

19 December 2019

# Structure & Performance of the NI Economy 2015 & 2016

Geographical Area: Northern Ireland  
Theme: Economy Statistics  
Frequency: Annual

These latest estimates of the flows of goods and services in the Northern Ireland (NI) economy have been produced in line with guidance from the European System of Accounts (2010) – an international standard approach. These statistics provide the most complete picture of the detailed structure and characteristics of the local economy currently available.

This publication includes revised 2015 and provisional 2016 estimates of Gross Domestic Product (GDP) derived from the NI Supply-Use Tables (SUTs). The resultant statistics are designated as “experimental” to reflect the fact that they are undergoing evaluation and to involve stakeholders in their development. NISRA welcomes any feedback from users.

2015 (revised) and 2016 (provisional) results along with information on the SUT framework are provided in the subsequent sections.

## Key Results

- Results show that in 2016, GDP for NI was £43.9 billion, and £41.8 billion in 2015.
- The change from 2015 to 2016 represents a 5.2%<sup>1</sup> increase in GDP in current market prices.
- In 2016, the total use of goods and services was estimated to be £102.4 billion. This includes “Intermediate Consumption” (goods and services used up in the production process) by industries of £33.9 billion and “Final Use” of £68.5 billion.

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<sup>1</sup> Note this is based on unrounded data.

- Final Use represents the total value of expenditure by Consumers and Government plus the value of Investment, external sales to Great Britain (GB) and exports:
  - Expenditure by the household sector (including non-profit organisations) was estimated to be £28.4 billion or 41% of Final Use, showing the importance of the household sector's contribution to local consumption of goods and services in the economy.
  - Central and Local Government Expenditure (£12.3 billion) accounted for 18% of Final Use, (compared to 15% in the United Kingdom (UK)), showing the relatively greater role government plays in the NI economy (in addition to public sector wages and salaries)<sup>2</sup>.
  - Capital Investment (£6.3 billion) accounted for 9% of NI Final Use, which is considerably lower than the UK as a whole (13%).
  - "External sales" (£21.6 billion), including exports<sup>3</sup> and sales to customers in GB accounted for 31% of NI Final Use. In contrast, exports accounted for 22% of UK Final Use.
  - "Imports" (including purchases from GB) equated to £24.6 billion and exceeded external sales resulting in a net negative trade balance of £3.0 billion in 2016.

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<sup>2</sup> 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.

<sup>3</sup> Exports in this framework exclude any taxes or duties due from GB residents.

# Introduction

This publication provides newly available results from the NISRA project to develop key elements of a system of Economic Accounts for Northern Ireland (NI). This provides users with a number of valuable indicators relating to the structure and inter-industry relationships of the NI economy to aid economic analysis and decision making.

A modern open economy like that of 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 SUTs. The resulting tables serve a number of purposes (discussed later), all of which contribute in different ways to understanding the Northern Ireland economy.

One of the key outputs from the Supply-Use framework is the calculation of GDP for NI as measured using the income, expenditure and output approaches, in line with international standards. The SUTs provide detailed data on the supply and use of commodities, inter-industry flows and the structure of the economy; they are also the foundation from which Input-Output Tables (IOT) are derived.

The IOTs provide a framework for modelling the impacts of changes to the domestic economy and are the pre-requisite for calculating a range of derived data such as multipliers which are used for economic planning, analysis and forecasting. NISRA plan to publish IOT tables and associated multipliers derived from these SUTs in early 2020, users will be advised accordingly.

The IOTs are the foundation for a further macro-economic model of the economy called a Social Accounting Matrix (SAM). The SAM determines relationships between businesses, households, government and markets and forms the underpinning dataset for Computable General Equilibrium (CGE) Models. During 2018 and 2019 NISRA has used the economic accounts project to produce an IOT and SAM to facilitate colleagues in the Department for the Economy (DfE) developing a CGE model for NI for the first time. Further information on this project can be found [here](#).

The following sections provide further details on the SUT and IOT framework along with key results emerging from the SUTs. A [glossary](#) of National Accounting terms used throughout this paper is presented at the end of this document.

# Contents

This publication contains the following sections.

1. [Overview of the Supply-Use framework](#)
2. [Supply-Use Tables for NI 2016](#)
3. [Gross Domestic Product for NI 2016](#)
4. [Comparison of GDP in NI, UK and Scotland 2016](#)
5. [Analysis of NI Supply-Use Tables](#)
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7. [Glossary](#)

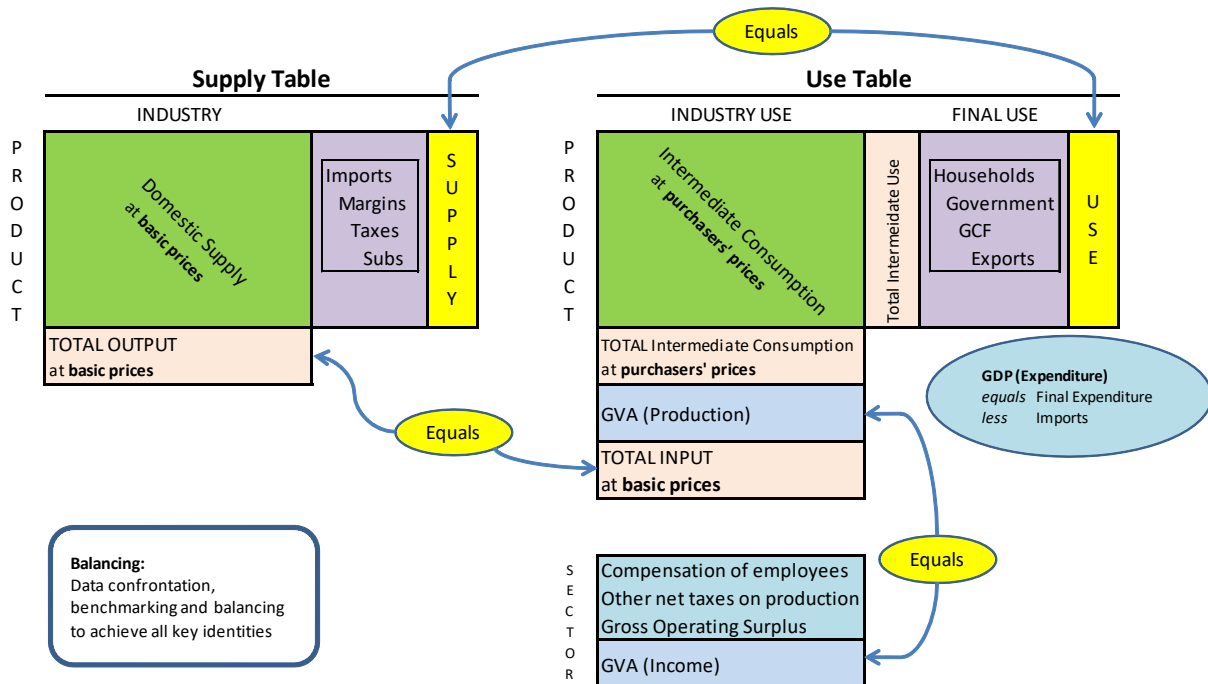
# 1

## Overview of the Supply-Use framework

The SUTs provide a picture of the flows of products and services in the economy for a single year and are used to set the level of annual current price GDP. They show the composition of uses and resources across institutional sectors and the inter-dependence of industries in order to reconcile the production, income and expenditure approaches to the measurement of GDP.

Figure 1 provides an overview of the SUTs showing how the framework provides a coherent picture of the economy. The methodology used and further information on how to interpret the tables can be accessed [here](#).

**Figure 1: Framework for a coherent picture of the economy**



The Supply table shows the output of each product by each industry. The value of industry output is based on NI official statistics surveys. As producers are classified according to their principal product, most domestic production lies on the diagonal. However, there are some off-diagonal elements in this table. These represent secondary production and by-products classified to Input-Output groupings (IOGs) other than the principal product of the industry. The profile of products within a category is currently based on the UK supply patterns. The Supply table is relatively sparse because most producers make a limited range of products.

The columns on the right of the Supply table show imports of products, distributors' trade margins on products and taxes on products (e.g. VAT) less subsidies on products. Summing across these columns and those in the main body gives the total supply of products at purchasers' prices i.e. the value paid by purchasers excluding any refundable VAT.

The main body of the Use table shows, for each industry classification, the intermediate consumption of products. That is, the value of products used-up or altered by the production process. These estimates are currently based on a combination of survey data from the NI Annual Business Inquiry (ABI) plus various tables from the UK SUTs provided by the Office for National Statistics (ONS). The latest ONS SUTs incorporate results from a large scale survey of businesses purchasing patterns (the Annual Purchases Survey) and as such these NI SUTs include the most up to date purchasing patterns available.

The columns to the right of the main table give the components of final use for products. Both final use and intermediate use are valued at purchasers' prices and cover domestically produced and imported products.

The rows underneath the main body of the Use table give the income components of Gross Value Added (GVA) for each industry grouping. These components are labour costs (wages and salaries plus associated employers' contributions e.g. national insurance and pension contributions), gross operating surplus (essentially, companies' trading profits), mixed income (earnings of self-employed people), and taxes on production (e.g. business rates) less subsidies on production, etc<sup>4</sup>.

Each of the components of the SUTs are based on detailed analysis of a wide range of data sources covering the whole of the NI economy. Behind each element there are a series of matrices which collate the analysis of the available data into the National Accounts framework which then feeds into the respective section of the tables above.

For further information on National Accounts and SUTs please refer to:

- [Eurostat Manual of Supply, Use and Input-Output Tables](#)
- [A Short Guide to the UK National Accounts](#)
- [Commentary on Supply and Use balanced estimates of annual GDP, 1997-2014](#)

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<sup>4</sup> [Input-Output Analytical tables: methods and application to UK National Accounts, 2013](#)  
Supply-Use Tables for Northern Ireland 2016 (provisional) results

## 2

## Supply-Use tables for NI 2016

The SUTs for NI for 2016 are presented below in summary format. Please note that numbers may not sum due to rounding.

**Table 1: Summary Supply Table for NI, 2016**

<b>DOMESTIC SUPPLY at basic prices (£'m)</b>	<b>Domestic Supply</b>	<i>Imports from IE</i>	<i>Imports (Purchases) from GB</i>	<i>Imports from ROW</i>	<b>Total Imports</b>	<b>Distributors' Trading Margins</b>	<b>Taxes (less subsidies) on products</b>	<b>Total Supply</b>
Agriculture [1-3]	1,810	158	359	135	653	288	74	<b>2,824</b>
Production [5-39]	17,916	1,955	11,139	4,000	17,094	7,341	3,759	<b>46,110</b>
Construction [41-43]	6,821	3	295	5	302	0	417	<b>7,540</b>
Distribution, transport, hotels and restaurants [45-56]	13,845	249	311	333	893	-7,913	561	<b>7,385</b>
Information and communication [58-63]	2,111	49	1,411	67	1,527	285	170	<b>4,093</b>
Financial and insurance [64-66]	2,961	39	534	56	628	0	117	<b>3,706</b>
Real estate [68.1-2-68.3]	5,681	38	52	60	150	0	36	<b>5,867</b>
Professional and support activities [69.1-82]	4,617	147	2,711	126	2,983	0	279	<b>7,880</b>
Government, health & education [84-88]	14,039	5	0	28	33	0	68	<b>14,140</b>
Other services [90-97]	2,332	23	199	93	315	0	224	<b>2,871</b>
<b>Total Supply at basic prices</b>	<b>72,133</b>	<b>2,666</b>	<b>17,011</b>	<b>4,902</b>	<b>24,579</b>	<b>0</b>	<b>5,704</b>	<b>102,416</b>

**Table 2: Summary Use Table for NI, 2016**

**INTERMEDIATE CONSUMPTION BY INDUSTRY GROUP**  
(at purchasers' prices)  
£'m

**FINAL USE**  
at purchasers' prices  
£'m

INTERMEDIATE USE at purchasers' prices	INTERMEDIATE CONSUMPTION BY INDUSTRY GROUP (at purchasers' prices) £'m										FINAL USE at purchasers' prices £'m										
	Agriculture	Production	Construction	Distribution, transport, hotels and restaurants	Information and communication	Financial and insurance	Real estate	Professional and support activities	Government, health and education	Other services	Total Intermediate Use	HHFCE	NPISH FCE	CG FCE	LG FCE	Gross Capital Formation	Exports to IE	External Sales to GB	Exports to ROW	Total Exports	Total Use
Agriculture [1-3]	544	1,124	-	24	-	0	5	-	1	5	1,702	536	-	-	-	92	336	133	23	493	2,824
Production [5-39]	528	8,476	2,386	2,944	114	106	241	335	2,041	405	17,575	12,022	-	292	268	1,565	2,366	6,851	5,171	14,389	46,110
Construction [41-43]	42	261	1,423	58	1	59	229	25	169	9	2,276	35	-	-	-	3,143	198	1,838	51	2,086	7,540
Distribution, transport, hotels and restaurants [45-56]	39	524	23	1,179	40	198	5	124	334	39	2,505	3,624	-	-	-	-	196	819	242	1,256	7,385
Information and communication [58-63]	16	192	38	132	366	252	23	80	242	114	1,456	1,251	-	-	-	328	150	454	454	1,058	4,093
Financial and insurance [64-66]	22	498	64	171	33	452	291	61	234	38	1,863	1,117	-	-	-	-	102	230	393	725	3,706
Real estate [68.1-2-68.3]	-	54	4	200	42	47	19	33	184	40	623	4,876	30	-	-	254	4	73	7	84	5,867
Professional and support activities [69.1-82]	200	1,016	291	604	239	539	82	517	910	310	4,708	937	86	-	-	862	225	694	368	1,287	7,880
Government, health & education [84-88]	1	59	16	73	7	31	40	36	566	6	834	1,266	554	11,118	245	27	16	44	36	96	14,140
Other services [90-97]	1	5	0	3	46	18	0	3	96	185	357	1,931	166	114	217	6	10	49	21	80	2,871
<b>Total Intermediate Consumption at purchasers' prices</b>	<b>1,393</b>	<b>12,207</b>	<b>4,245</b>	<b>5,386</b>	<b>888</b>	<b>1,702</b>	<b>936</b>	<b>1,214</b>	<b>4,778</b>	<b>1,151</b>	<b>33,899</b>	<b>27,596</b>	<b>836</b>	<b>11,524</b>	<b>729</b>	<b>6,278</b>	<b>3,602</b>	<b>11,185</b>	<b>6,768</b>	<b>21,554</b>	<b>102,416</b>
Taxes less subsidies on production	(269)	135	42	470	12	19	22	93	23	39	<b>587</b>										
Compensation of employees	141	3,832	1,177	4,255	830	779	154	1,406	7,134	743	<b>20,451</b>										
Gross operating surplus and mixed income	707	2,926	1,368	2,937	326	726	4,121	1,029	2,486	570	<b>17,196</b>										
<b>GVA (at basic prices)</b>	<b>579</b>	<b>6,893</b>	<b>2,587</b>	<b>7,662</b>	<b>1,168</b>	<b>1,524</b>	<b>4,297</b>	<b>2,528</b>	<b>9,643</b>	<b>1,352</b>	<b>38,233</b>										
<b>TOTAL OUTPUT (INPUTS) at basic prices</b>	<b>1,973</b>	<b>19,100</b>	<b>6,832</b>	<b>13,048</b>	<b>2,056</b>	<b>3,226</b>	<b>5,233</b>	<b>3,742</b>	<b>14,421</b>	<b>2,503</b>	<b>72,133</b>										

More detailed SUTs can be downloaded [here](#).

It can be seen that the Supply-Use Tables are balanced so that total supply equals total use for each product and industry, and at the national level. Balanced SUTs are the prerequisite for calculating GDP using the three different methods as discussed in subsequent sections.



# 3

## Gross Domestic Product for NI 2016

The Supply-Use framework 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 **production** approach);

In order to maintain consistency with other official statistics, the NISRA SUT estimates of Gross Value Added (GVA) have been constrained to the 2016 GVA estimates for NI published by ONS in 2018.

The headline results are presented below with further analysis presented in the following sections.

<b>NI GDP 2016</b> <b>£43.9 bn</b>	<b>NI GVA 2016</b> <b>£38.2 bn</b>
<b>NI GDP per head 2016</b> <b>£23,486</b>	<b>NI GVA per head 2016</b> <b>£20,437</b>
<b>GDP per head is equivalent to 78% of the UK figure</b>	

The equivalent figures for 2015 along with Supply-Use Tables for 2015 and 2016 can be downloaded from the [NISRA website](#).

An overview of how the three GDP approaches are calculated is presented in Section 4 alongside comparisons with the UK and Scotland.

## 4

## Comparison of GDP in NI, UK and Scotland, 2016

Tables 3-5 show how GDP is calculated for NI, the UK and Scotland for 2016 using the three different approaches as previously mentioned.

**Table 3: Calculation of GDP(I) for NI, UK and Scotland, 2016**

GDP Income approach 2016 (£ billion)			
	NI	UK	Scotland
Compensation of Employees (a)	20.5	967.7	74.8
Taxes, less subsidies, on <b>production</b> (b)	0.6	26.4	2.3
Gross Operating Surplus (c)	17.2	784.0	56.6
<b>Gross Value Added at current basic prices (a+b+c)</b>	<b>38.2</b>	<b>1,778.1</b>	<b>133.7</b>
Taxes less subsidies on <b>products</b> (d)	5.7	217.3	17.5
<b>Gross Domestic Product at current market prices (a+b+c+d)</b>	<b>43.9</b>	<b>1,995.5</b>	<b>151.2</b>

**Table 4: Calculation of GDP(E) for NI, UK and Scotland, 2016**

GDP Expenditure approach 2016 (£ billion)			
	NI	UK	Scotland
Household Final Consumption (including NPISH)	28.4	1,299.1	99.0
Government final consumption (GGFCE)	12.3	381.5	36.3
Gross Capital Formation (GCF)	6.3	347.2	26.4
External sales (including sales to GB)	21.6	567.5	78.0
<b>Total final Use (a)</b>	<b>68.5</b>	<b>2,595.3</b>	<b>239.7</b>
Total Imports (b) (including purchases from GB)	24.6	599.8	88.5
<b>Gross Domestic Product at current market prices (a-b)</b>	<b>43.9</b>	<b>1,995.5</b>	<b>151.2</b>

**Table 5: Calculation of GDP(O) for NI, UK and Scotland, 2016**

GDP Production approach 2016 (£ billion)			
	NI	UK	Scotland
Total output at basic prices (a)	72.1	3,354.1	244.3
Total intermediate inputs at purchasers' prices (b)	33.9	1,576.0	110.6
Gross Value Added at current basic prices (a-b)	<b>38.2</b>	<b>1,778.1</b>	<b>133.7</b>
Taxes less subsidies on <b>products</b> (c)	5.7	217.3	17.5
<b>Gross Domestic Product at current market prices (a-b+c)</b>	<b>43.9</b>	<b>1,995.5</b>	<b>151.2</b>

Table 6 overleaf compares the GVA and GDP per head for NI, Scotland and the UK.

**Table 6: GDP and GVA per head, 2016**

2016	NI	UK	Scotland
GVA per head (£)	20,437	26,925	24,647
GDP per head (£)	23,486	30,216	27,877

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](#) (note that the Scottish figure does not match that reported in the ONS Regional Accounts as the Scottish SUTs are not constrained to the Regional Accounts).

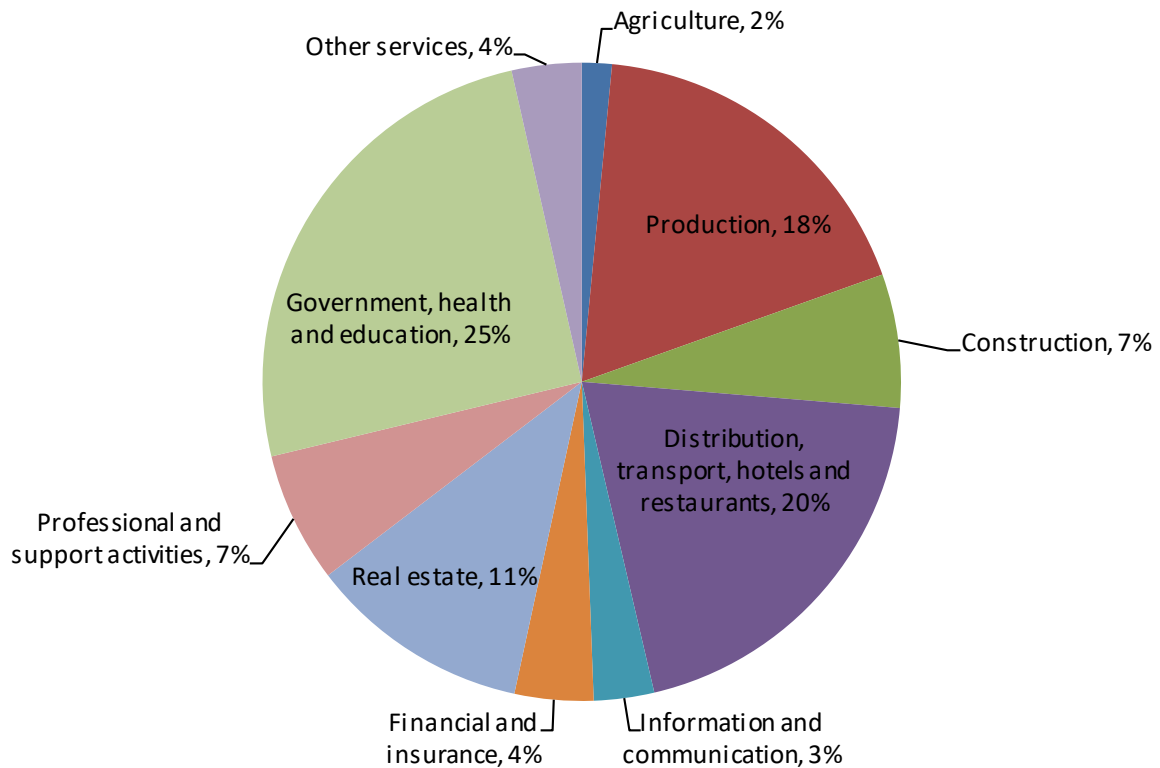
NI's GDP per head for 2016 is 78% of the corresponding UK total. Scotland's GDP per head is 92% of the UK total.

NI GVA per head for 2016 was 76% of the UK value whereas Scotland's equivalent figure was 92% of the UK GVA per head.

## Gross Value Added

The total value of GVA for NI for 2016 equated to £38.2 billion. A breakdown of the broad industry shares of GVA is presented in Figure 2.

**Figure 2: Split of GVA by industry**



Government, health and education had the largest share (25%) of the total NI GVA in 2016. This is largely composed of compensation of employees and non-market capital consumption (i.e. depreciation) which reflects the large workforce and ownership of buildings by organisations in these industries.

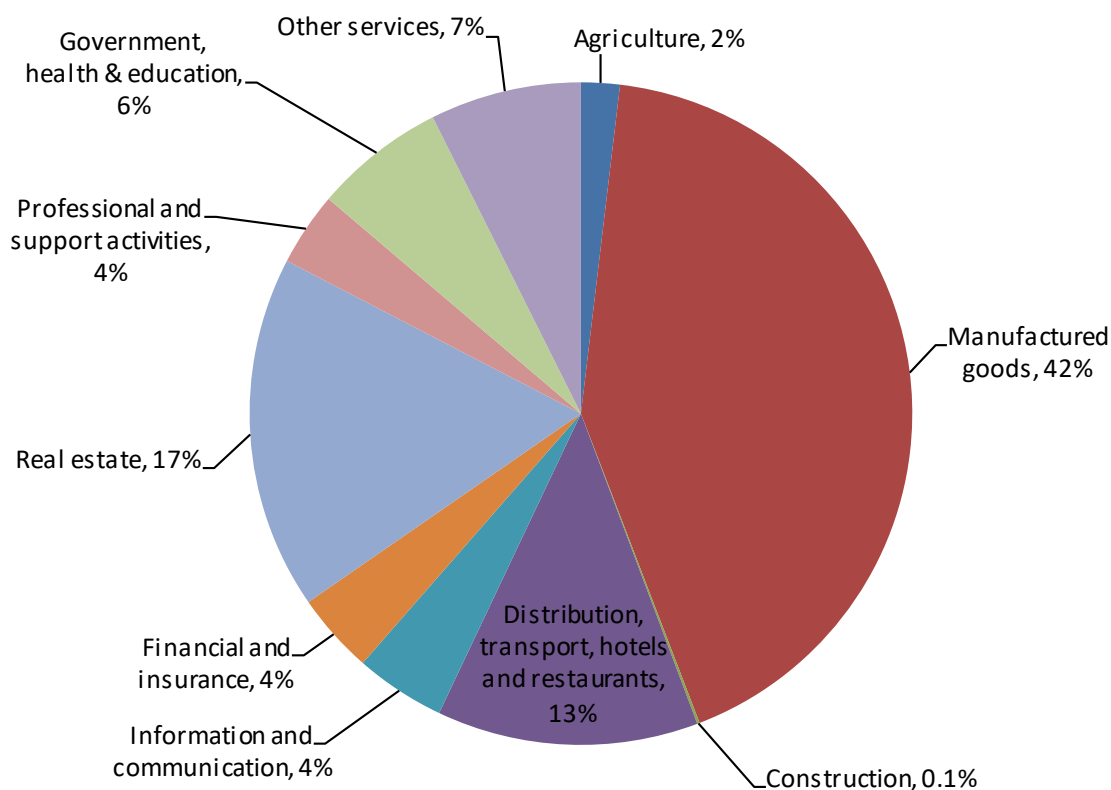
## Household Final Consumption Expenditure (HHFCE)

HHFCE comprises all the goods and services purchased and consumed by households in NI. 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 activity. Lower consumption can be influenced by a variety of factors including lower levels of income, increased savings or lower costs.

### Key points:

- In 2016, household consumption (by households, and the not for profit sector) was worth £28.4 billion;
- This accounted for the largest proportion (41%) of Final Use, showing the importance of the local consumption of goods and services to the economy;
- The largest component of HHFCE (Figure 3) was expenditure on goods and services from the manufacturing sector (42%) – this includes purchases of goods such as food, clothing, coke and refined petroleum products, and alcoholic beverages;
- Expenditure on Real Estate goods and services accounts for the second largest element of HHFCE (17%);
- The next largest component of HHFCE is expenditure on distribution transport, hotels and restaurants (13%).

**Figure 3: NI HHFCE disaggregated by broad product categories, 2016**



## Gross Capital Formation (GCF)

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).

Table 7 below provides an overview of the composition of GCF for NI in 2016.

**Table 7: Gross Capital Formation, 2016**

GCF calculation for NI 2016 (£ billion)	
Gross fixed capital formation	6.1
Acquisitions less disposals of valuables <sup>5</sup>	-
Changes in inventories	0.2
<b>Total GCF</b>	<b>6.3</b>

- In NI, GCF accounts for 9% of final use, this proportion is lower than in the UK, where GCF accounts for around 13% of final use<sup>6</sup>.
- This represented £3,356 per head of the NI population in 2016 compared to £5,258 for the UK as a whole.

<sup>5</sup> 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.

<sup>6</sup> 2016 UK SUT tables

## Net Trading position

Producing a balanced set of SUTs, and specifically the calculation of GDP(E) provides detailed information on the value of imports (including purchases from GB) and external sales (including sales to GB) for NI at an industry and product level. While not consistent with the international standard Balance of Payments method, the analysis provides an insight into NI's net position in terms of the goods and services sold externally relative to purchases from outside NI.

**Table 8: Overview of NI Imports by origin and External sales by destination, 2016**

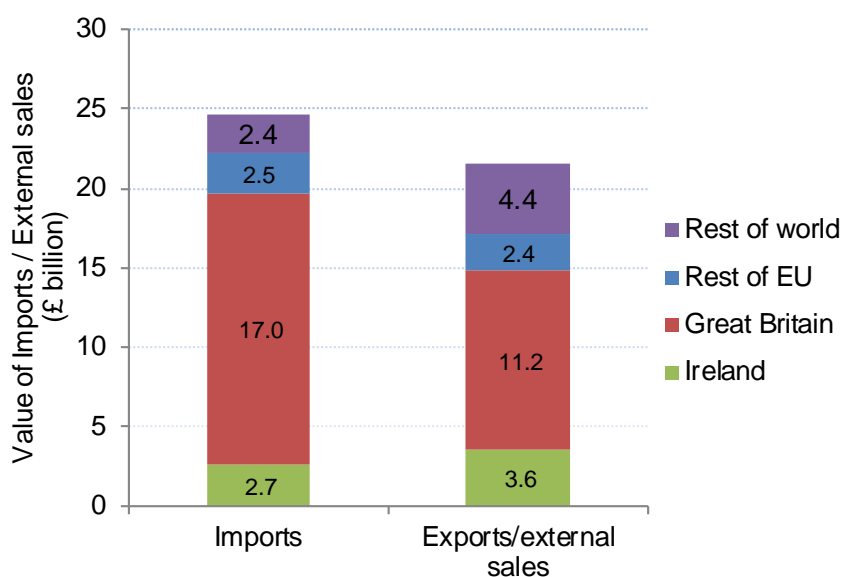
Origin of Imports / Destination of external sales	Imports (including purchases from GB) (£ billion)	External sales (including sales to GB) (£ billion)	Trade Balance (£ billion)
Great Britain (GB)	17.0	11.2	(5.8)
Ireland (IE)	2.7	3.6	0.9
Rest of the EU (REU)	2.5	2.4	(0.2)
Rest of the World (ROW)	2.4	4.4	2.0
<b>Total Imports / External sales</b>	<b>24.6</b>	<b>21.6</b>	<b>(3.0)</b>

\*Note numbers may not sum due to rounding

- In 2016, NI sold goods and services to the value of £21.6 billion to customers outside of NI with the majority sold to customers in GB;
- NI imported goods and services (including purchases from GB) to the value of £24.6 billion;
- The total of external sales (including sales to GB) minus imports is known as the balance of trade. In 2016, NI imports exceeded external sales resulting in a **net negative trade balance of £3.0 billion**.

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

**Figure 4: Overview of NI Purchases by origin and External sales (including sales to GB) by destination, 2016**



The external sales figures presented in this document differ to those reported by the NISRA Broad Economy Sales and Exports (BESES) measure due to the SUT framework excluding taxes or duties due from GB residents. In addition, the BESES measure does not cover the finance sector or the export of live animals, both of which are included in Figure 4.

## Experimental statistics

These statistics are experimental statistics which are still undergoing evaluation and are subject to revision. The statistics will remain classified as experimental statistics until user feedback indicates that they are useful and credible.

With regards to the GDP estimates for NI, whilst these are experimental statistics, they are considered to be robust as they are based on quality input data (national statistics) and prepared in line with best practice, having been developed in conjunction with methodological experts from the ONS. These are the best estimates with the data available.

## *Office for Statistics Regulation guidance*

In August 2019 the Office for Statistics Regulation (OSR) released [regulatory guidance](#) to inform the development of experimental statistics – official statistics in development.

The [Code of Practice for Statistics](#) encourages innovation and improvement and highlights the need for National Statistics and other official statistics to remain relevant for use, to provide a dynamic public service. Practices that are considered particularly relevant to producing experimental statistics are highlighted under the below themes.

- Sound methods;
- Relevance to users; and
- Innovation and improvement

We have highlighted below how the development of the Economic Accounts (and SUTs) is aligned to these principles.

## Sound methods

The statistics, data and metadata are compiled using recognised standards, classifications and definitions as set out in the European System of Accounts 2010 standard (ESA10).

They are harmonised to be consistent and coherent with related statistics and data where possible. For example we have constrained the GVA and its component figures to those published by the ONS Regional Accounts; we have constrained the Taxes estimates to regional figures produced by ONS and trade data for certain products are constrained to other official statistics such as the exports of financial services as reported by the ONS Regionalised estimates of UK Service exports.



Where available, the component parts of the NI SUTs are sourced from National and Official Statistics where Northern Ireland specific data is available including:

- NISRA Annual Business Inquiry;
- NISRA Quarterly Construction Enquiry;
- DAERA Aggregate Agricultural Accounts;
- ONS Regionalised estimates of UK service exports;
- ONS Regional Accounts;
- ONS Country and regional public sector finances revenue tables;
- HMT OSCAR database.

A full list of data sources can be found [here](#).

Using these NI specific sources allows us to supplement the existing high quality top level information with robust, NI specific data at a lower level. This facilitates building a series of accounts from a very granular level, constrained to robust totals, whilst utilising the relative strengths of each input.

The guidance notes that users should be provided with reasons for deviations from exiting figures or methods and so we have stated within this publication why there are differences between our trade figures and other figures published by NISRA. Essentially, external sales figures presented in this document differ to those reported by the NISRA Broad Economy Sales and Exports (BESES) measure due to the SUT framework excluding taxes or duties due from GB residents. In addition, the BESES is collected on an industry basis whereas the SUTs reports trade on a product basis.

Throughout the production of the statistics we have collaborated with topic and methods experts and producers of related statistics and data. These include agricultural statisticians and economists in the Department of Agriculture, Environment and Rural Affairs (DAERA), statisticians in the Scottish Government National Accounts team, statisticians in the ONS National Accounts team and other ONS data providers.

### **Relevance to users**

Statistics producers should maintain and refresh their understanding of the use and potential use of the statistics and data. They should consider the ways in which the statistics might be used and the nature of the decisions that are or could be informed by them.

Over the last two years we have worked closely with known users to ensure that the statistics are meeting their needs. The Department for Economy (DfE) along with Departments in GB have been using the outputs from the SUTs to inform the debate around EU Exit. In addition, the outputs from the project have facilitated, for the first time, NI Government's analytical capability to analyse the economic implications of a policy

decision in all its components through the development of a Computable General Equilibrium (CGE) model<sup>7</sup>.

### *Stakeholders*

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:

- Department for the Economy (DfE);
- Department of Finance (DoF);
- Department of Agriculture, Environment and Rural Affairs (DAERA);
- Department for Exiting the EU (DExEU)
- HM Treasury (HMT);
- The Department for Business, Energy and Industrial Strategy (BEIS);
- The Ulster University Economic Policy Centre (UUEPC);
- The Economic Statistics Centre of Excellence (ESCOE) in the University of Strathclyde; and
- A number of NI economic commentators and consultants.

Furthermore, the SUTs are being used to inform the development of DfE's Tourism Satellite Accounts, which are currently in development and will provide greater insight into tourism in NI.

NISRA intends to publish a number of outputs, from the Input-Output Tables derived from the 2016 SUTs in early 2020. NISRA will publish the SUTs for the 2017 reference year in 2020.

### *Feedback and Timescales*

Over the last year the Economic Accounts Team has held 14 face to face meetings with users and delivered 3 presentations to key stakeholders such as the NICS Economist Profession. Feedback from users has been incorporated where appropriate to do so, for example this publication is providing users with a much higher level of disaggregated data than previously available in response to user feedback. In early 2020 we plan to publish Input-Output Tables derived from the SUTs in response to user requests.

In addition, publications such as this one, which is published on the NISRA website and announced on Twitter, intends to help users become aware of the work undertaken by NISRA in the development of the Economic Accounts for NI.

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<sup>7</sup> Please refer to this article for further information: [Research Bulletin 19/6: Expanding the Analytical Toolkit with CGE Modelling](#).

NISRA is keen to engage and receive informed feedback from users which will improve the quality and value of the statistics. If you wish to join our Economic Accounts mailing list to keep informed of developments or provide any feedback on these statistics please email [economicstats@nisra.gov.uk](mailto:economicstats@nisra.gov.uk).

## **Methodological improvements**

The guidance states that statistics producers should keep up to date with developments that can improve statistics and data. They should also seek to collaborate with other producers, including within the UK and internationally, when developing their statistics, overcoming practical obstacles, and sharing best practice.

To this end, the NISRA Economic Accounts team are members of a number government working/users groups as highlighted below:

- Scottish Input-Output Expert User Group;
- ONS Regional Accounts Government User Group;
- ONS Public Sector Finances Government User Group;
- ONS Regional Short Term Indicators Working Group;
- ONS Annual Purchases Survey / Annual Business Survey / PRODCOM Government User Group;
- ONS Subnational Imports of Services Steering Group; and
- Various EU Exit related working groups.

In addition, the NISRA Economic Accounts team works closely with colleagues in the Scottish Government and ONS National Accounts teams to ensure the sharing of best practice and that we are up to date with developments.

### *Inclusion of the Annual Purchases Survey data*

The most recent [UK National Accounts, Blue Book: 2019](#) the ONS incorporated results from the Annual Purchases Survey, which identifies the purchasing patterns of businesses through the collection of information about their expenditure on energy, services, goods and materials that are used up or transformed by the business activity. We have collaborated closely with ONS to ensure that the tables we have used for the development of the NI SUTs also incorporates this new dataset.

### *Inclusion of HMRC data*

For the first time we have gained access to HMRC microdata which we have used in conjunction with our own BESES data to provide a more robust product breakdown of the BESES industry level imports and exports.

### *More granular data*

The guidance also states that Producers should commit to improve data presentation, enhance insight, and better meet the needs of different types of users and potential users in the dissemination of their statistics and data.

A significant improvement in this release, is the publication of the SUTs at a 62 classification level, where previously we had published at 32 level of disaggregation. It is hoped that users will be able to provide more granular feedback at this disaggregated level which will stimulate debate and feedback from users.

Furthermore, we have made even more detailed tables available to some other Government Departments where legislation allows us to do so. This data has been used to inform EU Exit discussions over recent years.

In due course NISRA plans to have these statistics assessed against the Code of Practice for Official Statistics which is required to gain National Statistics status.

### **Acknowledgments**

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### **For Further Information**

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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.

- **Basic prices** are the preferred method of valuing gross value added and output. They reflect the amount received by the producer for a unit of goods or services minus any taxes payable plus any subsidy receivable on that unit as a consequence of production or sale (that is the cost of production including subsidies). As a result the only taxes included in the basic price are taxes on the production process – such as business rates and any vehicle excise duty paid by businesses – which are not specifically levied on the production of a unit of output. Basic prices exclude any transport charges invoiced separately by the producer.
- **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.
- **Distributors' Trading Margins (DTM)** Transportation, storage and distribution do not change the physical appearance or nature of goods but change their time or place. The value added by the distributive industries is calculated as the difference in value of the good when it started and when it finished being held or moved i.e. the actual receipts from sales less the purchase of goods for resale less recurrent losses due to wastage, theft, etc plus net change in distributors' inventories.

These margins are typically earned by motor trades, wholesale, retail and catering industries and represent, for example, the difference between the price paid by the wholesaler for the good and the price paid by the purchaser. The distributors' trading margins column sums to zero because it simply reallocates the supply of distribution services to the products being distributed.

- **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. The total of **exports minus imports** is known as the **balance of trade**.
- **Government final consumption expenditure** Includes expenditure from both 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.
  - 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.

- 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 (Non-profit institution serving households) Final Consumption Expenditure** is all consumption by institutions which provide goods and services; either free or below the market price.
  - **Purchasers' prices** are the prices paid by purchasers. They include transport costs, trade margins and taxes (unless the taxes are deductible by the purchaser from their own tax liabilities).

### Additional Reading

Further information on the background to the NISRA project to develop the SUTs can be found on our [website](#).

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

- [Eurostat Manual of Supply, Use and Input-Output Tables](#)
- [European System of National and Economic Accounts \(ESA 2010\)](#)
- [ONS Series of National Accounts articles](#)
- [Scottish Government Input-Output Methodology Guide](#)