

Guernsey Annual GVA and GDP Bulletin

2016 (First Estimates)
Issue date 7th December 2017

This is the first bulletin presenting estimates of the size of Guernsey's economy and growth compared to previous years, using (revised method) Gross Domestic Product (GDP) as the aggregate measure and (new method) Gross Value Added (GVA) for analysis by sector.



States of Guernsey
Data and Analysis

1.1 Introduction

This bulletin is the first to present estimates of the size of Guernsey's economy in 2016 and a revised time series for Gross Domestic Product (GDP) for earlier years. It also includes information on Gross Value Added (GVA) by economic sector.

Guernsey (like many other small jurisdictions) measures its economy using an 'income' approach, and has done so since 1965. The methodology used until recently had not been updated since the 1990s. Billet XVIII, October 2015 (see www.gov.gg/billets) highlighted the need to standardise the methodology used to make it more internationally comparable and that to do so some additional data would need to be collected from employers and companies. Drafting the necessary legislation to enable this and implementing the best method for collecting the data in practice, in conversation with businesses, will take several years. As such, some interim improvements have been identified and implemented and these have resulted in notable changes to both the reported size and growth of the economy.

The revised method was audited by Gross Domestic Product statisticians from the Office for National Statistics in early November 2017. They confirmed that the restatement of GDP published in this report represents "a significant improvement in data quality", but that "the use of only the Income approach to measuring GDP will always leave room for further improvements". The full statement is available in Appendix 1.

Economic output, using the income approach, is calculated as the sum of:

- Compensation of employees (which includes remuneration in the form of wages paid to employees plus estimates of pension and social security contributions paid on their behalf by their employer)
- Gross operating surplus (which is equated to company trading profits and public sector trading body surpluses)
- Mixed income (the remuneration and profits of sole traders)
- Income of households (rental income and owner occupied imputed rents, net of maintenance costs and borrowing costs)

You may notice that these headings are quite different to those used in previous publications: wages, profits and 'other'. Improvements to both method and presentation have been made to the figures included in this bulletin to align it with international standards as far as is possible using the data available at present. This includes data that has become available relatively recently, as a result of other projects, such as the Electronic Census and Housing Stock data. See Appendix 1 for more detail on the revised method and how the restated time series differs to figures presented in the past.

The figures presented in this bulletin are not comparable with those published in the past, but are now more comparable with those produced by other jurisdictions.

1.2 Headlines

- Guernsey's total GDP for 2016 is estimated at £2,868 million, which is 0.6% higher than the estimate for 2015 in real terms (constant prices).
- GDP per capita in 2016 is £45,913; 57% greater than in the UK and 14% greater than Jersey GVA per capita for the same year.
- The largest two components of GDP are Compensation of employees, representing 45% of total GDP in 2016, and Gross operating surplus, which represented 38%.
- Guernsey's GVA at basic prices (which equates to GDP before the inclusion of taxes and removal of subsidies on products) is estimated at £2,806 million for 2016.
- The finance sector remains the largest single sector, accounting for 40% of the total GVA (£1,115 million) or 44% of Factor income in 2016. GVA is the total for all sectors including the households sector. Factor income is the total for all industry sectors and excludes the household sector.
- Non-finance industry sectors collectively contributed 52% of the total GVA (£1,450 million) or 56% of Factor Income in 2016. Of this, £208 million (7% of total GVA or 8% of Factor Income) was Legal, Accounting, Auditing, Office Administrative and other primarily finance industry support activities.
- Households contributed 9% of the Island's total GVA in 2016.
- Finance Sector GVA remained relatively static between 2015 and 2016 in real terms. Several non-finance sectors recorded growth, most notably Professional, business, scientific and technical activities and Water supply, sewerage, waste management and remediation activities. Conversely Real estate activities and Construction saw GVA decline between 2015 and 2016. Households also saw a decline, matching trends in residential property rental and purchase prices at this time.
- Productivity (Factor income per worker) was £87,822 per worker in 2016; a 1.1% decrease in real terms from 2015. The Finance sector had the highest productivity, at £164,824 per worker in 2016, whilst Agriculture, horticulture, fishing and quarrying had the lowest, at £26,240 per worker.

Figure 1.2.1 Annual percentage change in GDP (at current prices)

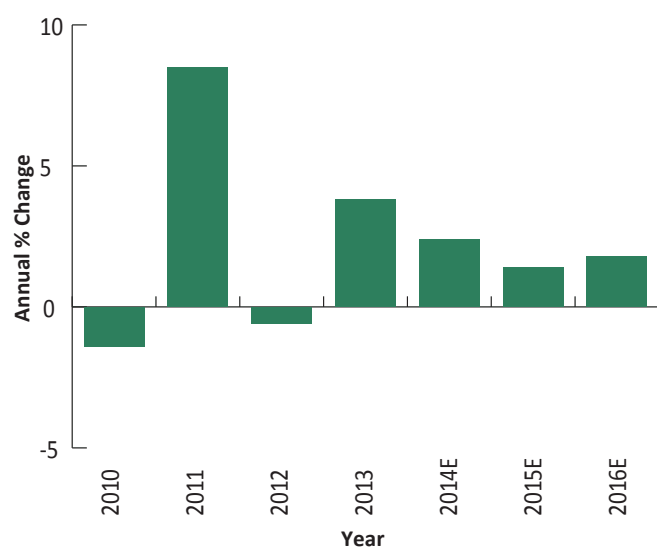
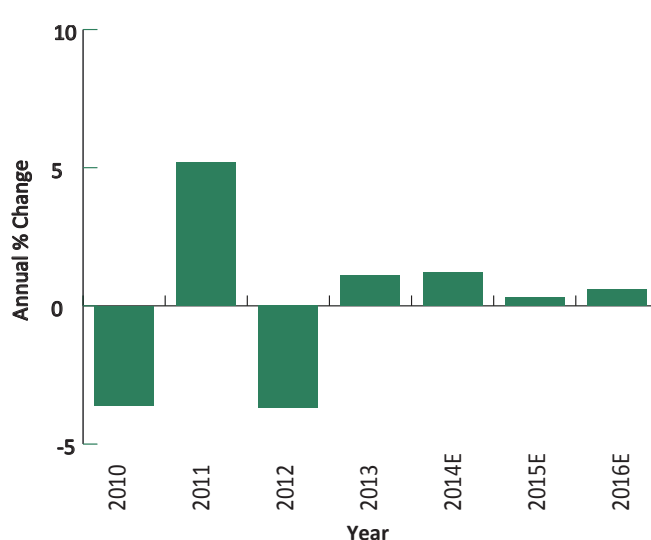


Figure 1.2.2 Annual percentage change in GDP (at constant prices)



2.1 GDP

Table 2.1.1 GDP Market

	GDP (£ millions, current prices)	Annual % change in current GDP	GDP (£ millions, constant prices)	Annual % change in constant GDP
2009	2,458	-	2,845	-
2010	2,423	-1.4	2,743	-3.6
2011	2,629	8.5	2,885	5.2
2012	2,615	-0.6	2,780	-3.7
2013	2,715	3.8	2,810	1.1
2014E	2,779	2.4	2,843	1.2
2015E	2,817	1.4	2,850	0.3
2016E	2,868	1.8	2,868	0.6

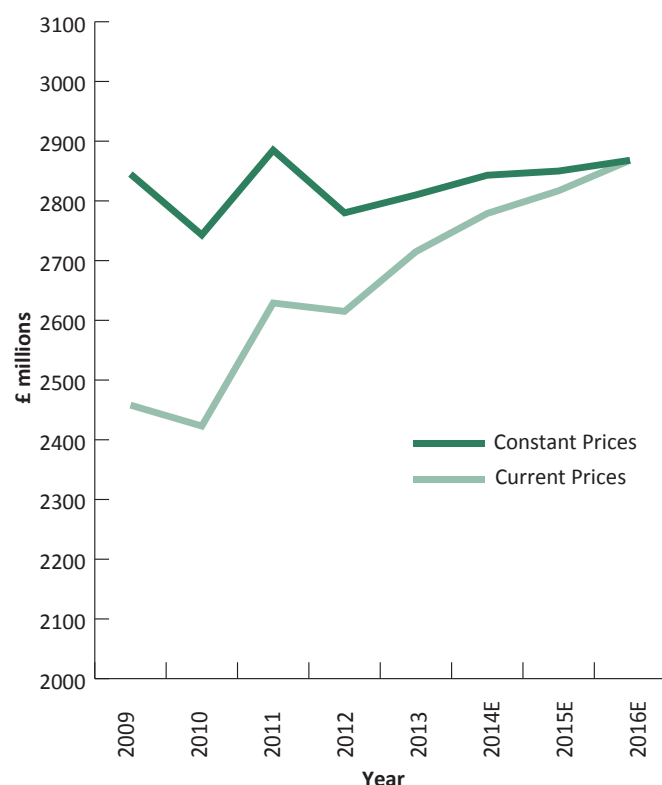
Estimated total GDP for 2016 in Guernsey is £2,868 million, which is 1.8% higher than 2015 in current prices (nominal terms), as shown in **Table 2.1.1** and **Figure 2.1.1**.

In nominal terms, GDP in Guernsey has grown year on year since 2012.

Guernsey GDP is also calculated on the basis of constant prices (in real terms), as shown in **Table 2.1.1** and **Figure 2.1.1**. Estimates of GDP are reflatd using the all items Retail Price Index (RPI) in Guernsey. This measure can be more informative when considering trends in economic performance through time, as it removes the effects of price inflation.

Estimated total GDP in Guernsey in 2016 was 0.6% higher than 2015 in real terms (constant prices).

Figure 2.1.1 GDP



In constant prices, the level of total GDP in 2016 was £17 million below the peak seen in 2011.

In real terms, GDP in Guernsey has also grown year on year since 2012.

2.2 GDP per capita

In 2016 GDP per capita (per head of population) was estimated to be £45,913 in current prices, which was 1.6% higher than 2015 in current prices (nominal terms), as shown in **Table 2.2.1** and **Figure 2.2.1**.

In nominal terms, GDP per capita in Guernsey has grown year on year since 2012.

Guernsey GDP per capita is also calculated on the basis of constant prices (in real terms), as shown in **Table 2.2.1** and **Figure 2.2.1**. This measure can be more informative when considering trends in economic performance through time, as it removes the effect of price inflation.

In 2016, estimated total GDP per capita was 0.4% higher than 2015 in real terms (constant prices), although below the peak recorded in 2011 of £45,964.

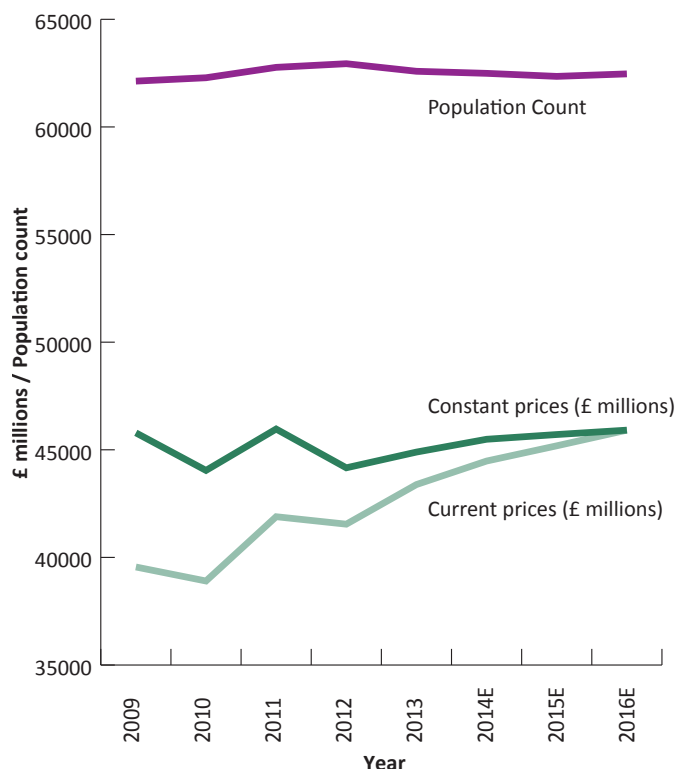
In real terms, GDP per capita in Guernsey has also grown year on year since 2012.

Throughout this time period Guernsey's population has been relatively stable, reaching a high of 62,938 in 2012 before declining to 62,465 in 2016 as shown in **Figure 2.2.1**.

Table 2.2.1 GDP per capita

	GDP per capita (£s, current prices)	Annual % change in current GDP per capita	GDP per capita (£s, constant prices)	Annual % change in constant GDP per capita
2009	39,555	-	45,789	-
2010	38,904	-1.6	44,042	-3.8
2011	41,891	7.7	45,964	4.4
2012	41,544	-0.8	44,163	-3.9
2013	43,385	4.4	44,894	1.7
2014E	44,477	2.5	45,489	1.3
2015E	45,185	1.6	45,709	0.5
2016E	45,913	1.6	45,913	0.4

Figure 2.2.1 GDP per capita

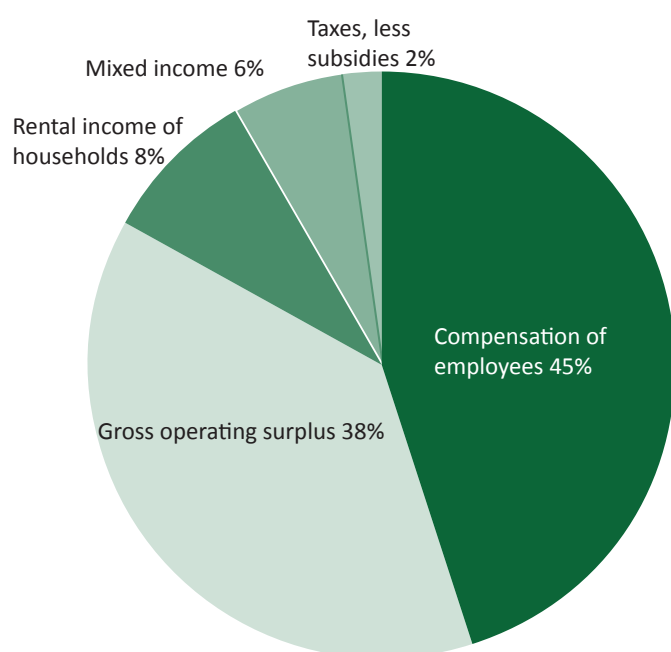


2.3 GDP components

Table 2.3.1 GDP Components (£millions, current prices)

	2013	2104E	2015E	2016E
Compensation of employees	1,196	1,216	1,264	1,297
Gross operating surplus	1,063	1,107	1,099	1,092
Mixed income	149	155	154	176
Rental income of households	250	244	243	241
GVA Basic	2,658	2,723	2,761	2,806
Taxes, less subsidies (on products)	+ 57	+ 56	+ 56	+ 62
GDP	2,715	2,779	2,817	2,868

Figure 2.3.1 GDP Components 2016



GDP comprises the following components; Compensation of employees (remuneration in the form of wages paid to employees plus estimates of pension and social security contributions paid on their behalf by their employer), Gross operating surplus (which is equated to company trading profits and public sector trading body surpluses), Mixed income (the remuneration and profits of sole traders), Income of households (generated from the ownership of property and including owner occupiers' imputed rent, net of maintenance and borrowing costs and rental income of private households) and Taxes (including excise and import duty and document duty) less subsidies.

The largest components of GDP in 2016 were Compensation of employees, representing 45%, £1,297 million of total GDP and Gross operating surplus, which represented 38%, £1,092 million. Other components included Mixed income, which represented 6% (£176 million), Households, which represented 8% (£241 million) and Taxes less subsidies, which represented 2% (£62 million) as shown in **Table 2.3.1** and **Figure 2.3.1**.

In current prices (nominal terms) between 2015 and 2016 Compensation of employees increased by 3%, whilst Gross operating surplus declined by 1%. Overall there was a £51 million increase in GDP.

3.1 GVA Basic

GVA Basic comprises the following components; Compensation of employees (remuneration in the form of wages paid to employees plus estimates of pension and social security contributions paid on their behalf by their employer), Gross operating surplus (which is equated to company trading profits and public sector trading body surpluses), Mixed income (the remuneration and profits of sole traders), Income of households (generated from the ownership of property). GVA Basic equates to GDP before the inclusion of taxes on products and removal of subsidies on products.

For 2016, GVA is estimated to be £2,806 million in current prices which is 1.6% higher than the estimate for 2015 in current prices (nominal terms), as shown in **Table 3.1.1** and **Figure 3.1.1**.

In nominal terms, GVA Basic in Guernsey has grown year on year since 2012.

Guernsey GVA Basic is also calculated on the basis of constant prices (in real terms), as shown in **Table 3.1.1** and **Figure 3.1.1**. This measure can be more informative when considering trends in economic performance through time, as it removes the effect of price inflation.

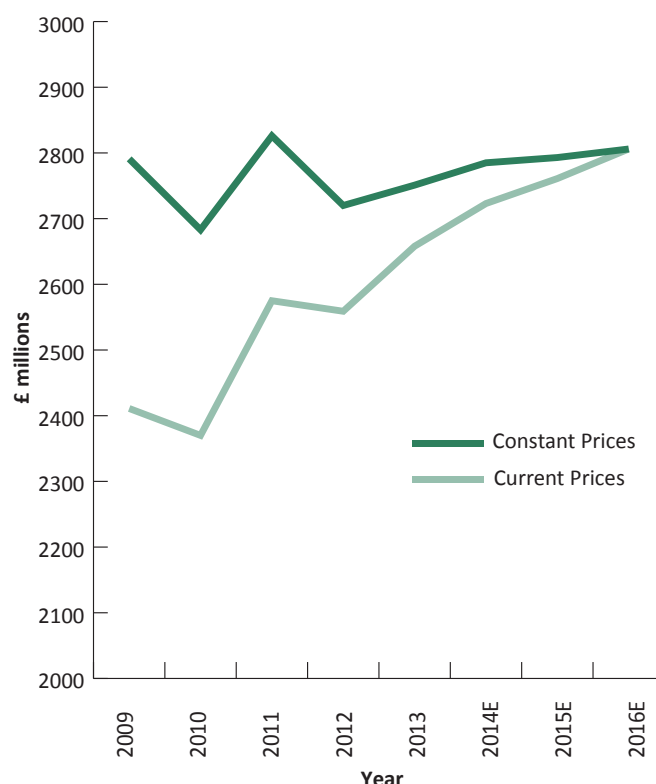
In 2016 estimated total GVA Basic was 0.5% higher than 2015 in real terms (constant prices), although still below the peak recorded in 2011 of £2,826 million.

In real terms, GVA in Guernsey has also grown year on year since 2012.

Table 3.1.1 GVA Basic

	GVA (£ millions, current prices)	Annual % change in current GVA	GVA (£ millions, constant prices)	Annual % change in constant GVA
2009	2,411	-	2,791	-
2010	2,370	-1.7	2,683	-3.9
2011	2,575	8.6	2,826	5.3
2012	2,559	-0.6	2,720	-3.7
2013	2,658	3.9	2,751	1.1
2014E	2,723	2.4	2,785	1.2
2015E	2,761	1.4	2,793	0.3
2016E	2,806	1.6	2,806	0.5

Figure 3.1.1 GVA Basic



3.2 GVA by sector - largest contributors

Figure 3.2.1 GVA by sector in 2016 (constant prices)

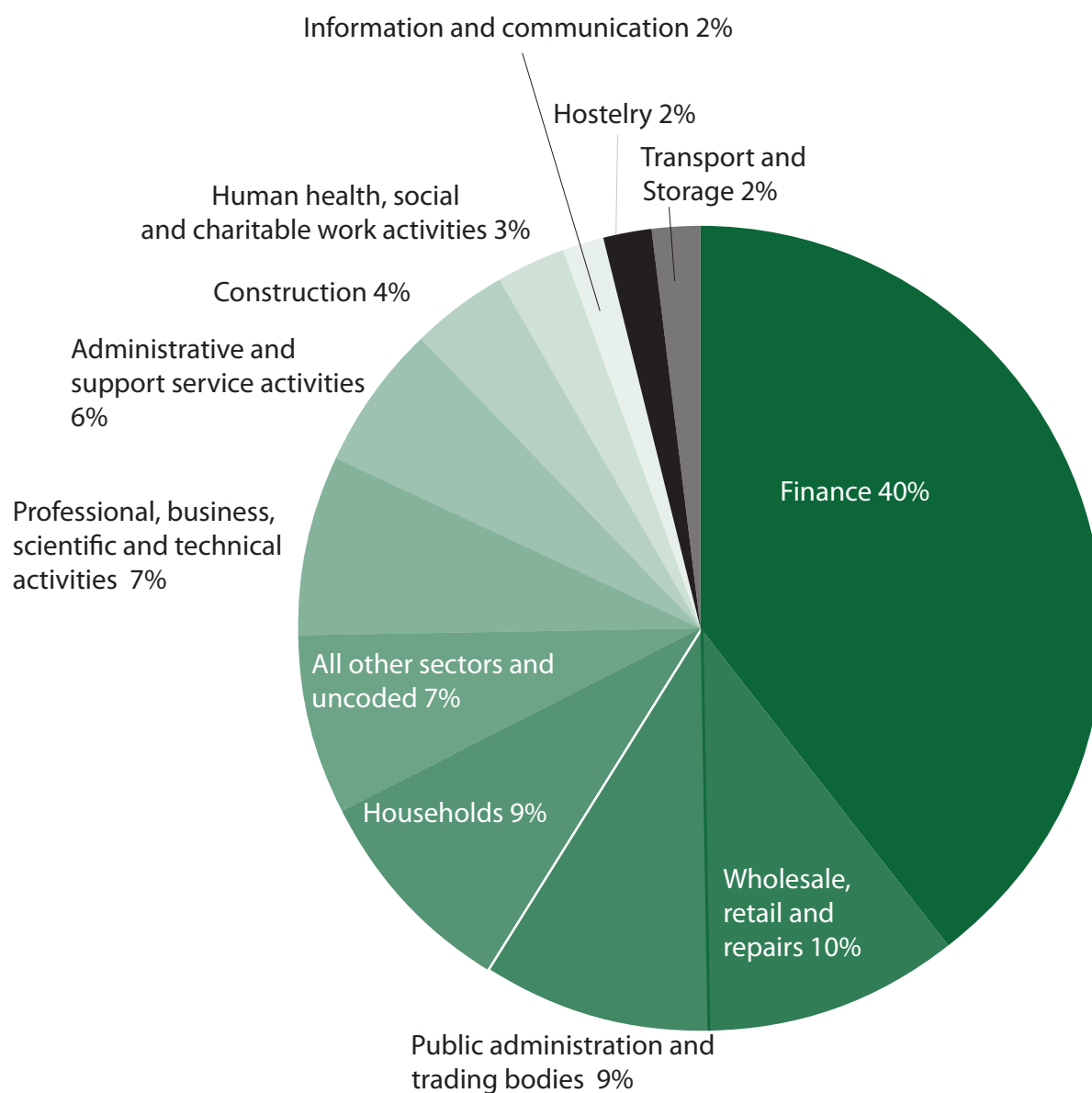


Figure 3.2.1 illustrates GVA in 2016 for Guernsey's largest sectors. The Finance sector was the largest component of GVA in 2016, accounting for 40% of GVA. Wholesale, retail and repairs and Public administration were the next largest sectors, accounting for 10% and 9% of GVA respectively. Households were the fourth largest sector in 2016, accounting for 9% of GVA. In previous publications Households were included within the 'Other' component, but were not presented as a sector. By presenting data specifically for Households this enables comparison with other jurisdictions.

3.2 GVA by sector - largest contributors

Figure 3.2.2 GVA by sector 2011 (constant prices)

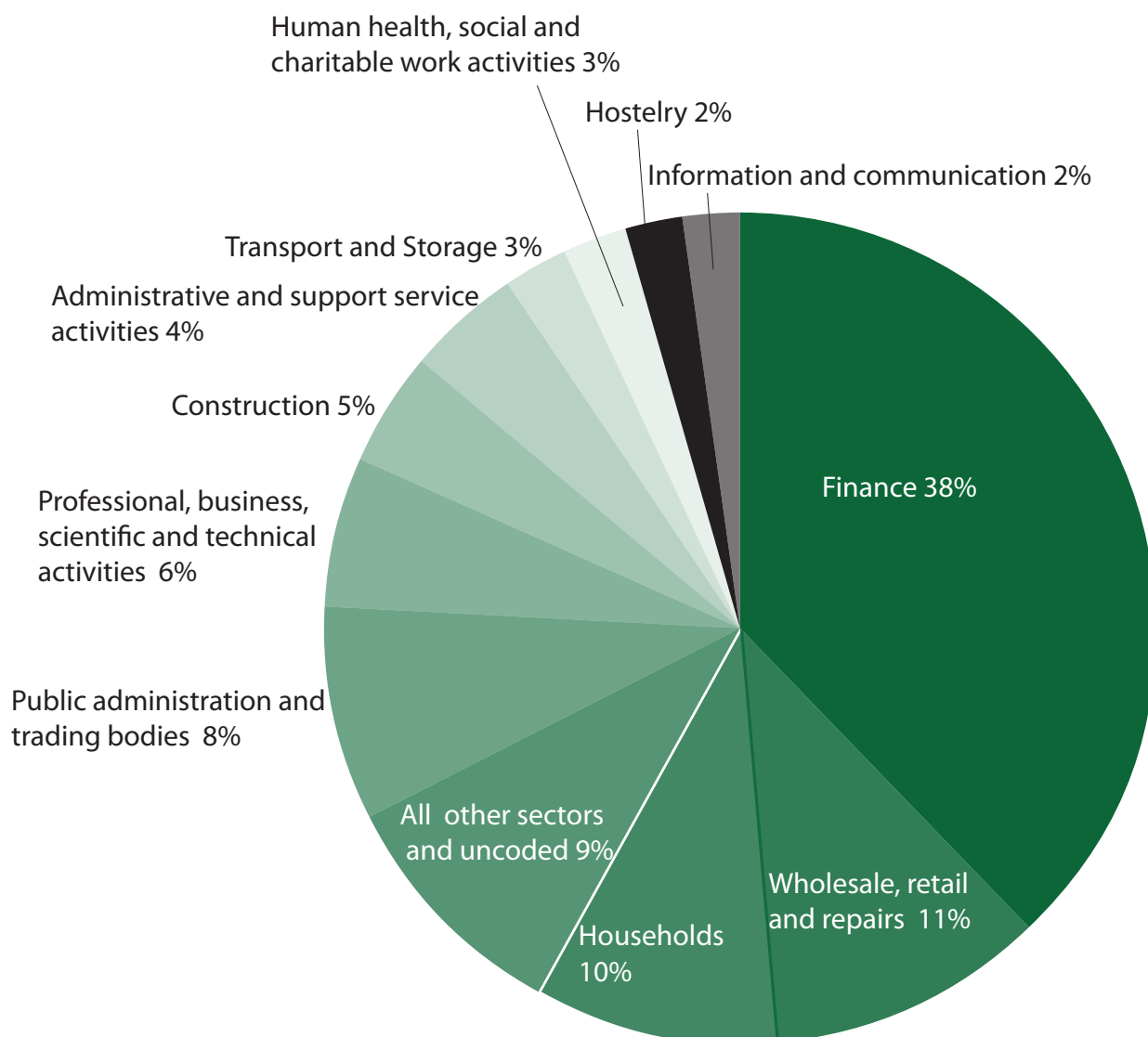


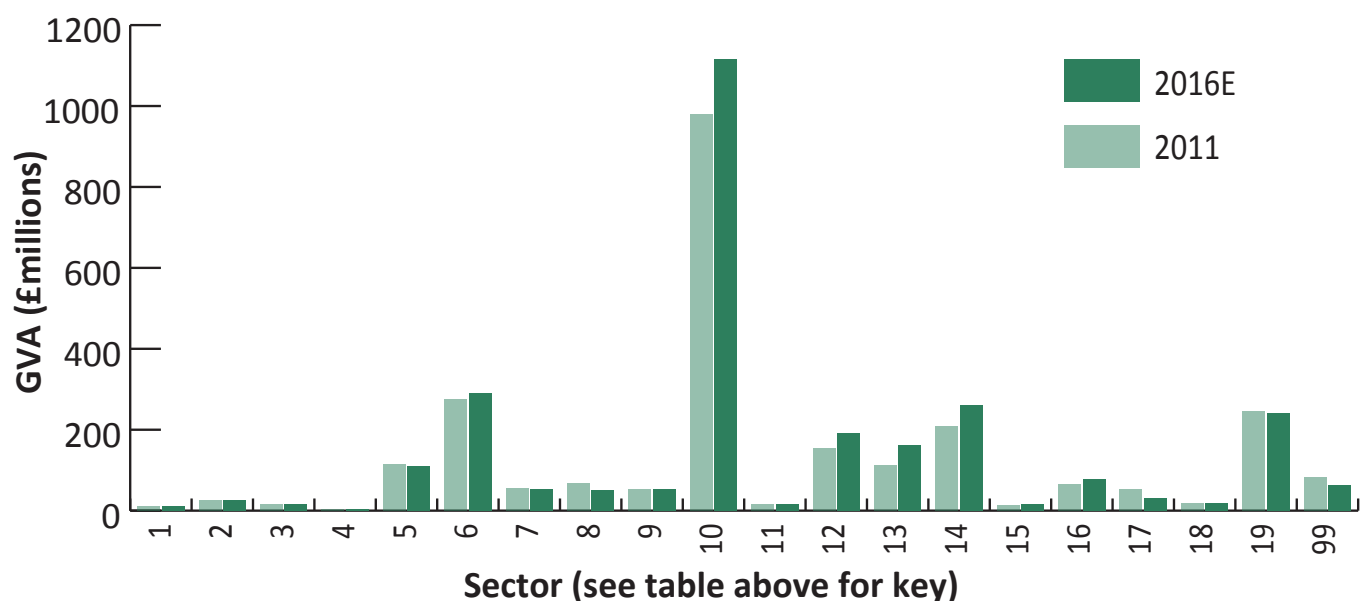
Figure 3.2.2 illustrates GVA for Guernsey's largest sectors five years ago, in 2011. The Finance sector was also the largest component of GVA in 2011, although it represented a smaller proportion of Guernsey's GVA than in 2016. Wholesale, retail and repairs was the second largest sector, accounting for 11% of GVA. Households was the third largest sector in 2011, accounting for 10% of GVA.

3.3 GVA by sector - all

Table 3.3.1 GVA by sector (£millions, current prices)

		2011	2012	2013	2014E	2015E	2016E
1	Agriculture, horticulture, fishing and quarrying	12	12	12	10	11	12
2	Manufacturing	26	26	27	25	26	26
3	Electricity, gas, steam and air conditioning supply	16	16	17	17	15	16
4	Water supply, sewerage, waste management and remediation activities	4	3	4	3	3	3
5	Construction	115	113	147	119	114	111
6	Wholesale, retail and repairs	276	236	283	282	288	290
7	Hostelry	56	49	49	49	51	52
8	Transport and storage	67	65	41	46	49	50
9	Information and communication	52	52	56	57	53	53
10	Finance	979	1,059	1,064	1,102	1,106	1,115
11	Real estate activities	16	18	17	20	17	16
12	Professional, business, scientific and technical activities	154	154	158	158	167	192
13	Administrative and support service activities	112	110	118	136	159	163
14	Public administration and trading bodies	210	219	221	225	253	260
15	Education	13	14	14	15	16	17
16	Human health, social and charitable work activities	66	68	69	72	74	77
17	Arts, entertainment and recreation	53	15	15	22	29	31
18	Other service activities	19	19	18	19	18	18
19	Households	246	245	250	245	243	242
99	Uncoded	84	66	79	101	69	64
	GVA Basic	2,575	2,559	2,658	2,723	2,761	2,806

Figure 3.3.1 GVA by sector (£millions, current prices)



3.3 GVA by sector - all

Table 3.3.2 Annual Percentage Change in GVA by sector (% , current prices)

		2012	2013	2014E	2015E	2016E	Overall % change 2011 -2016
1	Agriculture, horticulture, fishing and quarrying	-1.5	-2.3	-11.4	5.7	5.8	-4.7%
2	Manufacturing	1.8	3.4	-6.7	2.0	1.5	1.7%
3	Electricity, gas, steam and air conditioning supply	-0.9	6.0	3.2	-11.4	7.0	2.9%
4	Water supply, sewerage, waste management and remediation activities	-9.2	21.2	-24.3	2.2	12.3	-4.4%
5	Construction	-1.7	29.6	-18.6	-4.3	-2.7	-3.5%
6	Wholesale, retail and repairs	-14.3	19.7	-0.2	2.1	0.7	5.2%
7	Hostelry	-12.1	0.0	1.0	2.5	2.0	-7.2%
8	Transport and storage	-3.2	-37.1	13.0	5.6	1.7	-26.0%
9	Information and communication	1.7	6.6	1.6	-7.3	0.6	2.7%
10	Finance	8.1	0.5	3.5	0.4	0.7	13.8%
11	Real estate activities	8.4	-6.1	18.3	-11.9	-10.6	-5.2%
12	Professional, business, scientific and technical activities	-0.1	2.6	-0.1	5.6	15.1	24.5%
13	Administrative and support service activities	-1.9	7.6	14.6	17.1	2.9	45.7%
14	Public administration and trading bodies	4.3	0.9	1.9	12.4	2.9	24.1%
15	Education	4.4	3.4	8.4	5.4	3.1	27.3%
16	Human health, social and charitable work activities	4.0	1.4	4.2	2.3	3.7	16.5%
17	Arts, entertainment and recreation	-72.0	0.3	48.4	32.6	7.1	-40.8%
18	Other service activities	-3.1	-2.3	1.1	-1.4	-1.9	-7.4%
19	Households	-0.4	2.2	-2.3	-0.5	-0.7	-1.8%
99	Uncoded	-21.3	19.4	27.9	-31.9	-7.3	-24.1%
	GVA Basic	-0.6	3.9	2.4	1.4	1.6	9.0%

Ten of the nineteen economic sectors have recorded an increase in GVA in current prices between 2011 and 2016, as shown in [Table 3.3.1](#) and [Figure 3.3.1](#). The Finance sector, recorded the largest GVA in 2016, at £1,115 million, whilst the Water supply, sewerage, waste management and remediation sector recorded the lowest GVA in 2016 at £3 million.

Between 2015 and 2016, the Professional, business, scientific and technical sector recorded the highest growth, at 15%, whilst the Real estate sector and Construction sectors recorded an 11% and 3% decline in GVA respectively, as shown in [Table 3.3.2](#). The Finance sector, the largest single sector in terms of contribution to GVA in 2016, increased by 0.7% compared to 2015.

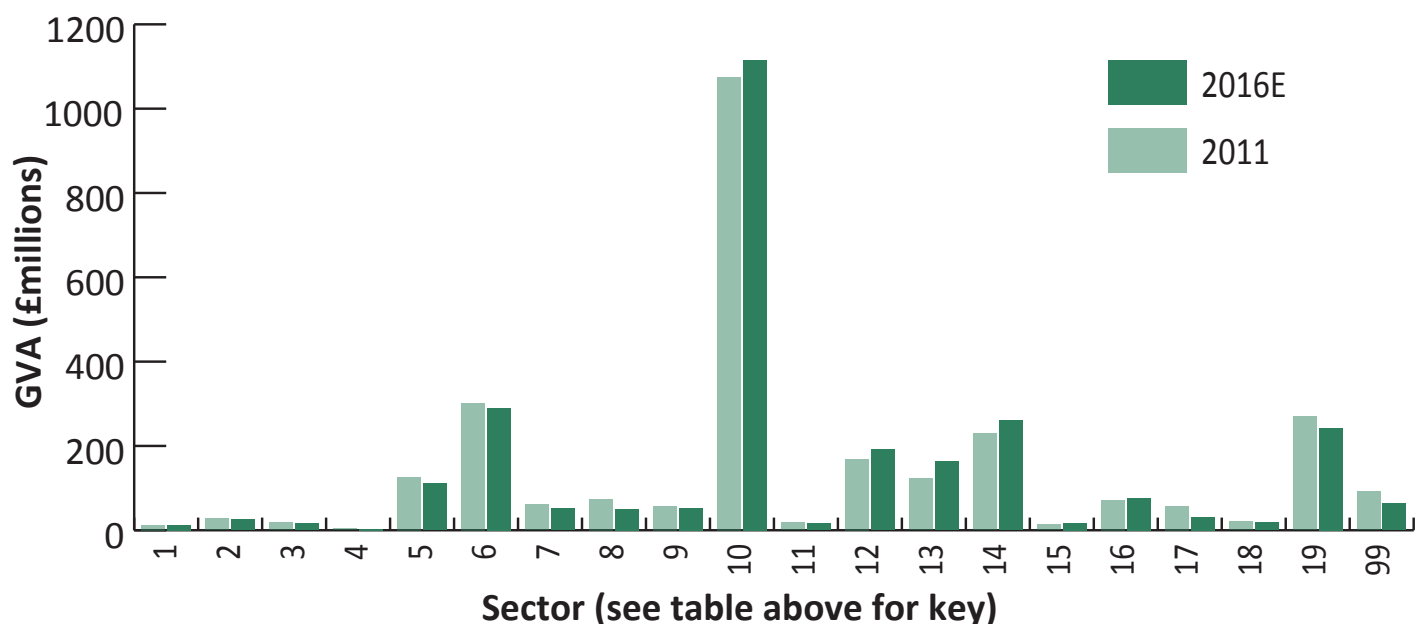
Over the past 5 years, 2011 to 2016, overall change in GVA was highest in the Administrative and support service activities sector, at 46% and lowest in the Arts, entertainment and recreation sector at -41%.

3.3 GVA by sector - all

Table 3.3.3 GVA by sector (£millions, constant prices)

		2011	2012	2013	2014E	2015E	2016E
1	Agriculture, horticulture, fishing and quarrying	13	13	12	11	11	12
2	Manufacturing	28	28	28	26	26	26
3	Electricity, gas, steam and air conditioning supply	18	17	17	18	16	16
4	Water supply, sewerage, waste management and remediation activities	4	3	4	3	3	3
5	Construction	126	120	152	122	116	111
6	Wholesale, retail and repairs	302	251	292	288	291	290
7	Hostelry	61	52	51	51	51	52
8	Transport and storage	74	69	42	47	49	50
9	Information and communication	57	56	58	58	53	53
10	Finance	1,075	1,126	1,101	1,127	1,119	1,115
11	Real estate activities	18	19	17	20	18	16
12	Professional, business, scientific and technical activities	169	164	163	161	169	192
13	Administrative and support service activities	123	117	122	139	161	163
14	Public administration and trading bodies	230	232	228	230	256	260
15	Education	14	15	15	16	16	17
16	Human health, social and charitable work activities	72	73	72	74	75	77
17	Arts, entertainment and recreation	58	16	15	23	30	31
18	Other service activities	21	20	19	19	19	18
19	Households	270	261	259	250	246	242
99	Uncoded	92	70	82	103	69	64
	GVA Basic	2,826	2,720	2,751	2,785	2,793	2,806

Figure 3.3.3 GVA by sector (£millions, constant prices)



3.3 GVA by sector - all

Table 3.3.4 Annual Percentage Change in GVA by sector (% , constant prices)

		2012	2013	2014E	2015E	2016E	Overall % change 2011 -2016
1	Agriculture, horticulture, fishing and quarrying	-4.6	-4.9	-12.5	4.5	4.6	-13.1%
2	Manufacturing	-1.4	0.7	-7.8	0.9	0.3	-7.3%
3	Electricity, gas, steam and air conditioning supply	-4.0	3.2	2.0	-12.3	5.8	-6.2%
4	Water supply, sewerage, waste management and remediation activities	-12.0	18.0	-25.2	1.1	11.0	-12.8%
5	Construction	-4.8	26.1	-19.5	-5.3	-3.8	-12.0%
6	Wholesale, retail and repairs	-17.0	16.5	-1.4	0.9	-0.4	-4.1%
7	Hostelry	-14.9	-2.6	-0.1	1.4	0.8	-15.4%
8	Transport and storage	-6.2	-38.7	11.7	4.4	0.6	-32.6%
9	Information and communication	-1.5	3.8	0.4	-8.4	-0.5	-6.4%
10	Finance	4.7	-2.2	2.3	-0.7	-0.4	3.7%
11	Real estate activities	5.0	-8.6	16.9	-12.9	-11.7	-13.6%
12	Professional, business, scientific and technical activities	-3.2	-0.2	-1.3	4.4	13.8	13.4%
13	Administrative and support service activities	-5.0	4.8	13.3	15.8	1.7	32.8%
14	Public administration and trading bodies	1.1	-1.8	0.8	11.1	1.7	13.1%
15	Education	1.2	0.7	7.2	4.3	1.9	16.0%
16	Human health, social and charitable work activities	0.7	-1.3	3.0	1.2	2.5	6.2%
17	Arts, entertainment and recreation	-72.8	-2.4	46.7	31.1	5.9	-46.0%
18	Other service activities	-6.2	-4.8	-0.1	-2.5	-3.0	-15.6%
19	Households	-3.5	-0.6	-3.5	-1.6	-1.8	-10.5%
99	Uncoded	-23.7	16.2	26.4	-32.7	-8.4	-30.8%
	GVA Basic	-3.7	1.1	1.2	0.3	0.5	-0.7%

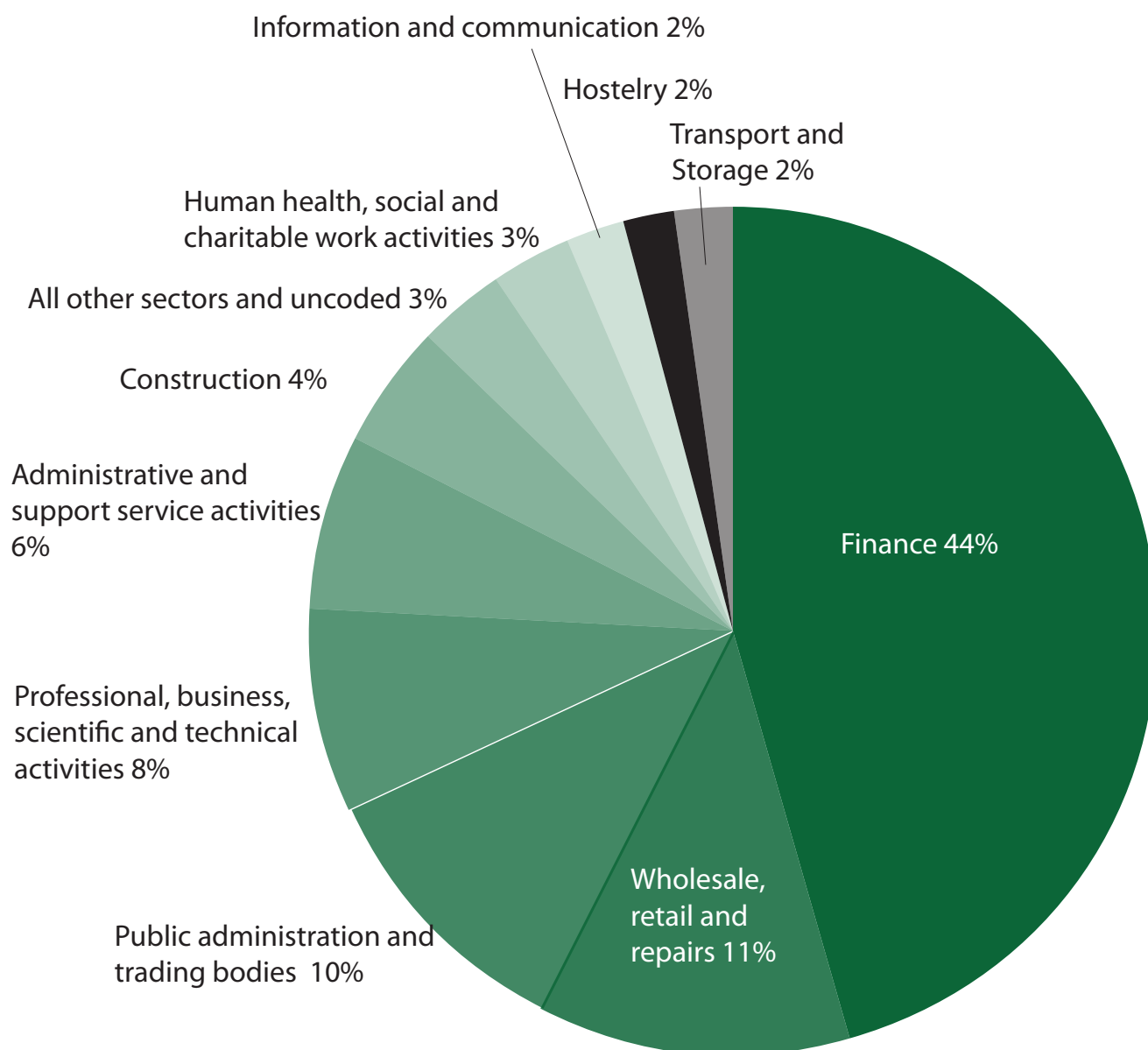
In constant prices, six of the nineteen economic sectors have recorded an increase in GVA between 2011 and 2016, as shown in [Table 3.3.3](#) and [Figure 3.3.3](#).

Between 2015 and 2016, the Professional, business, scientific and technical sector recorded the highest growth in constant prices, at 14%, whilst the Real estate sector and Construction sectors recorded a 12% and 4% decline in GVA respectively, as shown in [Table 3.3.4](#). The Finance sector, the largest single sector in terms of contribution to GVA in 2016, decreased by 0.4% in real terms compared to 2015.

Over the past 5 years, 2011 to 2016, overall change in GVA at constant prices was highest in the Administrative and support service activities sector, at 33% and lowest in the Arts, entertainment and recreation sector at -46%. In real terms, GVA grew within the Finance sector by 3.7% during the period 2011 to 2016.

3.4 Factor income by sector - largest contributors

Figure 3.4.1 Factor income by sector (2016)



Factor income is the total GVA for all the industry sectors excluding the Households sector. **Figure 3.4.1** illustrates the largest contributors to Factor incomes by sector. The Finance sector made the largest contribution to GVA in 2016, at 44%, followed by Wholesale retail and repairs at 11% and Public administration and trading bodies at 10%.

3.4 Factor income by sector - largest contributors

Figure 3.4.2 Factor income by sector (2011)

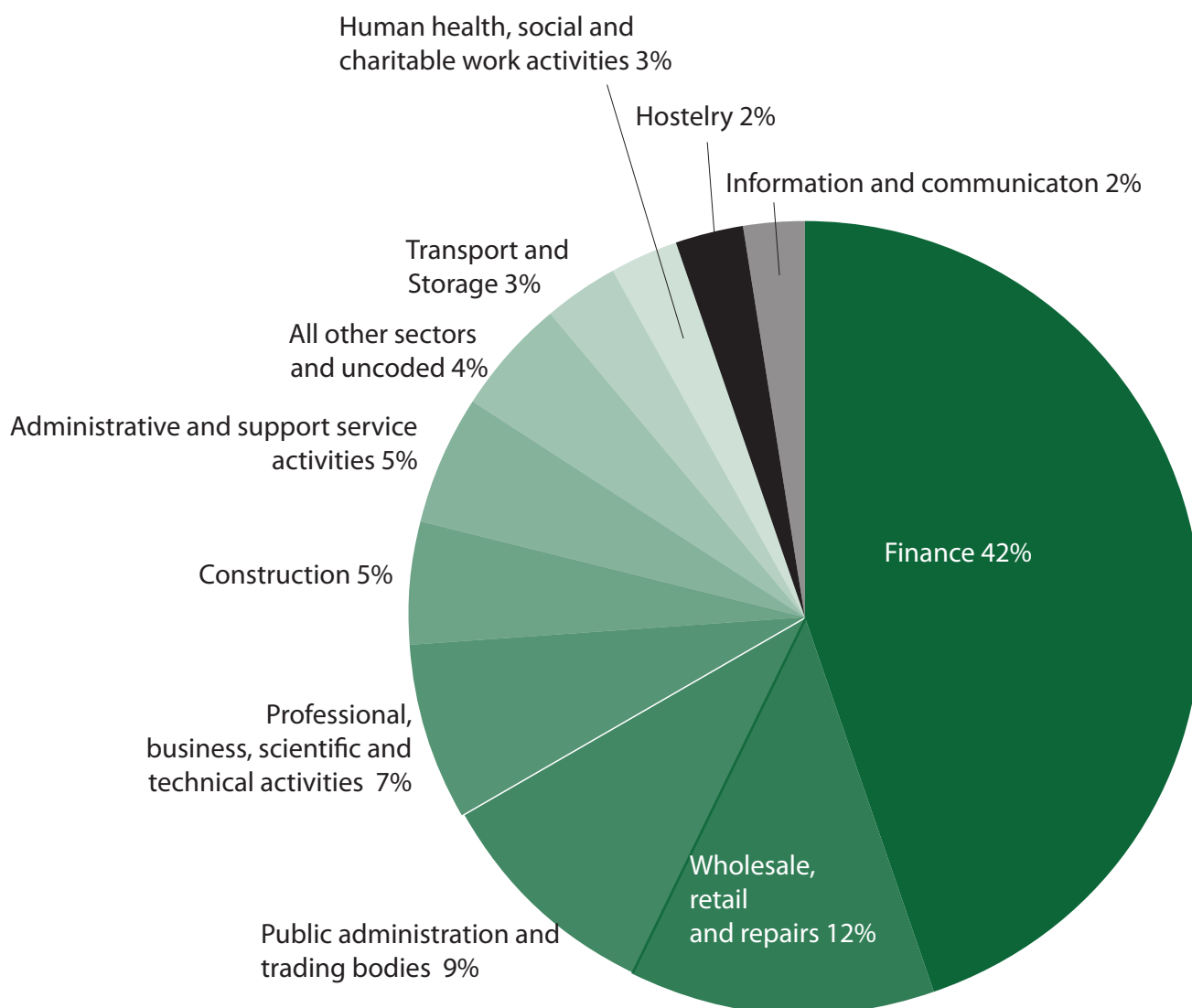


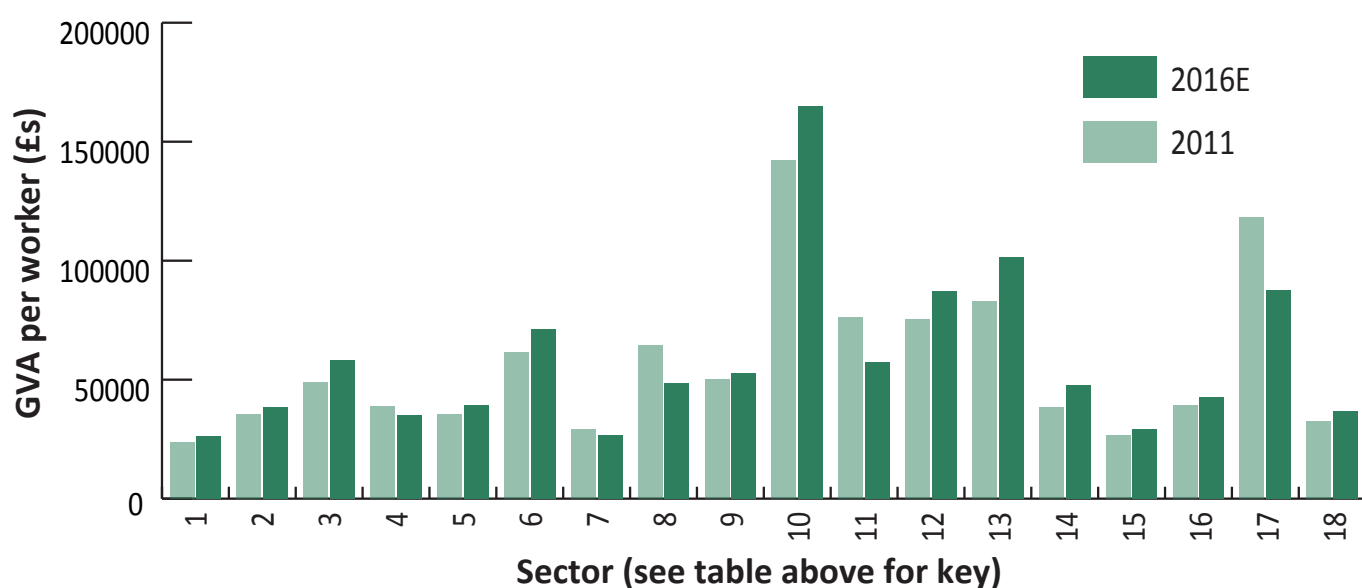
Figure 3.4.2 illustrates the largest contributors to Factor incomes five years ago, in 2011. The Finance sector was also the largest component in 2011, although it represented a slightly smaller proportion (42%) than in 2016. Wholesale, retail and repairs was the second largest sector, accounting for 12% of Factor income. Public administration and trading bodies was the third largest sector in 2011, accounting for 9%.

3.5 Factor income per worker by sector

Table 3.5.1 Factor income per worker by sector (£s, current prices)

		2011	2012	2013	2014E	2015E	2016E
1	Agriculture, horticulture, fishing and quarrying	23,683	24,831	25,501	22,000	24,401	26,240
2	Manufacturing	35,389	36,847	38,053	36,133	37,417	38,525
3	Electricity, gas, steam and air conditioning supply	48,862	51,700	54,465	57,126	52,701	58,203
4	Water supply, sewerage, waste management and remediation activities	38,667	36,701	43,489	28,225	34,809	35,111
5	Construction	35,706	36,488	44,428	35,941	38,484	39,470
6	Wholesale, retail and repairs	61,496	52,762	69,470	71,298	70,515	71,232
7	Hostelry	29,210	26,272	25,691	24,336	26,103	26,509
8	Transport and storage	64,493	62,083	41,683	48,492	54,001	48,608
9	Information and communication	50,236	49,551	58,620	58,498	51,750	52,587
10	Finance	142,084	155,600	157,767	167,842	164,625	164,824
11	Real estate activities	76,431	76,722	72,971	82,678	60,997	57,328
12	Professional, business, scientific and technical activities	75,338	75,917	77,794	79,248	79,647	87,187
13	Administrative and support service activities	82,887	75,689	82,498	95,064	96,197	101,473
14	Public administration and trading bodies	38,439	39,536	40,573	41,826	46,817	47,853
15	Education	26,627	26,137	27,243	27,697	29,524	29,023
16	Human health, social and charitable work activities	39,191	39,453	39,164	40,064	42,001	42,701
17	Arts, entertainment and recreation	118,345	34,262	37,580	59,887	85,456	87,446
18	Other service activities	32,643	31,560	28,632	32,269	36,854	36,685

Figure 3.5.1 Factor income per worker by sector (£s, current prices)



3.5 Factor income per worker by sector

Table 3.5.2 Annual Percentage Change in Factor income per worker by sector (% , current prices)

		2012	2013	2014E	2015E	2016E	Overall % change 2011 -2016
1	Agriculture, horticulture, fishing and quarrying	4.8	2.7	-13.7	10.9	7.5	10.8
2	Manufacturing	4.1	3.3	-5.0	3.6	3.0	8.9
3	Electricity, gas, steam and air conditioning supply	5.8	5.3	4.9	-7.7	10.4	19.1
4	Water supply, sewerage, waste management and remediation activities	-5.1	18.5	-35.1	23.3	0.9	-9.2
5	Construction	2.2	21.8	-19.1	7.1	2.6	10.5
6	Wholesale, retail and repairs	-14.2	31.7	2.6	-1.1	1.0	15.8
7	Hostelry	-10.1	-2.2	-5.3	7.3	1.6	-9.2
8	Transport and storage	-3.7	-32.9	16.3	11.4	-10.0	-24.6
9	Information and communication	-1.4	18.3	-0.2	-11.5	1.6	4.7
10	Finance	9.5	1.4	6.4	-1.9	0.1	16.0
11	Real estate activities	0.4	-4.9	13.3	-26.2	-6.0	-25.0
12	Professional, business, scientific and technical activities	0.8	2.5	1.9	0.5	9.5	15.7
13	Administrative and support service activities	-8.7	9.0	15.2	1.2	5.5	22.4
14	Public administration and trading bodies	2.9	2.6	3.1	11.9	2.2	24.5
15	Education	-1.8	4.2	1.7	6.6	-1.7	9.0
16	Human health, social and charitable work activities	0.7	-0.7	2.3	4.8	1.7	9.0
17	Arts, entertainment and recreation	-71.0	9.7	59.4	42.7	2.3	-26.1
18	Other service activities	-3.3	-9.3	12.7	14.2	-0.5	12.4

Factor incomes per worker are a measure of the total output or GVA of each sector expressed in relation to the number of employees and self employed within each sector.

With the exception of Transport and storage, Hostelry, Water supply, sewerage, waste management, and remediation activities, Real estate activities and Arts, entertainment and recreation sectors, all other economic sectors have recorded an increase in factor incomes per worker in current prices between 2011 and 2016, as shown in [Table 3.5.1](#) and [Figure 3.5.1](#). The Finance sector had the largest factor income per worker in 2016, at £164,824 per worker. The Agriculture, horticulture, fishing and quarrying sector recorded the lowest factor income per worker in 2016, at £26,240.

Between 2015 and 2016, the Electricity, gas, steam and air conditioning supply sector recorded the highest growth in factor incomes per worker, at 10.4%, whilst the Transport and storage sector recorded a 10% decline in factor incomes per worker in 2016, as shown in [Table 3.3.2](#). The Finance sector, the largest single sector in terms of contribution to GVA in 2016, recorded a 0.1% increase in factor incomes between 2015 and 2016.

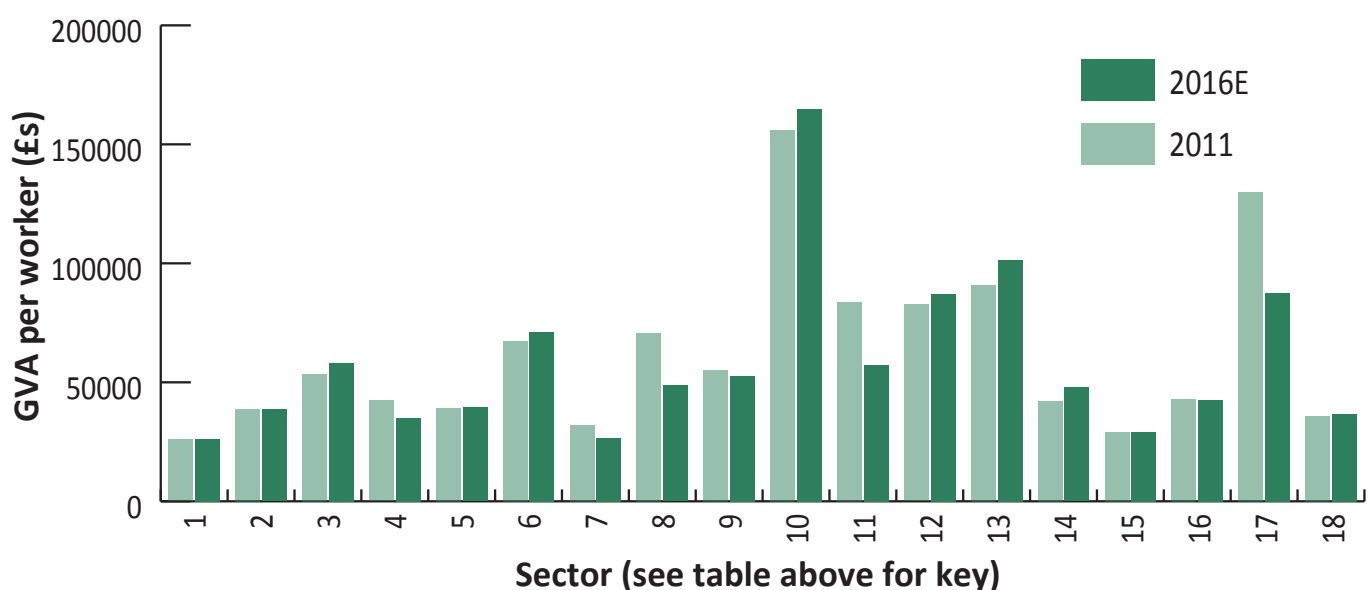
Over the past 5 years, between 2011 and 2016, overall change in factor incomes was highest in the Public administration and trading bodies sector, at 25%, and lowest in the Arts, entertainment and recreation sector at -26%, as shown in [Table 3.5.2](#).

3.5 Factor income per worker by sector

Table 3.5.3 Factor income per worker by sector (£s, constant prices)

		2011	2012	2013	2014E	2015E	2016E
1	Agriculture, horticulture, fishing and quarrying	25,985	26,396	26,388	22,500	24,684	26,240
2	Manufacturing	38,831	39,169	39,377	36,956	37,851	38,525
3	Electricity, gas, steam and air conditioning supply	53,614	54,958	56,360	58,426	53,313	58,203
4	Water supply, sewerage, waste management and remediation activities	42,427	39,014	45,001	28,867	35,213	35,111
5	Construction	39,178	38,788	45,973	36,759	38,931	39,470
6	Wholesale, retail and repairs	67,475	56,087	71,886	72,921	71,333	71,232
7	Hostelry	32,050	27,928	26,585	24,890	26,406	26,509
8	Transport and storage	70,764	65,995	43,133	49,595	54,627	48,608
9	Information and communication	55,121	52,674	60,659	59,829	52,350	52,587
10	Finance	155,900	165,407	163,255	171,662	166,535	164,824
11	Real estate activities	83,863	81,557	75,509	84,559	61,705	57,328
12	Professional, business, scientific and technical activities	82,663	80,701	80,499	81,051	80,571	87,187
13	Administrative and support service activities	90,947	80,459	85,367	97,227	97,313	101,473
14	Public administration and trading bodies	42,177	42,027	41,984	42,778	47,361	47,853
15	Education	29,216	27,785	28,191	28,327	29,867	29,023
16	Human health, social and charitable work activities	43,001	41,940	40,527	40,976	42,488	42,701
17	Arts, entertainment and recreation	129,852	36,422	38,887	61,250	86,447	87,446
18	Other service activities	35,818	33,549	29,627	33,003	37,282	36,685

Figure 3.5.3 GVA per worker by sector (£s, constant prices)



3.5 Factor income per worker by sector

Table 3.5.4 Annual Percentage Change in Factor income per worker by sector (% , constant prices)

		2012	2013	2014E	2015E	2016E	Overall % change 2011 -2016
1	Agriculture, horticulture, fishing and quarrying	1.6	0.0	-14.7	9.7	6.3	1.0
2	Manufacturing	0.9	0.5	-6.1	2.4	1.8	-0.8
3	Electricity, gas, steam and air conditioning supply	2.5	2.6	3.7	-8.8	9.2	8.6
4	Water supply, sewerage, waste management and remediation activities	-8.0	15.3	-35.9	22.0	-0.3	-17.2
5	Construction	-1.0	18.5	-20.0	5.9	1.4	0.7
6	Wholesale, retail and repairs	-16.9	28.2	1.4	-2.2	-0.1	5.6
7	Hostelry	-12.9	-4.8	-6.4	6.1	0.4	-17.3
8	Transport and storage	-6.7	-34.6	15.0	10.1	-11.0	-31.3
9	Information and communication	-4.4	15.2	-1.4	-12.5	0.5	-4.6
10	Finance	6.1	-1.3	5.1	-3.0	-1.0	5.7
11	Real estate activities	-2.8	-7.4	12.0	-27.0	-7.1	-31.6
12	Professional, business, scientific and technical activities	-2.4	-0.3	0.7	-0.6	8.2	5.5
13	Administrative and support service activities	-11.5	6.1	13.9	0.1	4.3	11.6
14	Public administration and trading bodies	-0.4	-0.1	1.9	10.7	1.0	13.5
15	Education	-4.9	1.5	0.5	5.4	-2.8	-0.7
16	Human health, social and charitable work activities	-2.5	-3.4	1.1	3.7	0.5	-0.7
17	Arts, entertainment and recreation	-72.0	6.8	57.5	41.1	1.2	-32.7
18	Other service activities	-6.3	-11.7	11.4	13.0	-1.6	2.4

Factor incomes per worker are a measure of the total output or GVA of each sector expressed in relation to the number of employees and self employed within each sector. **Table 3.5.3**, **Table 3.5.4** and **Figure 3.5.3** express these values in constant prices (i.e in real terms, adjusted for price inflation).

Nine out of the nineteen industry sectors have recorded an increase in factor incomes per worker in constant prices between 2011 and 2016, as shown in **Table 3.5.3** and **Figure 3.5.3**. The Finance sector, recorded the largest factor income per worker in 2016, at £164,824, whilst the Agriculture, horticulture, fishing and quarrying sector recorded the lowest factor income per worker in 2016 at £26,240.

Between 2015 and 2016, the Electricity, gas, steam and air conditioning supply sector recorded the highest growth in factor incomes per worker (at constant prices), at 9.2%, whilst the Transport and storage sector recorded an 11.0% decline in factor incomes per worker (at constant prices) in 2016, as shown in **Table 3.5.4**. The Finance sector, the largest single sector in terms of contribution to GVA, recorded a 1.0% decline in factor income (at constant prices) between 2015 and 2016.

Over the past 5 years, the overall change in factor incomes in constant prices was highest in the Public administration and trading bodies sector, at 13.5% and lowest in the Arts, entertainment and recreation sector at -32.7%.

4.1 Appendix 1 - Differences between old and new methodology

As explained at the start of this bulletin, Guernsey (like many other small jurisdictions) measures its economy only using an 'income' approach, and has done so since 1965. The methodology used until recently had not been updated since the 1990s, but international standards defined by the United Nations (as described by the framework known as the System of National Accounts) were updated in 1993 and 2008. Other jurisdictions use up to three approaches, in order to produce full National Accounts and cross-check the total GDP figure that is resultant.

Billet XVIII, October 2015 (see item 7, <https://www.gov.gg/article/150854/States-Meeting-starting-on-October-28th-2015-Billets-XIX-Budget-and-XVIII>) highlighted the need to standardise the methodology used to make it more internationally comparable and that to do so some additional data would need to be collected from employers and companies. Drafting the necessary legislation to enable this and implementing the best method for collecting the data in practice, in conversation with businesses, will take several years. As such, some interim improvements have been identified and implemented. Completion of the Housing Stock Monitoring system in 2010 and the Electronic Census in 2014 have made available some data that had not been accessible in the past.

The main revisions compared to previous reports are:

- Alteration to presentation of information to enable comparisons with other jurisdictions by aligning the economic sectors with the Standard Industrial Classification system, as used in all other publications produced by Data and Analysis (see www.gov.gg/ecodes).
- Alteration to presentation of information by referring to nominal figures as "current" and real figures as "constant" (RPI reflation factors continue to be used, as they had been in the past, to make previous years' figures comparable with the most recent year's, by presenting them all in the most recent year's prices).
- Inclusion of estimates for pension contributions made by employers on behalf of current employees and inclusion of social security contributions made by employers on behalf of current employees. This is in addition to wages, which have always been included, to give a more complete reflection of the value of compensation of employees.
- Refinement of the method used to determine the gross operating surplus of corporations, which is based on the net assessable (for tax purposes) business and rental incomes (but not investment or other incomes) of locally trading companies. Previously not all business income was included. In Guernsey, a high proportion of finance sector corporations operate as part of international groups in which inter-group financial transfers are common. As such, deriving the gross operating surplus (of banking corporations in particular) continues to be challenging. Estimation methods have been refined, but inevitably there will continue to be a judgemental element to this.
- Inclusion of 'owner occupied imputed rents', this is a notional figure indicative of the value of housing services generated from housing stock capital owned by owner occupiers, which is calculated using data also used in the publications available from www.gov.gg/property. This figure has not previously been included in the Guernsey method (it was not possible to make reliable estimates prior to the establishment of the Guernsey Housing Stock database and Rental Price Index), but is included by most other jurisdictions as it is recommended by the internationally agreed System of National Accounts, the latest version of which is dated 2008 and was confirmed in the European System of National Accounts in 2010.

4.1 Appendix 1 - Differences between old and new methodology

As you will have gathered, most of the methodological revisions involve including elements that had not been included in the past, contributing to the higher figures than published in the past. Much of the information had simply not been available in the past, but due to improvements in other areas, it can now be quantified and incorporated. The figures published in this bulletin are not comparable with those published in the past, but are now far more comparable with those published by other jurisdictions, such as Jersey and the Isle of Man.

These amendments represent steps towards international standards of best practice. The Office For National statistics audited the new method in November 2017 and agreed that it is now better aligned with the System of National Accounts, but that further improvements can always be made; both within the income approach method and by introducing an additional output approach as a cross check.

Office for National Statistics (ONS) Gross Domestic Product statisticians, Andrew Walton and Rob Doody, have provided independent scrutiny of the data sources and methods used to calculate the restated GDP estimates and provided the following statement,

“Within the methodology used there are some substantial improvements; for instance the inclusion of Owner Occupier Housing (Imputed rental) puts the States of Guernsey data on an internationally comparable basis consistent with the European System of Accounts 2010 and with a very detailed and high quality set of data sources. The work to restate GDP has also uncovered some areas where data were not being used fully in the past. In particular the ONS recognises the openness of the States of Guernsey in admitting previous deficiencies in the data used for compensation of employees and the willingness to incorporate the new data into the published estimates at the first opportunity. In ONS’s opinion the use of only the Income approach to measuring GDP will always leave room for further improvements and the potential for future revisions, especially within the financial sector which is so dominant in Guernsey. However, with the currently available data sources and the limited resources available within the States of Guernsey Data and Analysis team, the ONS experts have confirmed that the restatement of GDP published today is a significant improvement in data quality. The States of Guernsey GDP dataset is now based on much firmer foundations while leaving the potential to further improve the underlying data sources in future years as well as beginning to develop an output approach to measuring GDP in the longer term which will aid data confrontation.”

The new method has resulted in the inclusion of some additional data, but the majority of the data used in the calculations continues to be sourced from Income Tax (in a grouped, anonymised format). As such, and since tax returns may not have been submitted by all relevant companies or available at the time of publishing the figures, the most recent figures are labelled as estimates. These estimates can be subject to revisions three years from the date of their first publication.

As well as the methodological changes to update what data is included in GVA and GDP, more refined estimation models to fill data gaps have also been introduced. It is hoped that these will reduce the size of revisions between first estimates and final figures, which have been considerable in the past. It is also hoped that in future, final figures will be accessible to Data & Analysis more directly, so that estimated data can be replaced with actuals more quickly (as described in [Appendix 2](#)).

4.1 Appendix 2 - Further Methodological Improvements Planned

Further developments planned include, investigating the feasibility and costs of introducing an output approach of calculation as well as improving the data used in the income approach. As described in Billet XVIII, October 2015, see item 7, <https://www.gov.gg/article/150854/States-Meeting-starting-on-October-28th-2015-Billets-XIX-Budget-and-XVIII>) the intention is to source data directly from businesses, where secondary data is not adequate, potentially including:

- Separation of information on wages paid to current employees from pensions paid to past employees
- Value of employer contributions to pension schemes
- Gross Operating Surplus of locally trading finance corporations
- Depreciation of capital assets

The intention is for collection of any additional data required to be coordinated with the submission of annual company tax returns and quarterly employer Social Security and ETI schedules to keep the administration to a minimum for both businesses and Data & Analysis. The additional requirements will be requested in 2019 at earliest and Data & Analysis will engage with business groups in advance. If you have any questions or feedback on this, please do not hesitate to contact us using the details provided in [section 5](#).

5.0 Contact details

You may also be interested in other publications from States of Guernsey Data and Analysis Services, which are all available online at www.gov.gg/data. Please contact us for further information.

E-mail: dataandanalysis@gov.gg

Telephone: (01481) 717292



For more information
go to gov.gg/data