definition to the other.

Treatment of Government pensions and imputed pension contributions

Most public sector workers in Ireland benefit from unfunded ‘pay as you go’ pension schemes. In line with international accounting conventions, the wages of these workers are increased by an estimate of the amount that the employer would have to contribute if these pensions were actually being funded. This is calculated as the difference between an estimated actuarial value of the pension entitlements accrued by employees in respect of their year’s work and pension contributions paid by these employees.

In ESA 2010, employers’ imputed social contributions are included in D122pay, while pensions to current pensioners are included in D62pay, and imputed pension contributions are included in D611rec and D612rec respectively.

ESA codes and descriptions of variables reported in the tables.

Code	**Description**
B.1	Value added
B.1*	Domestic product (B.1*g =gross domestic product; B.1*n = net domestic product)
B.2	Operating surplus
B.3	Mixed income (i.e. income of self employed)
B.5*	National income
B.6	Disposable income
B.8	Saving
B.9	Net lending / net borrowing
D.1	Compensation of employees
D.11	Wages and salaries
D.12	Employers' social contributions
D.2	Taxes (on production and imports) excluding customs duty
D.21	Taxes on products
D.29	Other taxes on production
D.3	Subsidies (on production and imports)
D.31	Subsidies on products
D.39	Other subsidies on production
D.4	Property income (which includes distributed income of corporations and reinvested earnings)
D.41	Interest
EDP D.41	Interest including flows on swap interest
D.422	Withdrawals from income of quasi-corporations
D.5	Taxes on income and wealth
D.61	Actual social contributions (i.e. PRSI)
D.62	Social benefits other than social transfers in kind
D.63	Social transfers in kind
D.7	Current transfers
D.9	Capital transfers
D.91	Capital taxes
D.92	Investment grants
D.99	Other capital transfers
EDP B.9	Net lending / net borrowing adjusted for flows on interest rate swaps
P.11	Market Output
P.12	Output for own final use
P.131	Payments for other non-market output
P.2	Intermediate consumption
P.3	Final consumption expenditure
P.5	Gross capital formation
P.51	Gross fixed capital formation
P.51c	Consumption of fixed capital
P.52	Changes in inventories
NP	Acquisitions less disposals of non produced assets
P.6	Exports of goods and services
P.7	Imports of goods and services
AF.2	Currency and deposits
AF.33	Securities other than shares, exc. financial derivatives
AF.331	Short-term
AF.332	Long-term
AF.4	Loans
AF.41	Short-term
AF.42	Long-term