UK National Accounts – a short guide

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Contents

1. Foreword

The purpose of this guide is to give the reader an introduction to the concepts and underlying principles of national accounting and also to describe the various publications available. This is a highly complex and technical area and far more detailed guides and manuals are available (these are contained in the section on further reference), which provide detailed data analysis, methodology guides, descriptions of data sources or more detailed conceptual material. This guide should enable the reader to understand the key statistics published within the national accounts and the uses made of them.

2. What are the national accounts and for what are they used?

The national accounts provide an integrated description of all economic activity within the economic territory of the UK, including activity involving both domestic units (i.e. individuals and institutions resident in the UK) and external units (those resident in other countries). In addition to being comprehensive, the accounts are fully integrated and internally consistent.

The coverage of the core accounts is wide, encompassing production, consumption, the generation, distribution and redistribution of income, capital investment and the financing of the above (these terms will all be discussed more fully in later chapters). Additionally, accounts are produced for the regions, sub-regions and local areas of the UK, as are satellite accounts which cover activities linked to the economy, but separate from the core accounts, most notably the environmental accounts.

The majority of the core accounts deal with transactions between the various sectors of the economy, such as corporations, households and government, as well as transactions with the rest of the world

The national accounts are produced in line with international standards, most notably the European System of Accounts 1995 (ESA95) which is enforced for all European Union Member States through an EU regulation. ESA95 is in turn consistent with the United Nations System of National Accounts 1993 (SNA93). The SNA93 has recently been updated as SNA 2008 and in turn the ESA95 is being revised and will form ESA 2010, which will subsequently be implemented in the UK national accounts, as well as those of all other EU member states.

The national accounts are drawn together using data from many, many different sources. These different sources not only help to ensure that the national accounts are comprehensive: they provide different perspectives on the economy, for example sales by retailers and purchases by households. By comparing and contrasting these different sources, the national accounts produce a single picture of the economy which is consistent, coherent and fully integrated.

Many of the most well-known economic statistics are produced within the national accounts, including Gross Domestic Product, the household saving ratio, public sector net borrowing, the balance of trade and household consumption. These, along with other key statistics from the national accounts, will be discussed in more detail in subsequent chapters.

Domestically, the national accounts are heavily used by policy makers and analysts. They feed into the discussions of the Monetary Policy Committee of the Bank of England when setting interest rates and they are also used by the Office for Budgetary Responsibility in forecasting economic growth and public sector debt. Components of the national accounts are used by decision makers and advisers across the whole of society, including corporations, private individuals and government. Furthermore, many of the national accounts statistics are provided to Eurostat (the statistical office of the European Union) and are used by institutions such as the European Central Bank. The largest proportion of the UK's contribution to the EU budget is

determined by the level of gross national income, a key statistic from the national accounts. Conversely, EU payments to "deprived" regions of the union are determined by regional gross domestic product per head of population.

Subsequent chapters will provide an introduction to some of the key components of national accounts, beginning with the institutional sectors which make up the economy.

3. The principles of the national accounts framework

3.1 Institutional sectors

In order to make the accounts more meaningful and to provide certain key analyses, the units making up the economy are grouped into a number of institutional sectors based on their kinds of activities and who owns and controls them. An institutional unit is defined as one which has autonomy of economic decision making (for example it can enter into contracts, own assets and incur liabilities) and is able to keep a meaningful set of accounts. The characteristics of the various sectors are described briefly below. Most of the sectors have sub-sectors to enable more detailed analysis, the most important of these are also described.

3.1.1 Financial corporations (FinCos)

Financial corporations also produce services for the market but they differ from NFCs in that their primary activity is dealing with financial instruments. Some of the most important financial instruments include currency, loans, shares and bonds, although there are many others. Thus the main kinds of financial corporations are banks, building societies, securities dealers, insurance corporations and pension funds, although again this list is not exhaustive. The sub-sectoral breakdown of FinCos reflects these different kinds of activities. There are several public sector FinCos, notably the nationalised banks.

3.1.2 Non-financial corporations (NFCs)

Non-financial corporations produce goods and services for the market and do not, as a primary activity, deal in financial assets and liabilities. This sector includes retailers, manufacturers, utilities, business service providers such as accountancy and law firms, as well as caterers, haulage companies, airlines, construction companies and farms (please note that this list is not exhaustive).

The non-financial corporations sector is broken down into two sub-sectors, public sector NFCs (those controlled by the government, such as the Royal Mail) and private sector NFCs, dependent upon criteria such as the control of general corporate policy.

3.1.3 General government

The government sector is made up of those units providing services for collective or individual consumption, but not sold at market prices. These units are usually funded by compulsory payments from units in other sectors (taxes) and may be involved in the redistribution of national income (for example benefits, state pension). It includes government departments and agencies, local government, the devolved administrations in Northern Ireland, Scotland and Wales, the state education system, the National Health Service, the armed forces and the police (again, not an exhaustive list). In the UK, it is broken down into two sub-sectors, central government and local government.

3.1.4 Households

The household sector covers both consumers and producers. Households as consumers comprise groups of people sharing the same living accommodation who share some or all of their income and collectively consume certain types of goods and services, such as food, electricity or housing. This sector also includes the self-employed who are treated as producers. A smaller group of units within the household sector comprises of those living permanently in institutions with little economic autonomy, such as prison populations and members of religious orders living in monasteries.

3.1.5 Non-profit institutions serving households (NPISHs)

NPISHs are institutions which provide goods and services, either free or below the market price and mainly derive their income from grants and donations and which are not controlled by government. In the UK, this sector includes most charities, trades unions, religious organisations and the majority of universities. It should be noted that in the majority of the UK's national accounts publications, households and NPISH data are not published separately, they are added together.

3.1.6 Rest of the world (RoW)

The rest of the world sector in national accounts terms includes all those institutions or individuals not resident in the UK which have economic interactions with resident units. It can include overseas corporations, charities, governments or private individuals. It should be noted that residence does not imply nationality. This is particularly true for private individuals where (other than for a small number of exceptions, such as students, diplomats and service personnel) residing in another country for more than one year is sufficient to be classed as a non-resident and thus part of the RoW sector, irrespective of citizenship or nationality.

Also within the RoW sector are international organisations, irrespective of their geographical location. For example, in the German national accounts, the European Central Bank would be classified in the rest of the world, even though it is physically located in Frankfurt-am-Main. The sector also includes foreign embassies and consulates on UK soil.

3.1.7 Classification decisions

In the UK, the ONS is responsible for decisions on the sector classification of any unit. These decisions are taken by the National Accounts Classification Committee (NACC). For more information on the work of the NACC or to see the latest version of the Sector Classification Guide, please follow this link:

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=7163&Pos=&ColRank=1&Rank=272

3.2 Industries

Another way in which the units making up the economy can be grouped is by their industrial classification. Broadly, the main industrial groups are: agriculture; production; construction; and services.

The classification of units to industries in the UK is based on the Standard Industrial Classification (SIC). This is consistent with the European NACE (Nomenclature statistique des Activités économiques dans la Communauté Européene) classification and is updated periodically to take account of changes in economic structures and the impact of new industries. The UK national accounts are currently produced using the 2003 version of the classification (SIC03). In October 2011, the latest version of the classification, SIC07, will be implemented in the national accounts, ensuring that the accounts more accurately reflect the current structure of the UK economy.

3.2.1 Agriculture

This industry includes traditional agriculture, horticulture, hunting, forestry and fishing, as well as activities such as landscape gardening, boarding kennels and fish farming. In 2008, the agricultural industries accounted for approximately 0.7 per cent of the UK economy.

3.2.2 Production

The production industries are those involved in extraction (including oil, gas, coal, iron and other metal ores and stone for construction), manufacturing (including food processing, publishing and basic metal products) and the supply of electricity, gas and water. In 2008 the production industries accounted for just over 16 per cent of the UK economy.

3.2.3 Construction

The construction industry includes civil engineering projects, house building, demolition, road building and the installation of electrical wiring, plumbing and so forth. It also includes the renting of construction equipment. In 2008 this industry accounted for just over six per cent of the UK economy.

3.2.4 Services

By far the largest and most diverse grouping of industries, the service industries include retailers, wholesalers, motor traders, hotels, pubs and restaurants, the transport industry, postal services, telecommunications, banks, stockbrokers, insurance companies, pension funds, real estate, professional services such as lawyers, architects and recruitment consultants, local and central government (including the armed forces and the police), health care, education, libraries, museums, broadcasters, funeral directors, charities, sporting activities, bookmakers and hairdressers. This is not by any means an exhaustive list, but it does give some idea of the broad spectrum of activities included. In 2008, the service industries accounted for approximately 77 per cent of the UK economy.

For more information on the Standard Industrial Classification, please follow these links:

SIC2003:
http://www.ons.gov.uk/about-statistics/classifications/archived/uk-standard-industrial-classification-of-ea-2003.pdf

SIC2007:
http://www.statistics.gov.uk/methods_quality/sic/downloads/SIC2007explanatorynotes.pdf

3.3 Transactions, assets and liabilities

The national accounts describe the interactions between various sector by means of a variety of transactions. There are three main types of transactions: transactions in products, distributive transactions and financial transactions. These are described in more detail below.

3.3.1 Transactions in products

Transactions in products are those which deal directly with the production, sale and purchase of goods and services. This group includes output, household consumption, imports and exports and capital investment (these terms are described in the chapter on GDP).

3.3.2 Distributive transactions

These transactions describe the distribution or redistribution of the money generated by the transactions in products. This group includes employment income, taxes, benefits and subsidies, insurance claims and pension payments.

3.3.3 Financial transactions

Broadly, financial transactions deal with how the above transactions are funded. This group includes loans, stocks and shares, deposits and derivatives.

3.3.4 Assets and liabilities

The national ccounts identifiy two types of asset within the economy. The first of these is non-financial assets and includes fixed assets (buildings, vehicles, machinery), valuables, inventories and non-produced assets (such as land). The second type is financial assets. These include currency holdings, bank deposits, ownership of shares and loans (from the point of view of the lender). Every financial asset has an equal and opposite liability – in the examples above, the central bank is liable for currency, the bank where the deposits are held, the share issuer and, in the case of a loan, the borrower.

4. Gross domestic product

Arguably the best-known national accounts statistic, gross domestic product (GDP) is the primary indicator of economic activity within the UK. When external commentators describe the growth or decline of the economy, it is the change in GDP to which they refer. Although not an official definition, one of the most commonly used definitions of a recession (not an official term) is two successive quarters of GDP contraction. GDP can be estimated in real terms (adjusted to remove the effects of inflation) or nominal terms (unadjusted). Real and nominal data will be discussed further in chapter 9.

GDP can be estimated in three ways:
1. the sum of all production activity within the economy (the production approach), as estimated using gross value added (GVA);
2. the sum of all final expenditures within the economy (the expenditure approach); and / or
3. the sum of all income generated by production within the economy (the income approach), again, as estimated using GVA.

It should be noted that there are not three different versions of GDP, just three different ways of estimating the same thing. The three approaches will be discussed more in the next three sub-chapters.

It is also useful to describe the limitations of GDP. It is often described as a measure of wealth, welfare or well-being. It is none of these and has not been designed to be an all-encompassing indicator for these concepts. GDP is a measure of economic activity and, whilst there may be a link between this and wealth and welfare, such a link is complex. For example, there may be a huge amount of economic activity in a country, but this may be due to foreign companies building factories in a poor country to make use of liberal tax, environmental and employment regimes and then repatriating the profits back to parent companies in richer countries – this repatriation of profits has no effect on GDP, but the fact that it happens, along with low wages in the factory, will mean that the growth in GDP may well not be reflected in domestic wealth and social welfare. The ONS is currently developing ways of measuring national well-being, but these fall outside the scope of the national accounts and are thus excluded from this guide, although a link to a recent paper on the subject can be found in the further reference section towards the end of the guide.

4.1 The production approach

The production approach or GDP(P) as it is often known, is primarily concerned with the generation of value added. In other words, the value of all goods and services produced within the economy.

GVA is the sum of all output, less costs of intermediate inputs, or, in national accounts terms, intermediate consumption. Both of these terms are defined below.

There are two main types of output: that produced for the market (mainly by corporations) and services not for market sale (mainly by government and non-profit institutions serving households). These two types of output are valued differently. **Market output** is simply the total sales plus changes in inventories (as the amount produced will not necessarily be the amount sold and the former is what is required for GDP). **Non-market output** is difficult to value, as there is often no meaningful selling price. By convention, it is therefore valued as the sum of the costs of production. Specifically, non-market output is valued as labour costs plus intermediate consumption (see below) plus depreciation of fixed assets. None of these are actually output, but they provide the best available approximation.

Intermediate consumption is defined as all goods and services used up or transformed in a process of production. This includes raw materials, power and fuel, rental on buildings and business services such as advertising, recruitment consultancy and cleaning. It specifically excludes staff costs and capital investment which are handled elsewhere in the accounts.

GVA on a production basis is valued at basic prices. To convert from GVA at basic prices to GDP at market prices, taxes on products (such as value added tax and excise duties on alcohol, tobacco and hydrocarbon fuel) are added and subsidies on products are subtracted.

4.2 The expenditure approach

The expenditure approach, or GDP(E), is the sum of all final expenditures within the economy, that is, all expenditure on goods and services which are not used up or transformed in a productive process.

In other words, GDP is equal to household (and NPISH) final consumption expenditure plus general government final consumption expenditure plus gross capital formation plus exports less imports. These components are defined below. Imports are deducted because GDP refers to goods and services produced within the UK economy and the other components will include items produced elsewhere).

Household final consumption expenditure comprises all the goods and services purchased and consumed by households. This will include food, alcohol, clothing, cars, rental on houses and holidays, to name but a few items. It does not include the purchase of houses or payment of interest on loans, which are expenditure on assets and property income respectively, and not consumption expenditure).

Government final consumption expenditure relates to the purchases government has to make to deliver its services and, like non-market output, is valued as procurement plus staff costs plus depreciation. This is so defined as government, by convention, is assumed to consume its own output, in other words, government provides services, such as defence, which it then uses on behalf of society. This does not include government's capital expenditure (see gross capital formation).

Gross capital formation (which can be thought of as investment) is made up of three parts. The first (and largest) is gross fixed capital formation (GFCF), which relates to the purchase (and disposal) of fixed assets. Fixed assets are items which contribute to a productive process for more than a year and are not used up in the process of production. Examples of such assets are buildings (including dwellings), vehicles, plant and machinery, computer systems and aircraft. The second component is changes in inventories, which is made up of materials and fuel, work in progress and unsold finished goods. The third component is acquisitions less disposals of valuables. Valuables are defined as goods which do not contribute to a process of production but are a store of value for the owners. These include jewellery, precious metals, works of art and antiques.

Exports are goods and services produced in the UK purchased by units in the rest of the world, conversely **imports** are goods and services produced in the rest of the world and purchased by UK residents. These do not include financial flows which form part of the balance of payments, which is discussed in a later chapter. The total of exports minus imports is known as the **balance of trade**.

4.3 The income approach

The income approach, GDP(I), sums all income generated by production activity, also known as factor incomes. In other words, GVA(I) is equal to the sum of employment income (compensation of employees), self-employment income (mixed income) and profits (gross operating surplus). These terms are defined below.

Compensation of employees is the sum of all employment income, including wages and salaries, employers' pension and National Insurance contributions, bonuses and benefits in kind.

Gross operating surplus is officially defined as the balance between GVA and labour costs paid by producers. In effect, it is equal to the sum of gross trading profits and income earned through the ownership of buildings (rental income).

Mixed income is a combination of these two for the self-employed and recognises that the income of the self-employed is a combination of employment income and profits, but it is not realistic or appropriate to split it into these two components.

GVA on an income basis is valued at factor cost and to move to GDP at market prices, it is necessary to follow the following steps:

> GVA at factor cost + taxes on production
>   - subsidies on production
>   = GVA at basic prices
>   + taxes on products
>   - subsidies on products
>   = GDP at market prices

5. Gross national income

Gross national income (GNI) or, as it was previously known, gross national product (GNP) describes the total primary income received by residents of a country and links the economic activity described by GDP with the destination of the income so generated.

To give a full definition, GNI is equal to GDP plus net property income from abroad. Property income is not (as might be suggested by the name) the income generated by the ownership of buildings (rental). It is in fact, made up of interest, the distributed income of corporations (dividends, repatriated profits and so on) and rent on land.

This means that countries can have very high levels of GDP, but GNI would be significantly lower if, for example, many of the production units were owned by multi-national corporations with their headquarters in another country.

The size of GNI is, for Member States of the European Union, the largest determinant of national contributions to the EU budget, via the so-called fourth resource. In 2010, this component accounted for approximately £10.7 billion of the UK's contribution to the institutions of the EU (source: *Balance of Payments statistical bulletin, fourth quarter and annual 2010).*

6. The institutional sector accounts

For each of the institutional sectors identified in chapter 2, the ONS compiles a set of quarterly and annual accounts, detailing transactions with other sectors. The format of these accounts is as a sequence of nineteen accounts, although only the most important will be discussed in this guide, with the key transactions listed.

The sequence of accounts can be thought of as similar to a corporation's accounts, which will have a sequence of profit and loss account, cash flow statement and balance sheet. Each account is made up of resources (which can be thought of as income) and uses (expenditure), with balancing items making up the difference between the two. Many of the balancing items are of key economic interest, some more so for some sectors than for others. The balancing item from each account is carried down to the next account as a resource.

6.1 Production account

The production account is another way of describing the production approach to GVA and it describes how GVA is generated. On the resources side of the account is output. The "use" in this account is intermediate consumption, so that the balance, or difference, between output and intermediate consumption, is GVA.

6.2 Generation of income account

The generation of income account details how GVA is distributed in the form of labour costs (compensation of employees) and taxes minus subsidies on production, with the balance being gross operating surplus (plus mixed income in the household sector).

6.3 Allocation of primary income account

This account deals with property income (as described in the chapter on GNI). Property income received is added to the operating surplus and mixed income remaining as a balance in the previous account, as is compensation of employees received (domestically the latter will only be in the household sector). From this is deducted property income paid, leaving a balance which is known as the balance of primary incomes. If this balancing item is summed for all the domestic sectors, so that internal property income flows offset each other, the total is GNI.

6.4 Secondary distribution of income account

This account deals with transfer payments (that is payments where there is no direct economic return). As with property income in the previous account, each transaction can appear on either side of the account dependent on whether it is paid or received. The main transfer transactions in this account are social benefits, social contributions (pension contributions and payments, National Insurance contributions), current taxes on income and wealth (in the UK, mainly Income Tax, Council Tax and Vehicle Excise Duty for non-producers) and other current transfers (which include charitable donations, government grants for non-capital projects and insurance premia and claims). When added to the balance of primary incomes from the previous account,

the balancing item is gross disposable income (GDI), most often discussed in terms of the household sector. Occasionally, the balancing item less the balance of primary incomes is discussed. This is known as the balance of secondary incomes and is mainly of interest on a regional basis (see chapter 6).

6.5 Use of disposable income account

Starting with GDI, this account deducts final consumption expenditure to leave gross saving. Please note, final consumption expenditure only exists for government, households and NPISH, so GDI is equal to gross saving for the corporate sectors. One of the best known statistics produced in the sector accounts is the **household savings ratio**, which is defined as the ratio of saving to gross disposable household income.

6.6 Capital account

The capital account deals with flows of non-financial assets and grants to fund them. Beginning with gross saving, the main deductions are the three components of gross capital formation, namely gross fixed capital formation, changes in inventories and acquisitions less disposals of valuables. Additionally (usually as an income for corporations and an expenditure for government), capital transfers are included. These are grants specifically to fund capital projects. The balance at the end of this account is net lending (if positive) or net borrowing (if negative).

6.7 Financial account

The financial account details how net lending / borrowing is financed by each sector, by transactions in financial assets. Financial assets comprise means of payment, financial claims and economic assets similar to financial claims. Financial assets include cash, deposits, loans, stocks and shares and insurance companies' reserves (this is not by any means an exhaustive list). Every financial asset has a corresponding liability, so, for example, a shareholder owns the asset, whilst the issuing company has the liability. The financial account shows how changes in assets and liabilities by sector account for the net lending / borrowing already identified. In practice, due to the use of different data sources, the net lending / borrowing figure in the financial account for each sector will be different from that identified within the capital account, although they are conceptually equal. The difference between these two figures is known as the statistical discrepancy.

6.8 Balance sheets

In contrast with all the aforementioned accounts, the balance sheets do not look at transactions over a period of time, rather they look at the level of assets at a point in time. There are two balance sheets, financial and non-financial, looking at the two different types of assets. The balancing item left when total liabilities are deducted from total assets is net worth.

It should be noted that this is not a complete list of the accounts, but it does cover the most commonly discussed parts of the sector accounts (in some cases in simplified form).

7. Supply and use tables and input–output

The input-ouput (I-O) framework brings together components of GVA, industry inputs and outputs, product supply and demand and the composition of uses and resources across institutional sectors for the economy. This framework breaks the economy down to display transactions of all goods and services between industries and final consumers for a single period (for example, a quarter or a year). Information can be presented in two key products:

· Supply and use tables, and
· Symmetric input-output tables.

However, it is worth noting, that input-output represents a family of associated products, such as:
· Supply and use tables;
· Symmetric input-output tables (also known as analytical tables, I-O tables or derived tables);
· Extended input-output tables (and their applications);
· Monetary input-output tables;
· Physical input-output tables; and
· Range of satellite systems and links to extended parts of the national accounting framework including regional accounts, environmental accounts and social accounting matrices.

This chapter will concentrate on the supply and use tables and symmetric input-output tables. More detail on these and the other input-output related products can be found in the *Eurostat Manual of Supply, Use and Input-Output Tables.*

7.1 Supply and use tables

The supply and use tables (SUTs) show the whole economy by industry (e.g. motor vehicles industry) and products (e.g. sports goods). The tables show links between components of GVA, industry inputs and outputs, product supply and demand. The SUTs link different sectors of the economy (for example public corporations) together with detail of imports and exports of goods and services, government expenditure, household expenditure and capital expenditure.

Producing SUTs allows an examination of consistency and coherency of national accounts components within a single detailed framework and, by incorporating the components of the three approaches to measuring GDP (i.e. *production*, *income* and *expenditure*) enables a single estimate of GDP to be determined, both in current prices and constant prices.

The SUTs also provide the key in linking the components of three accounts, these being the:
• Goods and services account;
• Production account (by industry and by institutional sector); and
• Generation of income account (by industry and by institutional sector).

Supply

INDUSTRY

P R O D U C T

Product Breakdown	Imports	T&T margins	Taxes on products	Subs. on products	TOTAL SUPPLY
Total Output					

Use

INDUSTRY   FINAL EXPENDITURE

P R O D U C T

Product Breakdown	HH	NPISH	GG	GFCF	Inventories	Valuables	Exports	TOTAL USE
Total Intermediate Consumption								

Compensation of Employees
Gross operating surplus
Taxes on production
Subsidies on production
GVA

Output

7.2 Symmetric input-output tables

Symmetric input-output tables are derived from the data in the SUTs and other additional sources to form the theoretical basis for subsequent analyses.

These tables contain symmetric (product by product or industry by industry) tables, Leontief Inverse and other diagnostic analyses such as output multipliers. These tables show separately the consumption of domestically produced and imported goods and services, providing a theoretical framework for further structural analysis of the economy, the composition and the effect of changes in final demand on the economy.

8. Price and volume measures

Whilst many of the transactions and concepts mentioned in previous chapters are estimated in cash terms, for some of these (particularly GDP and its components) it is often more helpful to look at the movements in the data after removing the effects of inflation, as price movements can mask the underlying changes in the volumes produced or consumed. This section introduces some of the key terminology used, more detailed descriptions of price and volume measures are given in some of the references at the end of this guide.

8.1 Current prices (CP)

Current price series (also known as nominal, cash or value series) are expressed in terms of the prices of the time period being estimated. In other words, they describe the actual price charged or paid for the goods or services at time of production or consumption.

8.2 Constant prices (KP)

Constant price series (also known as real terms) have the effects of inflation removed by fixing the prices of goods and services in one period (the base year), so that only the volumes change. In practice, the most common method for doing this is to divide the CP series through by an appropriate price index. The base year would normally be updated every five years or so to ensure that the product and industry mix of the economy is accurately represented. The UK national accounts published real terms series on this basis until 2003 when, in line with international regulation, they were replaced by annual chained volume measures.

8.3 Chained volume measures (CVM)

With chained volume measures, instead of updating the base year every five years, it is updated every year, meaning that, in practice, every series to be presented in real terms is estimated both in current prices and prices of the previous year (PYPs). The growth rates of the series in successive years on the same prices (for example 2006 estimated in current prices and 2007 in PYPs) are linked together in a chain of short series (known as chain-linking) to give a full real terms time series. CVMs are more responsive to major structural changes in the economy and, given the fact that the industry and product mixes of the economy are changing more rapidly now than in the past, they provide a more accurate picture of change in the economy than constant price series rebased every five years.

All expenditure components of GDP are published on both CP and CVM bases; all output components on a CVM basis (annual production data are published in CP terms as well). Income components are only published in current price terms, as there is no meaningful means of producing operating surplus on a real terms basis. This is because, whereas for most transactions (for example purchases from a shop), there is a price element and a quantity element, this is not true in the case of profits for which there are no price or volume components. Within the sector accounts, the only data series published in real terms is real household disposable income (RHDI), everything else is in nominal terms.

9. Balance of payments

The balance of payments deals with transactions with institutions in the rest of the world. It is closely linked to and consistent with the rest of the world sector account, although viewed from the opposite perspective (the UK's side rather than the rest of the world's side). It is broken into four main parts, the current, capital and financial accounts and the international investment position.

9.1 Current account

The current account includes trade in goods and services with the rest of the world, employment income paid to cross-border workers, income from investments abroad (such as dividends from shares in overseas corporations, repatriated profits from subsidiaries to foreign parent companies and interest payments on loans and deposits abroad) and current transfers. There is also a published breakdown of payments to and receipts from the institutions of the European Union. The balancing item of this account, simply titled the current account balance of the balance of payments, is probably the best known statistic in this area.

9.2 Capital account

The capital account deals mainly in capital transfers to and from the rest of the world. The capital account and balance are less commonly discussed than the current balance.

9.3 Financial account

As per the financial account in the sector accounts, this deals with transactions in financial instruments. Specifically, it is geared towards direct investment (ownership of shares in companies greater than ten per cent), portfolio investment (investment in equity and debt securities other than that classed as direct investment), financial derivatives, reserve assets and other investment. The balance of this account is known as net financial transactions. There is an equivalent to the statistical discrepancy in the sector accounts. This is known as "net errors and omissions".

9.4 International investment position (IIP)

This is the equivalent of the financial balance sheet and is the balance between UK assets abroad and UK liabilities to the rest of the world at a given point in time.

10. Monthly and quarterly publications

In addition to the core GDP publications, the ONS publishes a variety of monthly and quarterly national accounts indicators, which are briefly described below.

10.1 Monthly

The monthly publications, often described as the short term indicators (although this term can also be applied to quarterly data) are a suite of rapid estimates of key parts of the economy, where large amounts of source data are available through monthly surveys. These publications will be briefly described below, in the approximate order of publication, with links to their home pages on the ONS website.

10.1.1 Retail Sales Index (RSI)

The fastest of the monthly national accounts indicators, the RSI is published less than three weeks after the end of the month to which it refers. It estimates the total volume and value of retail sales in Great Britain. It breaks down the sales by type of store (and non-store retailing) and also has details on internet sales.

http://www.statistics.gov.uk/about/Methodology_by_theme/retail_sales/downloads/rsi-quick-guide.pdf

10.1.2 Public Sector Finances (PSF)

The PSF is published less than four weeks after the end of the period to which it refers and presents detail on public sector spending, receipts and debt, both including and excluding interventions in the financial sector since the beginning of the financial crisis in 2008. It should be noted that government expenditure in the PSF encompasses a broader spectrum of spending than the general government final consumption expenditure data in the GDP releases, as it includes such items as benefits and interest.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=805&Pos=&ColRank=1&Rank=422

10.1.3 UK Trade

Approximately six weeks after the end of the month, data on trade in goods are published. It has a breakdown by trade with European Union Member States and with other countries and there is also a commodity breakdown. A country-by-country breakdown with some of the UK's key trading partners is also available. Very provisional aggregate data for trade in services are also included for completeness.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=1119&Pos=&ColRank=1&Rank=422

10.1.4 Index of Production (IoP)

Also published approximately six weeks after the end of the month, the IoP details the output of the production industries (extraction, manufacturing and utilities) broken down into their main components.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6230&Pos=1&ColRank=1&Rank=272

10.1.5 Index of Services (IoS)

Published approximately eight weeks after the end of the month, the IoS is the direct equivalent of the IoP for the much larger services sector and again is broken down into detailed indices of output for the various components of services.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=9333

10.2 Quarterly

Quarterly publications provide a much more detailed picture of the economy than the monthly indicators, covering all of GDP, sector accounts and beyond. As with the monthlies, these are described below in order of publication.

10.2.1 Preliminary estimate of GDP

Published just three and a half weeks after the end of the quarter, the UK's preliminary estimate is the fastest produced GDP estimate in the world. It only contains output data, as there are no expenditure or income data available to this timescale and it makes significant use of the key monthly indicators already described. Only aggregated industrial data are published at this stage.

http://www.statistics.gov.uk/statbase/Product.asp?vlnk=406

10.2.2 Output in the construction industry

Published approximately six weeks after the end of the quarter, this release breaks down the activity of the construction industry by public and private sector and by type of activity (housing, non-housing, infrastructure, repairs and maintenance). It is based on a monthly survey introduced in January 2010, replacing a previous quarterly survey.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=725&Pos=&ColRank=1&Rank=422

10.2.3 Second estimate of GDP

Published about a month after the preliminary estimate, approximately seven and a half weeks after the end of the quarter, the second estimate (known up to and including February 2011 as UK output, income and expenditure) includes more detailed output data than the first publication, along with aggregated expenditure and income data. Usually, this release only updates information first published in the preliminary estimate release, that is the latest quarter., with the exception of the fourth quarter release, published in February, when all estimates for all four quarters of the latest calendar year can be revised.

http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1129

10.2.4 Business investment

Published alongside the second estimate of GDP (and again alongside the third estimate - see Quarterly national accounts below), the Business investment publication gives a breakdown of the corporate part of gross fixed capital formation. Breakdowns by industry and asset are included.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=171&Pos=1&ColRank=1&Rank=422

10.2.5 Quarterly national accounts (QNA)

The QNA includes the third estimate of GDP and is published approximately ninety days after the end of the period and contains significantly increased detail on all three approaches to measuring GDP, as well as key data from the sector accounts (see UK economic accounts below). It includes the first publication of such key indicators as gross national income, the household saving ratio and the net lending / borrowing of corporations. Revisions are usually permitted as far back as the first quarter of the previous calendar year (so, for example, the December 2011 QNA publication for 2011 quarter three could include revisions as far back as the first quarter of 2010).

http://www.statistics.gov.uk/statbase/Product.asp?vlnk=818

10.2.6 Balance of Payments (BoP)

Published at the same time as the QNA, the BoP publication includes detail on the UK's current, capital and financial accounts with the rest of the world, transactions with the EU and the international investment position. It follows the same revisions policy as the QNA.

http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1118

10.2.7 UK Economic Accounts (UKEA)

The largest quarterly national accounts publication, UKEA is released simultaneously with QNA and BoP and contains much of the information in both of these releases, as well as significant amounts of data not elsewhere available. This extra content includes non-seasonally adjusted components of GDP, detailed quarterly sector accounts and detailed quarterly balance of payments data.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=1904&Pos=&ColRank=2&Rank=272

10.2.8 Consumer trends (CT)

Also published at the same time as QNA, Bop and UKEA, CT contains very detailed analyses of household final consumption expenditure by product, consistent with the twelve broad product groupings available in the QNA.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=242&Pos=&ColRank=1&Rank=422

10.2.9 Profitability of UK companies

Available a week after the QNA, the profitability release contains data on rates of return for UK corporations broken down by industry and component. The profitability of UK continental shelf companies is separately identified.

http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=794&Pos=&ColRank=1&Rank=422

11. Annual publications – the Blue Book and Pink Book (BB and PB)

The Blue and Pink Books are the flagship annual publications for, respectively, the national accounts and the balance of payments. They are usually published in July or October, following on from Quarterly National Accounts and Balance of Payments statistical bulletins, consistent with BB and PB changes, which are published in June or September.

The Blue Book publication includes supply and use tables for all but the most recent year, annual versions of the key national accounts aggregates in the UK Economic Accounts and more detail which is only available annually. There is a special chapter devoted to extra public sector data and there is also a chapter devoted to the environmental accounts (see chapter on satellite accounts).

Likewise the Pink Book includes more detailed data on the balance of payments data available in UKEA, as well as detailed data only available annually. In particular, there are more detailed geographic breakdowns of the current account and international investment position.

The annual BB and PB process also provides the opportunity for major methodological or conceptual changes to be introduced. These could include new industrial classifications (as in BB2011), new accounting frameworks (most recently BB/PB1998), major sectoral reclassifications (for example the reclassification of the BBC in BB2006) or improvements to statistical methodology (such as the introduction of annual chain-linking in BB2003). Such changes are usually announced in advance of the publications in articles on the ONS website.

The links below are to the respective product pages for the Blue and Pink Books:

Blue Book
http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1143

Pink Book
http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1140

12. Regional accounts

The regional accounts are versions of the national accounts, covering smaller geographic areas. In practice only a subset of the national accounts can be produced for regions, as some transactions, particularly most financial transactions, have no meaning on a sub-national basis. Also, some transactions, such as imports and exports, are impossible to measure regionally, so are excluded.

The regional breakdowns used are based on the European system known as NUTS (Nomenclature of Units for Territorial Statistics). This gives a relatively uniform breakdown of the 27 Member States of the EU for comparative and policy purposes.

The NUTS classification has three levels, known as NUTSI, II and III. For the UK, NUTSI is comprised of Wales, Scotland, Northern Ireland and the nine regions of England. At NUTSII level, these are broken down further into 37 sub-regions (although Northern Ireland is not broken down further at this level and thus appears in both levels of the classification). These sub-regions are split into 133 NUTSIII local areas (again there are three NUTSII sub-regions which are not further broken down at NUTSIII). Differing levels of detail are published at the different geographical levels.

There are two annual publications, the first covering GVA (calculated using the income approach) and the second GDHI. All data are constrained to national component and industry totals published in the latest Blue Book. The links below are to the ONS website product pages for the two outputs:

GVA
http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14650&Pos=4&ColRank=1&Rank=272

GDHI
http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14651

13. Satellite accounts

Satellite accounts are extensions to the core national accounts framework which analyse specific types of activity or the impact of certain activities in a wider, not necessarily purely economic, context. There are many types of satellite accounts, such as for health or households (the latter can be built as an extension to the supply and use framework as a so-called social accounting matrix (SAM), but in the UK the only satellite accounts currently produced are the environmental accounts and the experimental tourism satellite account.

13.1 Environmental accounts

The environmental accounts estimate the effect of economic activity on a variety of environmental factors. The highest profile of these relates to greenhouse gas emissions. It should be noted that the coverage of the environmental accounts greenhouse gas emissions is different from that of similar data published by the Department for Energy and Climate Change (DECC). The environmental accounts data include all emissions by UK resident institutions and individuals, whilst the DECC data include emissions from UK territory, irrespective of source. For example, a UK resident driving in France would, in the environmental accounts, have their emissions included, whilst in the DECC data they would be excluded - this is reversed for a French resident driving in the UK. The other key difference is that international air and sea transport is included in the environmental accounts, not in the DECC data.

The other key components of the environmental accounts are energy consumption, material use, waste, land cover, oil and gas reserves and environmental taxes. Environmental taxes are those, like Vehicle Excise Duty and Air Passenger Duty, which are levied on a specific activity which is deemed to have a negative impact on the environment. Whether or not the revenues so generated are used for environmental activities is not relevant to this classification

Many of these estimates (other than taxes) are not produced in monetary terms, rather the volumes are the focus. Environmental accounts are published annually, as well as having a dedicated chapter in the Blue Book.

The environmental accounts are produced in accordance with a United Nations manual, equivalent to the SNA, known as the System of Environmental and Economic Accounting (SEEA). This manual is currently being updated and it is anticipated that there will be an international standard for environmental economic accounting to sit alongside the SNA by February 2012, confirming the strong links with the National Accounts.

The link below provides more information on environmental accounts:
http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=3698&Pos=1&ColRank=1&Rank=272

13.2 Tourism satellite account

The tourism satellite account (TSA) attempts to analyse supply and demand for all goods and services related to tourism. This is not done within the core framework of the accounts as "tourism" is not a recognised industry within the SIC – it is found in various parts of the classification in the form of tourism characteristic activities that provide products to tourists, e.g. accommodation and food and beverage serving activities. A wide range of products are purchased by visitors from their destinations before, during and after any tourists' visit. It is then the economic value within a given nation or region of all the purchases made and the employment dependent upon the production and distribution of these goods, that we should think of as the 'tourism economy'.

Two measurement problems become evident here. The first involves issues around the expenditure of visitors and the second concerns employment data in 'tourism related industries'. Visitor expenditure data can be misleading because not all expenditure will be on goods and services produced within the region being visited. For example, an item purchased in a shop while on holiday could be imported from elsewhere. Additionally, merely calculating employment in all 'tourist related industries' such as hotels or recreation will also be inaccurate as not all employment in tourism industries will be tourism-dependent (a good example is the case of a hotel bar used by local residents).

Using a System of National Accounts framework to examine tourism is important as, in essence, this allows (through the Tourism Satellite Account) for the separation of expenditure of residents and tourists. The tourism satellite account further identifies expenditure on tourism characteristic activities by UK residents and by foreign visitors separately. The expenditure by domestic tourists is also broken down by day trippers and those on overnight stays.

This framework allows the estimation of key variables such as how much individual industries depend upon tourists, and, by extension, how much value-added and employment is supported by tourists.

To summarise the purpose of the tourism satellite account is to provide an overview of the supply and use of goods and services for the various types of tourism and to reconcile the supply of these products with the demand for them, or consumption, by tourists. This reconciliation is crucial in both national accounts generally, and the TSA. It ensures there is no double counting of activity and headline indicators, such as value added and employment are then comparable with other industries

The link below provides more details on the tourism satellite account:
http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15367&Pos=1&ColRank=2&Rank=272

14. Abbreviations

BB	Blue Book
BoP	Balance of payments
CP	Current prices
CT	Consumer Trends
CVM	Chained volume measures
DECC	Department for Energy and Climate Change
DTM	Distributors' trading margin
ESA	European System of Accounts
FinCo	Financial corporation
GDHI	Gross disposable household income
GDI	Gross disposable income
GDP	Gross domestic product
GFCF	Gross fixed capital formation
GNI	Gross national income
GVA	Gross value added
IIP	International investment position
IoP	Index of Production
IoS	Index of Services
KP	Constant prices
NACC	National Accounts Classification Committee
NACE	Nomenclature statistique des Activités économiques dans la Communauté Européene
NFC	Non-financial corporation
NPISH	Non-profit institution serving households
NUTS	Nomenclature of Units for Territorial Statistics
PB	Pink Book
PSF	Public sector finances
PYP	Previous year's prices
QNA	Quarterly national accounts
RHDI	Real household disposable income
RoW	Rest of the world
RSI	Retail Sales Index
SAM	Social accounting matrix
SIC	Standard Industrial Classification
SNA	System of National Accounts
SUT	Supply and use table
T&T	Trade and transport
UKEA	United Kingdom Economic Accounts

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