Structure of the NI Economy

Experimental Results

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Geographical Area: Northern Ireland
Theme: Economy Statistics
Frequency: Ad hoc

NISRA has for the first time developed a balanced estimate of Northern Ireland Gross Domestic Product (GDP) and its component parts using the international standard approach. The resultant statistics are designated as "experimental" to reflect the fact that they are under development.

Key points

- The project has facilitated the calculation of GDP for NI using three distinct approaches – the income approach, the expenditure approach and the output approach.

- Results show that in 2012, GDP for NI was £37.2bn.

- In 2012, the total value of "Final Demand" in NI was estimated to be worth £62.1bn. This represents the total value of expenditure by Consumers and Government plus the value of Investment and Net Trade:

    - Expenditure by the household sector (including non-profit organisations) was estimated to be £27.5bn or 44% of Final Demand, showing the importance of the local consumption of goods and services to the economy.

    - Central & Local Government Expenditure accounted for 20% of Final Demand, (compared to 16% in the UK), showing the relatively greater role government plays in NI (in addition to public sector wages and salaries)[1].

    - Capital Investment (£4.0bn) accounted for 6% of NI Final Demand, which is considerably lower than the UK as a whole (12%) and Scotland (11%).

    - "External sales" including exports[2] and sales to customers in Great Britain (GB) accounted for 30% of NI Final Demand. This was just below the value of Scottish exports and sales to GB (31% of Scottish Final Demand). In contrast, exports accounted for 23% of UK Final Demand.

    - Local "imports" (including purchases from Great Britain) exceeded external sales resulting in a "net trade deficit" of £6.5bn in 2012.

[1] Government expenditure in this framework excludes social transfers. This is the main difference between these figures and those produced in the Public Expenditure Statistical Analyses (PESA) publication.
[2] Exports in this framework exclude any taxes or duties due from GB residents

Introduction

This release provides initial results from a NISRA project to develop key elements of system of Economic Accounts for Northern Ireland. It is hoped that this will provide users with a number of new indicators relating to the structure of the NI economy.

A modern open economy like that of Northern Ireland (NI) engages in four basic economic activities:

- **Production** involves industries producing goods and services;
- **Consumption** represents purchases of goods and services by both industries and domestic final users comprising mainly households, and Central and Local Government;
- **Investment** includes the accumulation all capital transactions such as fixed investment expenditure and changes in the level of stocks; and
- **Trade** is the total value of external sales minus imports.

Measurement of these four activities is captured in the framework of the Supply-Use Tables (SUTs) which NISRA has produced for the first time for Northern Ireland (see section 6 for further information on SUTs). The resulting tables serve a number of purposes, all of which contribute in different ways to understanding the Northern Ireland economy. One of the key outputs from the Supply and Use framework is Gross Domestic Product for Northern Ireland as measured using the income, expenditure and output approaches in line with international standards.

The following sections provide details of key results emerging from the Supply-Use framework. Additional papers with more in-depth analysis of key data will follow in due course. A glossary of National Accounting terms used throughout this paper is presented at the end of this document.

Experimental Statistics

This publication provides the first official statistics from the SUTs, many of which have never been available at the Northern Ireland level before. They are experimental statistics (see section 6) which are still undergoing evaluation and are subject to revision. NISRA is therefore seeking feedback from users to inform the development of the statistics. Users should also consider the issues raised in the Bean independent review of UK economic statistics and any implications there may be for the NISRA economic accounts project.

Contents

This publication contains the following sections.

1 Estimating Gross Domestic Product

Historically Gross Domestic Product (GDP) has not been available for Northern Ireland due to the lack of requisite datasets needed to compile the SUT framework. In 2014 a feasibility study recommended that draft SUT tables were feasible, with a number of recommendations to improve their robustness.

Gross Value Added

Gross Value Added (GVA) is already produced by the Office for National Statistics for all the regions of the UK including Northern Ireland and this represents the only available whole economy output statistic available for Northern Ireland consistent with international standards. It is measured at current basic prices, which includes the effect of inflation and excludes taxes (less subsidies) on products (for example, Value Added Tax). Regional estimates produced by ONS use the income approach, which involves adding up the income generated by resident individuals or corporations in the production of goods and services.

Gross Domestic Product

Gross Domestic Product (GDP) is one of the main indicators of economic activity/output used when comparing regions and countries. It is essentially comprised of:

GVA plus taxes (less subsidies) on products = GDP

The Supply and Use framework developed by NISRA allows GDP to be measured using three distinct approaches:

- the sum of all income generated by production within the economy (the **income** approach);
- the sum of all final expenditures within the economy (the **expenditure** approach); and
- the sum of all output within the economy (the **output** approach);

In order to maintain consistency with other official statistics, the NISRA SUT estimates of Gross Value Added (GVA) have been constrained to the latest 2012 GVA estimates for NI published by the Office for National Statistics.

As part of the process, the Supply and Use Tables are balanced so that supply equals demand. Once this is completed, each of the three methods of calculating GDP produces the same figure. An overview of how the three GDP approaches are calculated is presented below with further detail in the following sections.

Key points continued

The component parts of the NI GDP can be examined in further detail using the income, expenditure and output approaches.

GDP (Income based)

- Using the Income approach to calculating GDP, NI compensation of employment (wages and salaries) accounted for 57% of GVA in 2012. This was similar to the proportion in the UK as a whole and Scotland (58%).

GDP (Expenditure based)

- The Expenditure approach to calculating GDP shows that in 2012 NI household expenditure comprised 44% of total final demand showing the importance of the local consumption of goods and services to the economy. This was below the proportion in the UK as a whole (49%) and Scotland (43%). Other findings from the expenditure approach show that:

    - Expenditure by the Household sector (including non-profit organisations) in NI in 2012 totalled £27.5bn. This equates to £15,060 spend by the Household sector per head of population in NI compared with £16,836 for the UK and £16,035 for Scotland.

    - Sales of goods and services to customers outside Northern Ireland represented 30% of Final Demand in the economy. This was just below the equivalent estimate for Scotland (31%) and shows the importance of such sales to the local economy.

    - Capital Investment in NI in 2012 was £4.0bn. This represented £2,173 per head of the NI population in 2012 compared to £4,292 for the UK as a whole and £4,119 for Scotland.

GDP (Output based)

- The Output approach to calculating GDP shows that intermediate consumption (goods and services used up in the production process) was 51% of total output. This was similar to the cost of production in the UK as a whole (50%) and in Scotland (48%).

2 Comparison of GDP in NI, UK and Scotland using three different approaches

This section provides an overview of GDP calculated using each of the three approaches for NI, the UK and Scotland for 2012.

Table 1: Calculation of GDP(I) for NI, UK and Scotland, 2012

GDP Income approach 2012 (£bn)			
	NI	UK	Scotland
Compensation of Employees (a)	18.5	849.4	66.2
Taxes, less subsidies, on **production** (b)	0.1	21.9	1.5
Gross Operating Surplus (c)	13.9	604.6	46.2
Gross Value Added at current basic prices (a+b+c)	**32.4**[3]	**1,475.9**	**113.9**
Taxes less subsidies on **products** (d)	4.8	179.4	15.3
Gross Domestic Product at current market prices (a+b+c+d)	**37.2**	**1,655.4**	**129.2**

Table 2: Calculation of GDP(E) for NI, UK and Scotland, 2012

GDP Expenditure approach 2012 (£bn)			
	NI	UK	Scotland
Household Final Consumption (including NPISH)	27.5	1,072.5	85.2
Government final consumption (GGFCE)	12.3	343.9	31.3
Gross Capital Formation (GCF)	4.0	273.4	21.9
External sales (including sales to GB)	18.3	500.7	61.9
Total final demand (a)	**62.1**	**2,191**	**200.3**
Total Imports (B) (including purchases from GB)	24.9	535.2	71.1
Gross Domestic Product at current market prices (a-b)	**37.2**	**1,655.4**	**129.2**

Table 3: Calculation of GDP(O) for NI, UK and Scotland, 2012

GDP Output approach 2012 (£bn)			
	NI	UK	Scotland
Total output at basic prices (a)	66.0	2,928.1	218.1
Total intermediate inputs at purchasers' prices (b)	33.6	1,452.2	104.2
Gross Value Added at current basic prices (a-b)	**32.4**	**1,475.9**	**113.9**
Taxes less subsidies on **products** (c)	4.8	179.4	15.3
Gross Domestic Product at current market prices (a-b+c)	**37.2**	**1,655.4**	**129.2**

[3] This value of GVA is as reported by the ONS Regional Gross Value Added (Income Approach), December 2014 publication. Note that updated results are due to be published on 9 December 2015

Figure 1: Understanding GDP[4]

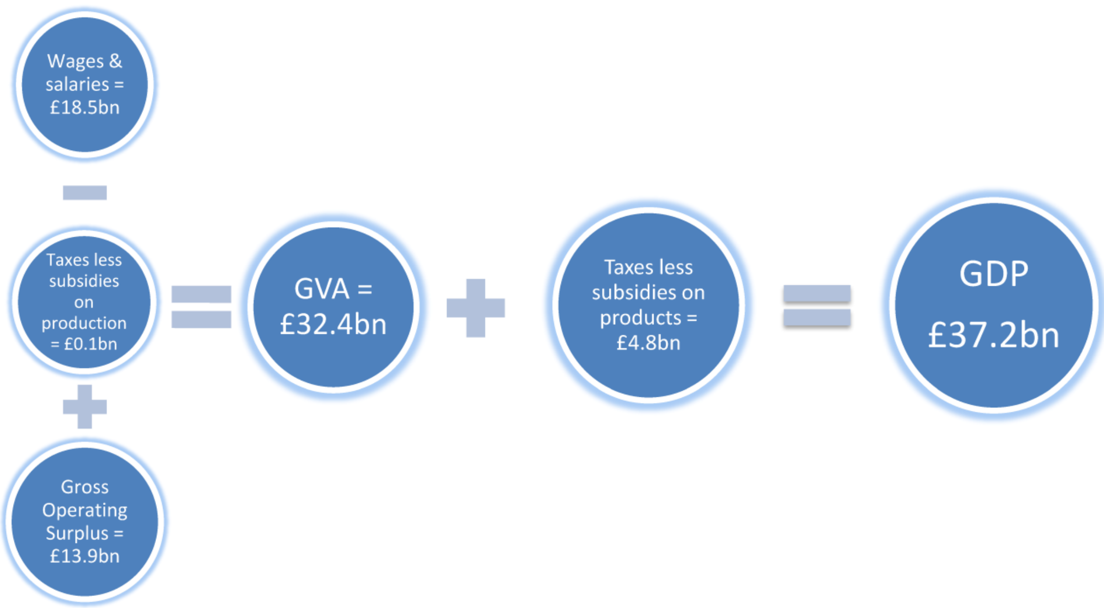
[4] Please refer to the tables on page 6 for more detailed information

3 NI GDP measured using the Income approach

Gross Value Added is equal to the costs of employment (wages, national insurance and pension contributions), any taxes less subsidies, levied upon production (e.g. business rates, vehicle excise duty) and Gross Operating Surplus (broadly analogous to profit).

This value of GVA using the income approach is published annually for Northern Ireland by the Office for National Statistics in their Regional Accounts publication. In order to transform GVA to GDP at market prices it is necessary to include any taxes less subsidies on products, such as value added tax (VAT). An overview of the GDP(I) calculation is presented below. NISRA has constrained its Income, Expenditure and Output approaches of GVA to ONS's Regional Accounts Income measure of GVA.

Figure 2: Overview of GDP(I) approach for NI, 2012



The table below shows the calculation of GDP (I) for Northern Ireland in 2012.

Table 4: NI GDP (I) 2012

Northern Ireland GDP 2012 Income approach (£bn)	
Compensation of Employees (a)	18.5
Taxes, less subsidies, on **production** (b)	0.1
Gross Operating Surplus (c)	13.9
Gross Value Added at current basic prices (a+b+c)	**32.4**
Taxes less subsidies on **products** (d)	4.8
Gross Domestic Product at current market prices (a+b+c+d)	**37.2**

- Total GDP for Northern Ireland in 2012 was £37.2bn which represents a GDP per head value for NI of £20,409.
- NI compensation of employment (wages and salaries) accounted for 57% of GVA in 2012. This was similar to the proportion in the UK as a whole and Scotland (58%).

GVA/GDP per head of population is a useful way of comparing regions of different sizes and is an important indicator for both domestic and European policy purposes. It is calculated using the entire population (including the economically inactive). The table below compares the GVA and GDP per head for NI, Scotland and the UK.

Table 5: GDP and GVA per head, 2012

2012	NI	UK	Scotland
GVA per head (£)	17,791	22,797	21,420
GDP per head (£)	20,409	25,985	24,317

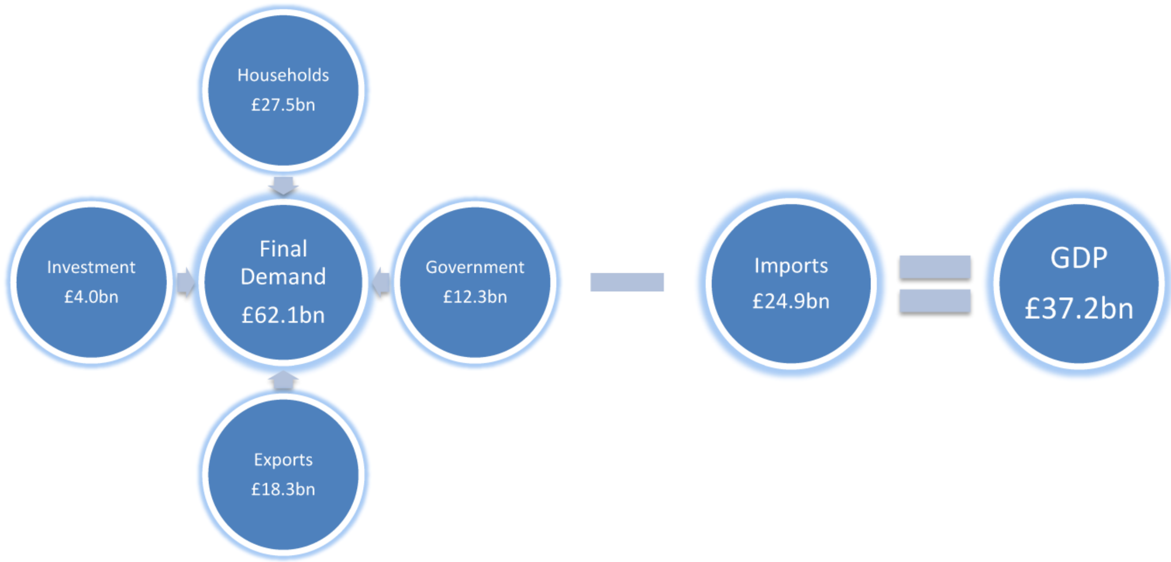
The GDP per head figures are based on analysis of the NI Supply-Use tables, the UK Supply-Use tables and the Scottish Supply-Use tables.

- Northern Ireland's GDP pre head for 2012 is 79% of the corresponding UK total. Scotland's GDP is 94% of the UK total.

4 NI GDP measured using 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 the production process. The GDP(E) calculation is presented below:

Figure 3: Overview of GDP(E) approach for NI, 2012



The following table shows the calculation of GDP(E) for Northern Ireland in 2012.

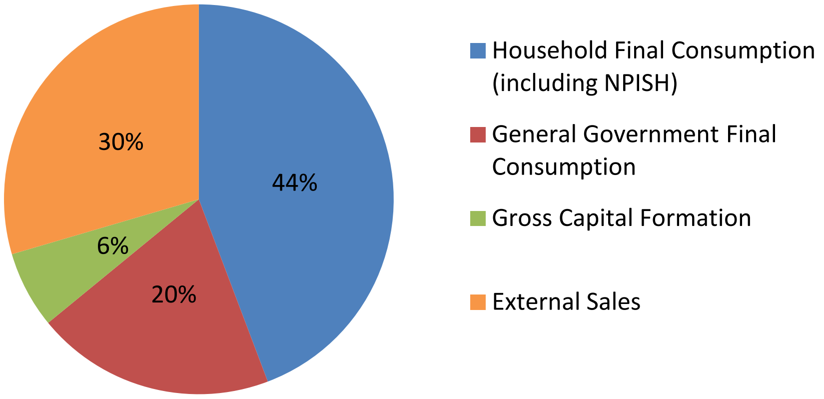
Table 6: NI GDP (E) 2012

Northern Ireland GDP 2012 Expenditure approach (£bn)	
Household Final Consumption (including Non-Profit Institutions Serving Households (NPISH))	27.5
Government Final Consumption (GGFCE)	12.3
Gross Capital Formation (GCF)	4.0
External sales (including sales to GB)	18.3
Total final demand (a)	**62.1**
Total Imports (B) (including purchases from GB)	24.9
Gross Domestic Product at current market prices (a-b)	**37.2**

- In 2012, Expenditure by the household sector (including non-profit organisations) was estimated to be £27.5bn or 44% of Final Demand, showing the importance of the local consumption of goods and services to the economy.
- Central & Local Government Expenditure accounted for 20% of Final Demand, (compared to 16% in the UK), showing the relatively greater role government plays in NI (in addition to public sector wages and salaries)[5].
- Capital Investment (£4.0bn) accounted for 6% of NI Final Demand, which is considerably lower than the UK as a whole (12%) and in Scotland (11%).
- "External sales" including exports[6] and sales to customers in Great Britain (GB) accounted for 30% of NI Final Demand. This was just below the value of Scottish exports and sales to GB (31% of Scottish Final Demand). In contrast, exports accounted for 23% of UK Final Demand.

[5] Government expenditure in this framework excludes social transfers. This is the main difference between these figures and those produced in the Public Expenditure Statistical Analyses (PESA) publication.
[6] Exports in this framework exclude any taxes or duties due from GB residents

Figure 4: Share of final demand, NI 2012



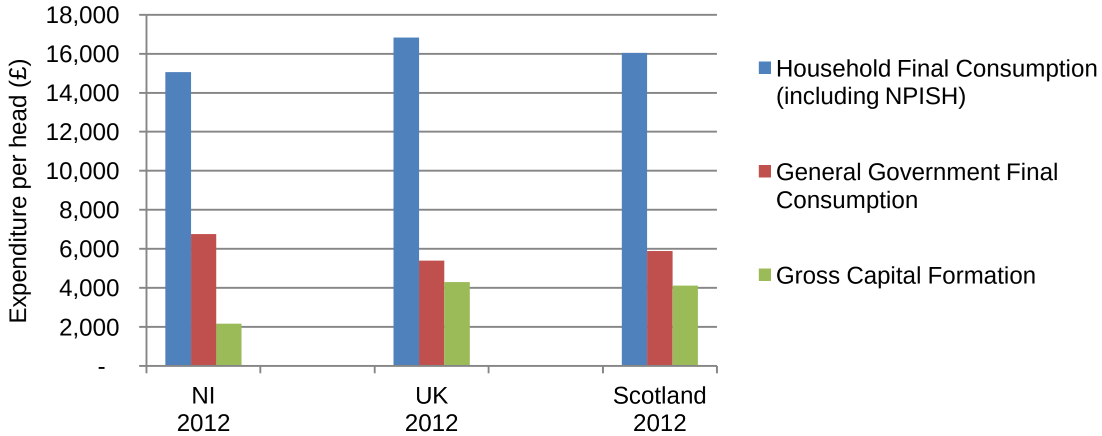
A comparison of the key expenditure categories with those for the UK and Scotland is presented below.

Table 7: Expenditure per head on key expenditure categories for NI, UK and Scotland, 2012

Expenditure per head (£)	NI	UK	Scotland
Household Final Consumption (including NPISH)	15,060	16,836	16,035
General Government Final Consumption	6,751	5,398	5,893
Gross Capital Formation	2,173	4,292	4,119

- Expenditure per head by the household (including non-profit institutions) sector is lower in NI compared with the UK and Scotland;
- Household expenditure in NI equates to 89% of UK expenditure per head;
- There is a lower amount of investment (Gross Capital Formation) per head in NI compared with the UK and Scotland;
- Investment per head in NI equates to 51% of UK expenditure per head;
- Expenditure per head by the government sector (including central and local government) is greater in NI compared with both the UK and Scotland;
- Expenditure per head by the government sector in NI equates to 125% of expenditure in the UK.

Figure 5: Expenditure per head on key expenditure categories for NI, UK and Scotland 2012



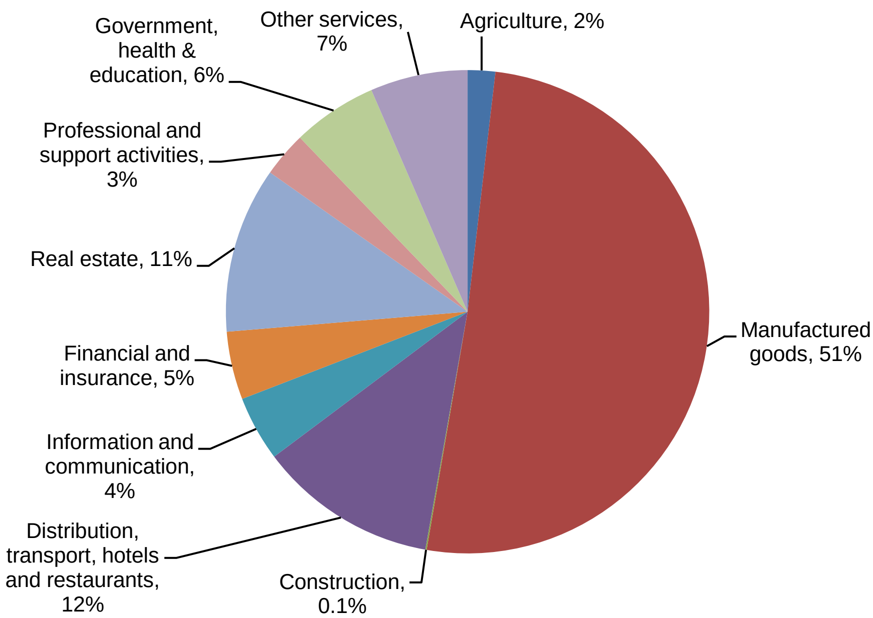
4a Household Final Consumption Expenditure

The compilation of the Supply and Use Tables also facilitates the calculation of detailed Household Final Consumption Expenditure (HHFCE) for the first time[7].

HHFCE comprises all the goods and services purchased and consumed by households in Northern Ireland. This includes expenditure on food, alcohol, clothing, cars, rental on houses and holidays, amongst others. 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. HHFCE is important because it represents the biggest driver of economic growth. Lower consumption can be influenced by a variety of factors including lower levels of income, increased savings or lower costs.

- Household consumption (by households, and the not for profit sector) was worth £27.5 bn;
- This accounted for the largest proportion (44%) of Final Demand (Figure 4), showing the importance of the local consumption of goods and services to the economy;
- The largest component of HHFCE was expenditure on goods and services from the manufacturing sector (51%) – this includes purchases of goods such as food, clothing, coke and refined petroleum products, and alcoholic beverages;
- Expenditure on the distribution, transport, hotels and restaurants sector accounts for the second largest element of HHFCE (12%);
- The next largest component of HHFCE is expenditure on real estate goods and services (11%) the greatest element of which is owner-occupiers' housing services[8].

Figure 6: Components of NI HHFCE, 2012



[7] Please note that for the purpose of calculating GDP(E) HHFCE is combined with expenditure from the non-profit sector (Non-Profit Institutions Serving Households (NPISH)).
[8] This is the amount an owner occupier would need to pay to rent their own property.

4b Gross Capital Formation

Gross Capital Formation (including capital investment as its largest element) is made up of three parts:

- Gross Fixed Capital Formation (GFCF), which relates to the purchase (and disposal) of fixed assets (investment) e.g. buildings, plant and machinery, computer systems and aircraft;
- Changes in inventories, which is made up of materials and fuel, work in progress and unsold finished goods; and
- Acquisitions less disposals of valuables (e.g. jewellery, precious metals, works of art and antiques).

The table below provides an overview of the composition of GCF for NI in 2012.

Table 8: Gross Capital Formation, 2012

GCF calculation for NI 2012 (£bn)	
Gross fixed capital formation	4.1
Acquisitions less disposals of valuables[9]	-
Changes in inventories	(0.1)
Total GCF	**4.0**

- In Northern Ireland GCF accounts for 6% of final demand, this proportion is lower than in the UK, where GCF accounts for around 12% of final demand[10].
- Capital Investment (£4.0 bn) accounted for 6% of NI Final Demand, which was much lower than in Scotland (11%) or for the UK as a whole (12%). This represented £2,173 per head of the NI population in 2012 compared to £4,119 for Scotland and £4,292 for the UK as a whole.

[9] It is noted that theoretically acquisitions less disposals of valuables should also be included in the calculation of GCF however there is no available data for this for NI. It is a small component of GCF.
[10] 2012 UK SUT tables

4c Balance of trade

Producing a balanced set of Supply and Use Tables, and specifically the calculation of GDP(E) provides detailed information on the value of imports and external sales (including sales to GB) for Northern Ireland at an industry and product level.

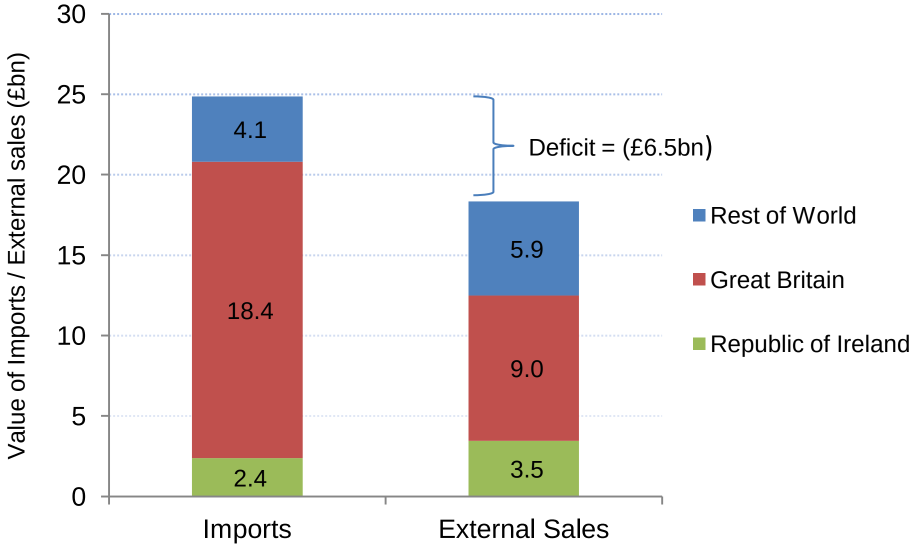
Table 9: Overview of NI Imports by origin and External sales by destination, 2012

Origin of Imports / Destination of external sales	Imports (including purchases from GB) (£bn)	External sales (including sales to GB) (£bn)	Trade Surplus / (Deficit) (£bn)
Great Britain (GB)	18.4	9.0	(9.4)
Republic of Ireland (ROI)	2.4	3.5	1.1
Rest of the World (ROW)	4.1	5.9	1.8
Total Imports / External sales	**24.9**	**18.3**	**(6.5)**

- In 2012, NI sold goods and services to the value of £18.3bn to customers outside the UK with the majority sold to customers in Great Britain;
- NI imported goods and services (including purchases from GB) to the value of £24.9bn;
- The total of external sales (including sales to GB) minus imports is known as the balance of trade. In 2012, NI imports exceeded external sales resulting in a **trade deficit of around £6.5bn**.

The split of trade by origin/destination is presented below.

Figure 7: Overview of NI Imports by origin and External sales (including sales to GB) by destination, 2012



Please note that the external sales figures presented in this document differ to those reported by the NISRA Broad Economy Exports (BEE) measure due to the SUT framework excluding taxes or duties due from GB residents. In addition, the BEE measure has several known limitations including some coverage issues relating to the finance sector and the export of live animals.

5 NI GDP measured using the Output approach

GDP at basic prices is also known as Gross Value Added (GVA) which is a measure of the total value added to the economy by each producing unit in Northern Ireland.

Broadly speaking, it is simply the sum of:

- each company's outputs (sales);
- less inputs (purchases).

The output of an organisation will be equal to the total value of sales (turnover) over a given period although account is also taken of goods manufactured but held in inventory and work in progress (which is particularly relevant for industries like ship-building where the outputs are high-value but infrequent). These are valued and added to the other items to form a figure for the total value of goods and services produced by an organisation - their Gross Output at Basic Prices.

In producing these outputs, an organisation will have to purchase raw materials, energy and other intermediate inputs of goods and services: these are subtracted from the output (including any taxes relating to these purchases) to yield Gross Value Added.

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. The calculation of GDP(O) is presented below.

Figure 8: Overview of GDP(O) approach for NI, 2012

The table below shows the calculation of GDP(O) for Northern Ireland in 2012.

Table 10: NI GDP(O) 2012

Northern Ireland GDP 2012 Output approach (£bn)	
Total output at basic prices (a)	66.0
Total intermediate inputs at purchasers' prices (b)	33.6
Gross Value Added at current basic prices (a-b)	**32.4**
Taxes less subsidies on **products** (c)	4.8
Gross Domestic Product at current market prices (a-b+c)	**37.2**

- In 2012, intermediate consumption (goods and services used up in the production process) for Northern Ireland was 51% of total output. This was similar to the cost of production in the UK as a whole (50%) and in Scotland (48%).

6 Further information

Experimental statistics

The statistics will remain classified as experimental statistics until user feedback indicates that they are useful and credible. The quality of the current statistics is restricted because of the lack of up to date information on purchases made by businesses for use as part of their production process. It is hoped that new purchases data will be available in 2017.

NISRA is making these experimental statistics available so that users and stakeholders can be involved in their development. NISRA has engaged extensively throughout the project with expert users of NI economic statistics whose views have helped shape the development of the SUTs. Users include DETI, DFP and DARD economists, the Ulster University Economic Policy Centre and a number of NI economic commentators and consultants.

NISRA hope to receive informed feedback which will improve the quality and value of the statistics. In addition, this release is to help users become aware of the work undertaken by NISRA in the development of the Supply and Use framework for Northern Ireland.

NISRA plans to have these statistics assessed against the Code of Practice for Official Statistics which is required to gain National Statistics status. It is likely that the statistics will not be put forward for assessment until the new purchasing data is incorporated.

The sections below provide some further high level information on the National Accounting framework.

National accounts

National accounts provide a structure which is used to measure the economy. The economy consists of various sectors which interact with each other in a range of transactions. The national accounts explain how we define the sectors and transactions and provide an accounting structure within which these transactions can be placed. Key elements within the national accounts framework are annual Supply-Use tables (SUTs) which display the transactions of all goods and services in the economy for a single year in matrix form.

Overview of Supply and Use Tables (SUTs)

The Supply and Use framework is the part of the National Accounts system which focuses on the production in an economy. It reflects the production of industries in which intermediate products and primary inputs (labour, capital, land) are required. Supply and Use tables show where goods and services are produced and where they are used in intermediate consumption, final consumption, gross capital formation and exports, (Eurostat, 2008)11.

[11] Blue Book 2011: Reclassification of the UK Supply and Use Tables; Steve Drew and Marianthi Dunn, ONS, November 2011, pg 1

Understanding the SUTs

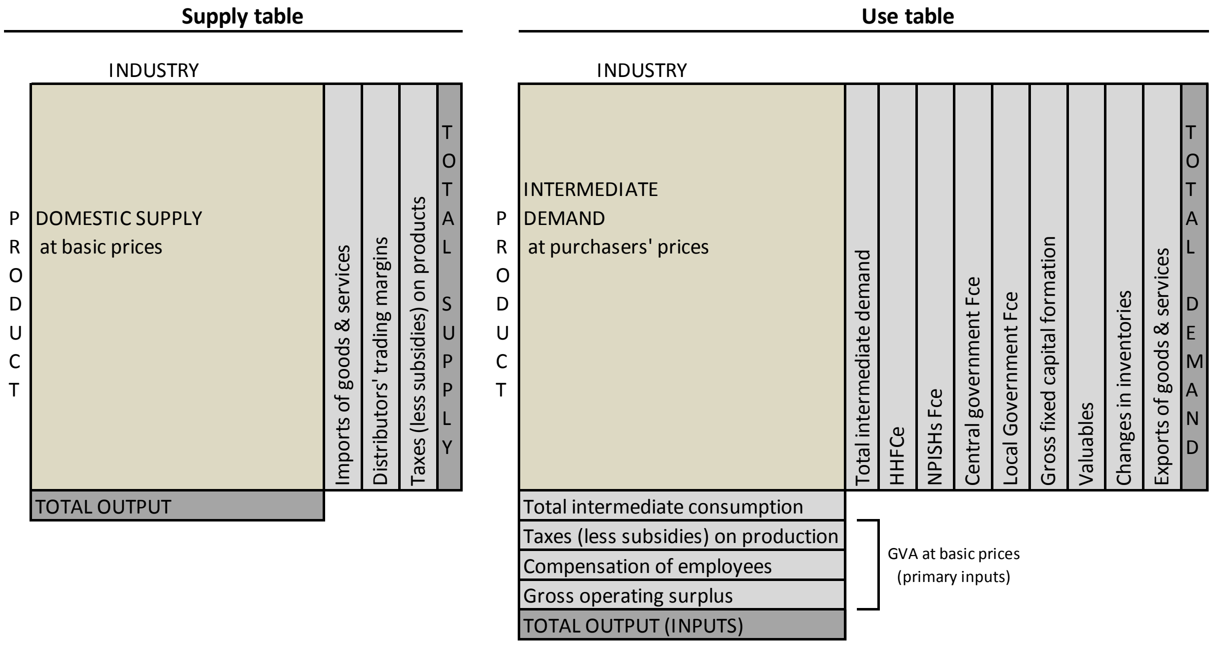
SUTs are key elements of the National Accounts framework and are constructed directly from survey and other data sources. The Supply Table provides estimates of the output of a large number of differentiated products by each industry and the Use Table provides estimates of the inputs (of goods and services) used by each industry to produce their own output.

The SUTs show the whole economy by industry and products. The tables show links between components of GVA, industry inputs and outputs, product supply and demand. The SUTs also link different sectors of the economy (for example public corporations) together with detail of imports and external sales 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 prices12. The SUT framework is illustrated overleaf.

[12] UK National Accounts: a short guide; pg 15

Figure 9: Overview of Supply-Use framework



A brief overview of interpreting the above supply and use tables is presented below.

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<u>**Supply Table**</u>

- Domestic output is shown by product group in the rows;
- Reading **across** we start off with domestic output (supply) at basic prices i.e. the internal cost to producers before they leave the 'factory gate';
- By adding imports to domestic output we get **total supply at basic prices**;
- The next two columns, distributors trading margins and taxes (less subsidies) on products, sum to give the basic price adjustment;
- Adding this to domestic output and imports gives **total supply at purchasers' prices**;
- Reading **down** there is only one main point: domestic output splits into three categories:
  i. Market output (output that is sold at significant prices);
  ii. Output for own final use (consumption of own production); and
  iii. Non-market output.

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<u>**Use Table**</u>

- Reading **across**, we firstly have intermediate consumption of each product group by each industry group;
- After intermediate consumption there are the elements of final demand:
  i. Final consumption by households, NPISHs and government (General Government Final Consumption);
  ii. Next is investment, split into fixed investment (Gross Fixed Capital Formation), valuables and changes in inventories; and
  iii. Lastly there is exports of goods and services.
- Adding these up provides **total demand at purchasers' prices**, this equals total supply at purchasers' prices from the supply table;
- Reading **down** gives intermediate consumption ('Total consumption') by industry;
- Next we see:
  i. Taxes less subsidies on products;
  ii. Compensation of employees; and
  iii. Gross operating surplus;

The sum of these equals **total inputs at basic prices,** which matches **total output at basic prices** on the bottom line.

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7 Glossary

A glossary of key elements discussed in this paper is presented below. Further information on National Accounts concepts can be found in "A Short Guide to the UK National Accounts" paper published by the ONS.

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

- **Exports** are goods and services produced in NI purchased by units in the rest of the world (including external sales to GB); conversely **imports** are goods and services produced in the rest of the world and purchased by NI 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**.

- **Government final consumption expenditure** Includes local authorities and central government. This covers pay of employees, procurement of goods and services and capital consumption.

- **Gross capital formation** (which can be thought of as investment) is made up of three parts.
    i. 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.
    ii. The second component is **changes in inventories**, which is made up of materials and fuel, work in progress and unsold finished goods.
    iii. 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.

- **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).

- **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).

- **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.

- **Mixed income** is the income from self-employment. It recognises that the income of the self-employed is a combination of wages (COE) and profits (GOS), but it is not realistic or appropriate to split it into these two components

- **NPISH Final Consumption Expenditure** is all consumption by institutions which provide goods and services; either free or below the market price.

Additional Reading

Further information on the background to the NISRA project to develop the Supply-Use Tables can be found on our website.

Other useful sources of information relating to National Accounts and the Supply-Use framework include:

- European System of Nation and Economic Accounts (ESA 2010)
- ONS Series of National Accounts articles
- Scottish Government Input-Output Methodology Guide