Guernsey Annual GVA and GDP Bulletin

2017 (First Estimates)
Issue date 6th September 2018

This bulletin presents 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.



1.1 Introduction

This bulletin is the second to present estimates of the size of Guernsey's economy using the method introduced in 2017. It includes 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 were identified and implemented.

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 and the Guernsey Annual GVA and GDP Bulletin 2016 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)

Improvements to both method and presentation have been made to the figures included in this and the previous year's 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.

The figures presented in this bulletin are comparable with those published in the 2016 Guernsey Annual GVA and GDP Bulletin. They are also now more comparable with those produced by other jurisdictions.

1.2 Headlines

- Guernsey's total GDP for 2017 is estimated at £3,050 million, which is 2% higher than the estimate for 2016 in real terms (constant prices).
- Guernsey GDP per capita in 2017 is £49,041; 65% greater than in the UK in 2017 and 22% greater than Jersey GVA per capita in 2016 (the latest published data).
- The largest two components of GDP are Compensation of employees, representing 44% of total GDP in 2016, and Gross operating surplus, which represented 40%.
- Guernsey's GVA at basic prices (which equates to GDP before the inclusion of taxes and removal of subsidies on products) is estimated at £2,983 million for 2017.
- The finance sector remains the largest single sector, accounting for 44% of the total GVA (£1,298 million) or 48% of Factor income in 2017. 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 48% of the total GVA (£1,435 million) or 53% of Factor Income in 2017. Of this, £183 million (6% of total GVA or 7% of Factor Income) was Legal, Accounting, Auditing, Office Administrative and other primarily finance industry support activities.
- Households contributed 8% of the Island's total GVA in 2017.
- Finance Sector GVA increased by 4.2% between 2016 and 2017 in real terms. Several non-finance sectors recorded growth, most notably Administration and support service activities, Human health, social and charitable work activities and Other service activities. Conversely Information and communication and Real estate activities saw GVA decline between 2016 and 2017. Households saw a slight increase, matching trends in residential property rental and purchase prices at this time.
- Productivity (Factor income per worker) was £93,191 per worker in 2017; a 0.6% decrease in real terms from 2016. The Finance sector had the highest productivity, at £192,345 per worker in 2017.

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

2010 2010 2011 2012 Aear 2015 2015 2017 2017 2017

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

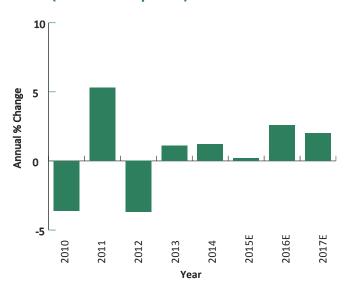
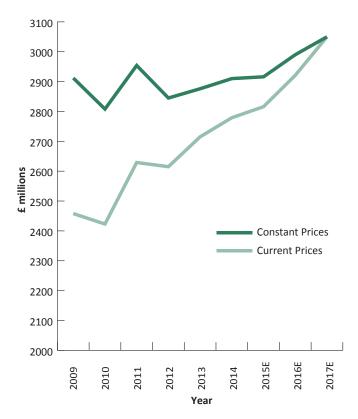


Table 2.1.1 GDP Market

	GDP (£ millions, current prices)	Annual % change in current GDP	GDP (£ millions, constant prices)	Annual % change in constant GDP
2009	2,458	-	2,912	-
2010	2,423	-1.4	2,808	-3.6
2011	2,629	8.5	2,954	5.2
2012	2,615	-0.6	2,845	-3.7
2013	2,715	3.8	2,876	1.1
2014	2,779	2.4	2,910	1.2
2015E	2,816	1.3	2,916	0.2
2016E	2,921	3.7	2,990	2.6
2017E	3,050	4.4	3,050	2.0

Figure 2.1.1 GDP



Estimated total GDP for 2017 in Guernsey is £3,050 million, which is 4.4% higher than 2016 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 reflated 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 2017 is 2.0% higher than 2016 in real terms (constant prices).

In constant prices, the level of total GDP in 2017 is £96 million above the previous peak seen in 2011.

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

2.2 GDP per capita

In 2017 GDP per capita (per head of population) was estimated to be £49,041 in current prices, which was 4.9% higher than 2016 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 2017, estimated total GDP per capita was 2.4% higher than 2016 in real terms (constant prices).

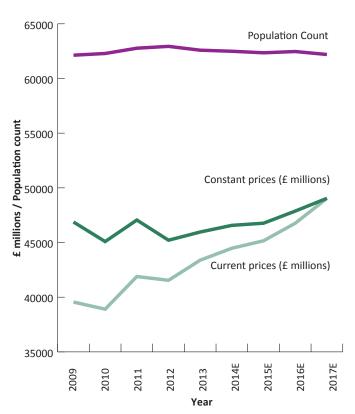
In real terms, GDP per capita in Guernsey has also grown year on year since 2012.

Throughout this time period Guernsey's population has been relatively stable, reaching a high of 62,938 in 2012 before declining to 62,193 in 2017 as shown in **Figure 2.2.1**.

Table 2.2.1 GDP per capita

	GDP per capita (£s, current	Annual % change in current	GDP per capita (£s, constant	Annual % change in constant
	prices)	GDP per	prices)	GDP per
	. ,	capita		capita
2009	39,555	-	46,876	-
2010	38,904	-1.6	45,088	-3.8
2011	41,891	7.7	47,055	4.4
2012	41,544	-0.8	45,211	-3.9
2013	43,385	4.4	45,960	1.7
2014	44,477	2.5	46,569	1.3
2015E	45,157	1.5	46,766	0.4
2016E	46,763	3.6	47,873	2.4
2017E	49,041	4.9	49,041	2.4

Figure 2.2.1 GDP per capita

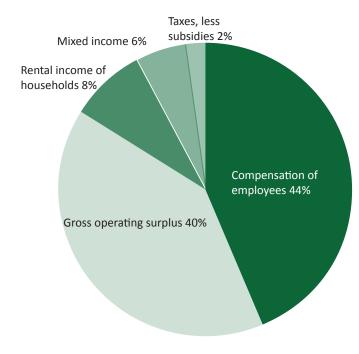


2.3 GDP components

Table 2.3.1 GDP Components (£millions, current prices)

	2013	2104	2015E	2016E	2017E
Compensation of employees	1,196	1,216	1,261	1,295	1,336
Gross operating surplus	1,063	1,107	1,103	1,163	1,229
Mixed income	149	155	151	159	168
Rental income of households	250	244	244	242	250
GVA Basic	2,658	2,723	2,759	2,859	2,983
Taxes, less subsidies (on products)	+ 57	+ 56	+ 56	+62	+67
GDP	2,715	2,779	2,816	2,921	3,050

Figure 2.3.1 GDP Components 2017



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 2017 were Compensation of employees, representing 44%, £1,336 million of total GDP and Gross operating surplus, which represented 40%, £1,229 million. Other components included Mixed income, which represented 6% (£168 million), Households, which represented 8% (£250 million) and Taxes less subsidies, which represented 2% (£67 million) as shown in Table 2.3.1 and Figure 2.3.1.

In current prices (nominal terms) between 2016 and 2017 Compensation of employees increased by 3.2%, whilst Gross operating surplus increased by 5.7%. Overall there was a £129 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 2017, GVA is estimated to be £2,983 million in current prices which is 4.3% higher than the estimate for 2016 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 2017 estimated total GVA Basic was 1.9% higher than 2016 in real terms (constant prices), and above the previous peak recorded in 2011 of £2,893 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	-	2,858	-
2010	2,370	-1.7	2,747	-3.9
2011	2,575	8.6	2,893	5.3
2012	2,559	-0.6	2,785	-3.7
2013	2,658	3.9	2,816	1.1
2014	2,723	2.4	2,851	1.2
2015E	2,759	1.3	2,857	0.2
2016E	2,859	3.6	2,927	2.4
2017E	2,983	4.3	2,983	1.9

Figure 3.1.1 GVA Basic



3.2 GVA by sector - largest contributors

Figure 3.2.1 GVA by sector in 2017 (constant prices)

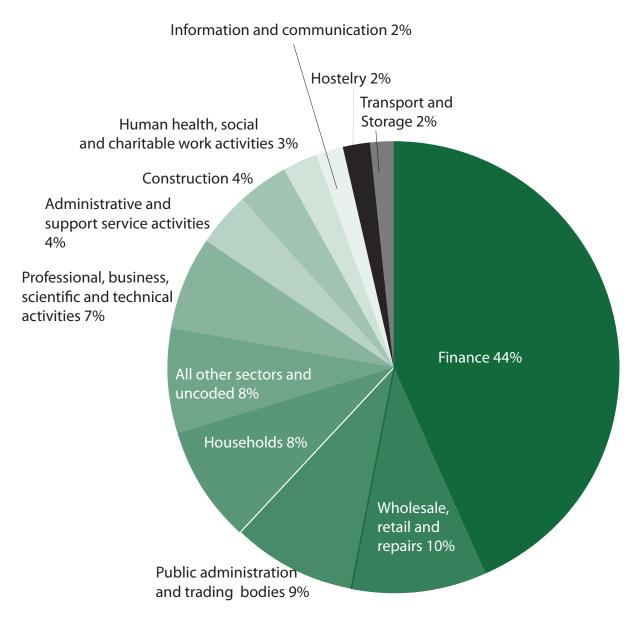


Figure 3.2.1 illustrates GVA in 2017 for Guernsey's largest sectors. The Finance sector was the largest component of GVA in 2017, accounting for 44% of GVA. Wholesale, retail and repairs and Public administration were the next largest sectors, accounting for 10% and 9% of GVA respectively. Households were the fourth largest sector in 2017, accounting for 8% 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 2012 (constant prices)

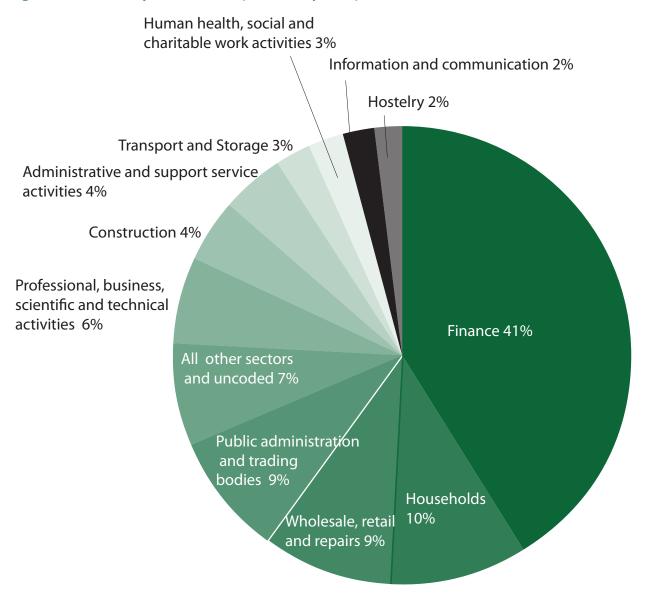


Figure 3.2.2 illustrates GVA for Guernsey's largest sectors five years ago, in 2012. The Finance sector was also the largest component of GVA in 2012, although it represented a smaller proportion of Guernsey's GVA than in 2017. Households was the second largest sector, accounting for 10% of GVA. Wholesale, retail and repairs was the third largest sector in 2012, accounting for 9% of GVA.

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

		2011	2012	2013	2014	2015E	2016E	2017E
1	Agriculture, horticulture, fishing and quarrying	12	12	12	10	13	13	13
2	Manufacturing	26	26	27	25	29	29	29
3	Electricity, gas, steam and air conditioning supply	16	16	17	17	15	15	15
4	Water supply, sewerage, waste management and remediation activities	4	3	4	3	3	4	4
5	Construction	115	113	147	119	113	105	109
6	Wholesale, retail and repairs	276	236	283	282	289	283	285
7	Hostelry	56	49	49	49	52	53	55
8	Transport and storage	67	65	41	46	43	46	47
9	Information and communication	52	52	56	57	58	60	58
10	Finance	979	1,059	1,064	1,102	1,122	1,216	1,298
11	Real estate activities	16	18	17	20	18	17	17
12	Professional, business, scientific and technical activities	154	154	158	158	174	196	199
13	Administrative and support service activities	112	110	118	136	115	101	108
14	Public administration and trading bodies	210	219	221	225	253	261	269
15	Education	13	14	14	15	15	15	15
16	Human health, social and charitable work activities	66	68	69	72	73	75	80
17	Arts, entertainment and recreation	53	15	15	22	29	21	21
18	Other service activities	19	19	18	19	19	18	20
19	Households	246	245	250	245	244	242	250
99	Uncoded	84	66	79	101	83	89	92
	GVA Basic	2,575	2,559	2,658	2,723	2,759	2,859	2,983

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

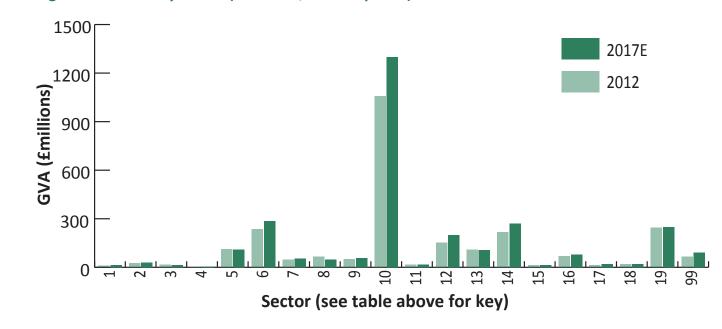


Table 3.3.2 Annual Percentage Change in GVA by sector (%, current prices)

		2013	2014	2015E	2016E	2017E	Overall % change
1	Agriculture, horticulture, fishing and quarrying	-2.3	-11.4	26.4	1.4	1.4	12.5%
2	Manufacturing	3.4	-6.7	15.8	-1.2	-0.7	9.7%
3	Electricity, gas, steam and air conditioning supply	6.0	3.2	-11.2	-1.3	-0.4	-4.5%
4	Water supply, sewerage, waste management and remediation activities	21.2	-24.3	-1.0	25.3	4.5	18.8%
5	Construction	29.6	-18.6	-5.5	-7.2	3.6	-4.1%
6	Wholesale, retail and repairs	19.7	-0.2	2.4	-2.1	1.0	20.8%
7	Hostelry	0.0	1.0	6.1	1.9	3.3	12.9%
8	Transport and storage	-37.1	13.0	-7.7	7.8	1.9	-27.9%
9	Information and communication	6.6	1.6	1.5	4.3	-3.3	10.9%
10	Finance	0.5	3.5	1.8	8.4	6.7	22.6%
11	Real estate activities	-6.1	18.3	-8.9	-5.7	-1.1	-5.6%
12	Professional, business, scientific and technical activities	2.6	-0.1	10.3	12.5	1.5	29.0%
13	Administrative and support service activities	7.6	14.6	-15.3	-12.1	7.1	-1.6%
14	Public administration and trading bodies	0.9	1.9	12.4	3.2	3.1	23.0%
15	Education	3.4	8.4	-4.4	3.5	0.4	11.4%
16	Human health, social and charitable work activities	1.4	4.2	1.4	2.6	7.1	17.8%
17	Arts, entertainment and recreation	0.3	48.4	31.9	-29.3	-0.2	38.4%
18	Other service activities	-2.3	1.1	-0.1	-1.8	6.9	3.6%
19	Households	2.2	-2.3	-0.1	-0.9	3.3	2.0%
99	Uncoded	19.4	27.9	-17.4	7.1	3.0	39.1%
	GVA Basic	3.9	2.4	1.3	3.6	4.3	16.6%

Fourteen of the nineteen economic sectors have recorded an increase in GVA in current prices between 2012 and 2017, as shown in **Table 3.3.1** and **Figure 3.3.1**. The Finance sector, recorded the largest GVA in 2017, at £1,298 million, whilst the Water supply, sewerage, waste management and remediation sector recorded the lowest GVA in 2017 at £4 million.

Between 2016 and 2017, Administrative and support service activities and Human health, social and charitable work activities recorded the highest growth, both at 7.1%, whilst Information and communication and the Real estate sectors recorded a 3% and 1% 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 2017, increased by 6.7% compared to 2016.

Over the past 5 years, 2012 to 2017, overall change in GVA was highest in the Arts, entertainment and recreation sector at 38% and lowest in Transport and storage, -28%.

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

		2011	2012	2013	2014	2015E	2016E	2017E
1	Agriculture, horticulture, fishing and quarrying	14	13	12	11	13	14	13
2	Manufacturing	29	28	29	26	30	29	29
3	Electricity, gas, steam and air conditioning supply	18	17	18	18	16	16	15
4	Water supply, sewerage, waste management and remediation activities	4	4	4	3	3	4	4
5	Construction	129	123	155	125	117	107	109
6	Wholesale, retail and repairs	310	257	299	295	299	289	285
7	Hostelry	63	53	52	52	54	55	55
8	Transport and storage	76	71	43	48	44	47	47
9	Information and communication	58	57	59	59	60	61	58
10	Finance	1,100	1,152	1,127	1,153	1,162	1,245	1,298
11	Real estate activities	18	19	18	21	19	17	17
12	Professional, business, scientific and technical activities	173	168	167	165	180	200	199
13	Administrative and support service activities	126	120	125	142	119	103	108
14	Public administration and trading bodies	235	238	234	235	262	267	269
15	Education	15	15	15	16	15	16	15
16	Human health, social and charitable work activities	74	74	73	76	76	77	80
17	Arts, entertainment and recreation	60	16	16	23	30	21	21
18	Other service activities	22	20	20	19	19	19	20
19	Households	276	267	265	256	253	248	250
99	Uncoded	94	72	83	105	86	91	92
	GVA Basic	2,893	2,785	2,816	2,851	2,857	2,927	2,983

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

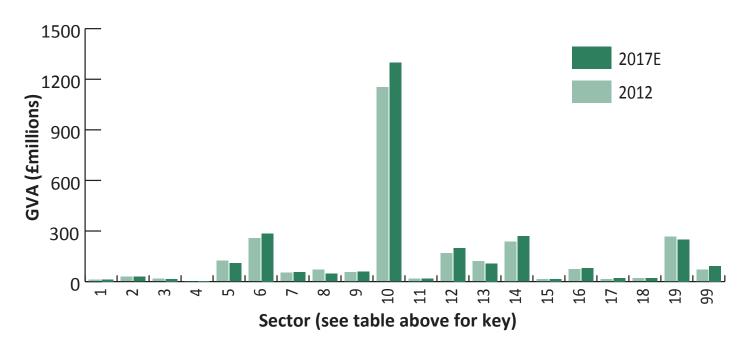


Table 3.3.4 Annual Percentage Change in GVA by sector (%, constant prices)

		2013	2014	2015E	2016E	2017E	Overall % change
							2012 -2017
1	Agriculture, horticulture, fishing and quarrying	-4.9	-12.5	25.0	0.2	-0.9	3.4%
2	Manufacturing	0.7	-7.8	14.6	-2.3	-3.0	0.8%
3	Electricity, gas, steam and air conditioning supply	3.2	2.0	-12.2	-2.4	-2.7	-12.2%
4	Water supply, sewerage, waste management and remediation activities	18.0	-25.2	-2.1	23.8	2.0	9.2%
5	Construction	26.1	-19.5	-6.5	-8.2	1.2	-11.9%
6	Wholesale, retail and repairs	16.5	-1.4	1.2	-3.2	-1.4	11.0%
7	Hostelry	-2.6	-0.1	4.9	0.8	0.9	3.7%
8	Transport and storage	-38.7	11.7	-8.7	6.5	-0.4	-33.8%
9	Information and communication	3.8	0.4	0.4	3.1	-5.5	1.9%
10	Finance	-2.2	2.3	0.7	7.2	4.2	12.6%
11	Real estate activities	-8.6	16.9	-9.9	-6.8	-3.4	-13.3%
12	Professional, business, scientific and technical activities	-0.2	-1.3	9.1	11.2	-0.9	18.5%
13	Administrative and support service activities	4.8	13.3	-16.3	-13.1	4.6	-9.6%
14	Public administration and trading bodies	-1.8	0.8	11.1	2.0	0.7	13.0%
15	Education	0.7	7.2	-5.5	2.4	-1.9	2.4%
16	Human health, social and charitable work activities	-1.3	3.0	0.3	1.5	4.6	8.3%
17	Arts, entertainment and recreation	-2.4	46.7	30.4	-30.1	-2.5	27.2%
18	Other service activities	-4.8	-0.1	-1.2	-2.9	4.5	-4.8%
19	Households	-0.6	-3.5	-1.2	-2.0	0.9	-6.2%
99	Uncoded	16.2	26.4	-18.3	5.9	0.6	27.8%
	GVA Basic	1.1	1.2	0.2	2.4	1.9	7.1%

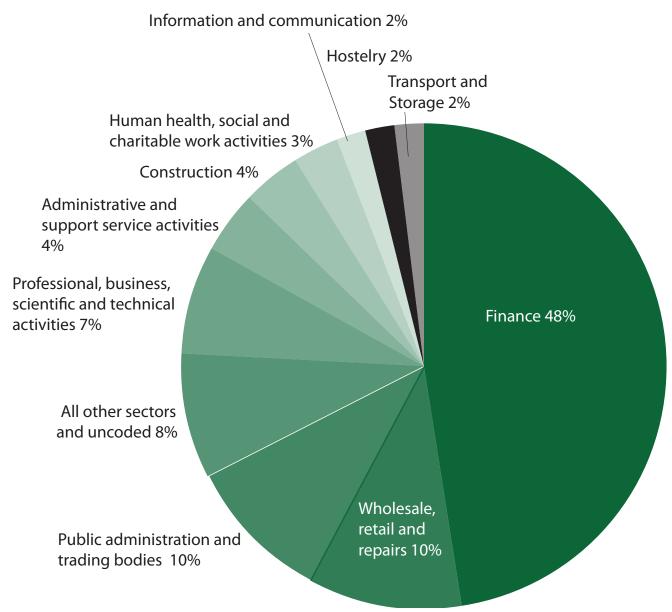
In constant prices, twelve of the nineteen economic sectors have recorded an increase in GVA between 2012 and 2017, as shown in **Table 3.3.3** and **Figure 3.3.3**.

Between 2016 and 2017, Administrative and support service activities and Human health, social and charitable work activities recorded the highest growth in constant prices, both at 4.6%, whilst the Information and communication sector recorded the largest decline in GVA at 5.5%, as shown in **Table 3.3.4**. The Finance sector, the largest single sector in terms of contribution to GVA in 2017, increased by 4.2% in real terms compared to 2016.

Over the past 5 years, 2012 to 2017, overall change in GVA at constant prices was highest in the Arts, entertainment and recreation sector at 27% and lowest in Transport and storage, -34%. In real terms, GVA grew within the Finance sector by 12.6% during the period 2012 to 2017.

3.4 Factor income by sector - largest contributors

Figure 3.4.1 Factor income by sector (2017)



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 2017, at 48%, followed by Wholesale retail and repairs at 10.4% and Public administration and trading bodies at 9.8%.

3.4 Factor income by sector - largest contributors

Figure 3.4.2 Factor income by sector (2012)

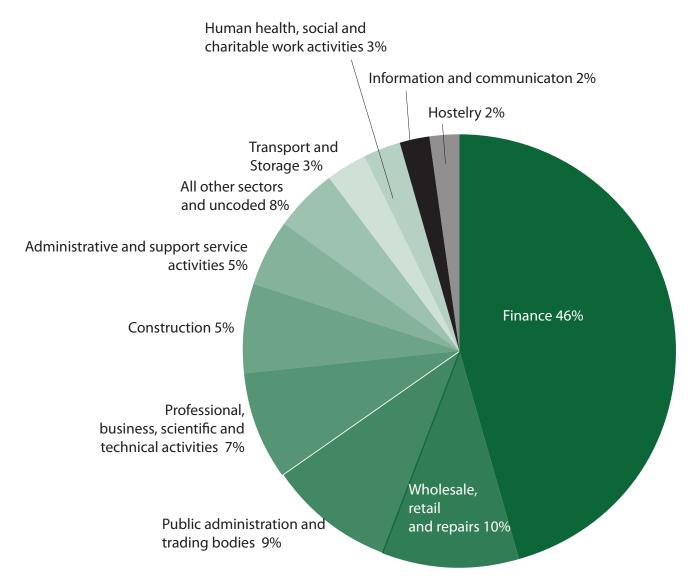


Figure 3.4.2 illustrates the largest contributors to Factor incomes five years ago, in 2012. The Finance sector was also the largest component in 2017, although it represented a slightly smaller proportion (46%) than in 2017. Wholesale, retail and repairs was the second largest sector, accounting for 10% of Factor income. Public administration and trading bodies was the third largest sector in 2012, accounting for 9%.

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

		2012	2013	2014	2015E	2016E	2017E
1	Agriculture, horticulture, fishing and quarrying	24,831	25,501	22,000	29,189	30,060	31,490
2	Manufacturing	36,847	38,053	36,133	42,476	42,594	43,306
3	Electricity, gas, steam and air conditioning supply	51,700	54,465	57,126	52,783	53,774	52,089
4	Water supply, sewerage, waste management and	36,701	43,489	28,225	33,712	37,924	34,053
	remediation activities						
5	Construction	36,488	44,428	35,941	37,995	37,177	39,660
6	Wholesale, retail and repairs	52,762	69,470	71,298	70,724	69,441	71,564
7	Hostelry	26,272	25,691	24,336	27,021	27,432	28,473
8	Transport and storage	62,083	41,683	48,492	47,200	44,997	51,333
9	Information and communication	49,551	58,620	58,498	56,702	59,714	56,686
10	Finance	155,600	157,767	167,842	166,895	179,888	192,345
11	Real estate activities	76,722	72,971	82,678	63,089	62,586	61,903
12	Professional, business, scientific and technical	75,917	77,794	79,248	83,171	89,005	88,254
	activities						
13	Administrative and support service activities	75,689	82,498	95,064	69,559	62,710	63,916
14	Public administration and trading bodies	39,536	40,573	41,826	46,811	47,961	49,157
15	Education	26,137	27,243	27,697	26,770	26,424	25,134
16	Human health, social and charitable work	39,453	39,164	40,064	41,661	41,921	41,918
	activities						
17	Arts, entertainment and recreation	34,262	37,580	59,887	85,001	57,401	55,279
18	Other service activities	31,560	28,632	32,269	37,319	37,175	38,650

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

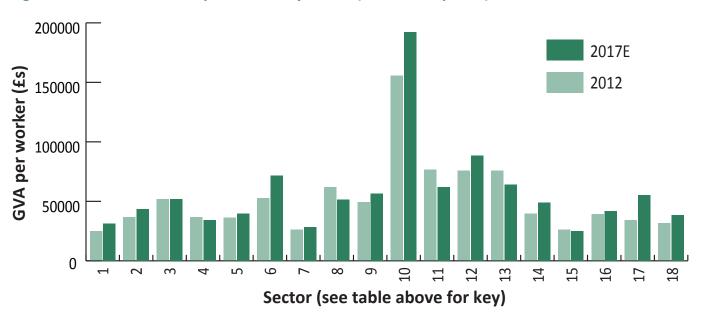


Table 3.5.2 Annual Percentage Change in Factor income per worker by sector (%, current prices)

pric							
		2013	2014	2015E	2016E	2017E	Overall % change 2012 -2017
1	Agriculture, horticulture, fishing and quarrying	2.7	-13.7	32.7	3.0	4.8	26.8
2	Manufacturing	3.3	-5.0	17.6	0.3	1.7	17.5
3	Electricity, gas, steam and air conditioning supply	5.3	4.9	-7.6	1.9	-3.1	0.8
4	Water supply, sewerage, waste management and remediation activities	18.5	-35.1	19.4	12.5	-10.2	-7.2
5	Construction	21.8	-19.1	5.7	-2.2	6.7	8.7
6	Wholesale, retail and repairs	31.7	2.6	-0.8	-1.8	3.1	35.6
7	Hostelry	-2.2	-5.3	11.0	1.5	3.8	8.4
8	Transport and storage	-32.9	16.3	-2.7	-4.7	14.1	-17.3
9	Information and communication	18.3	-0.2	-3.1	5.3	-5.1	14.4
10	Finance	1.4	6.4	-0.6	7.8	6.9	23.6
11	Real estate activities	-4.9	13.3	-23.7	-0.8	-1.1	-19.3
12	Professional, business, scientific and technical activities	2.5	1.9	5.0	7.0	-0.8	16.3
13	Administrative and support service activities	9.0	15.2	-26.8	-9.8	1.9	-15.6
14	Public administration and trading bodies	2.6	3.1	11.9	2.5	2.5	24.3
15	Education	4.2	1.7	-3.3	-1.3	-4.9	-3.8
16	Human health, social and charitable work activities	-0.7	2.3	4.0	0.6	0.0	6.2
17	Arts, entertainment and recreation	9.7	59.4	41.9	-32.5	-3.7	61.3
18	Other service activities	-9.3	12.7	15.6	-0.4	4.0	22.5

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, Water supply, sewerage, waste management, and remediation activities, Real estate activities, Education and Administrative and support service activities, all other economic sectors have recorded an increase in factor incomes per worker in current prices between 2012 and 2017, as shown in **Table 3.5.1** and **Figure 3.5.1**. The Finance sector had the largest factor income per worker in 2017, at £192,345 per worker.

Between 2016 and 2017, the Transport and storage sector recorded the highest growth in factor incomes per worker, at 14.1%, whilst the Water supply, sewerage, waste management and remediation sector recorded a 10% decline in factor incomes per worker in 2017, as shown in **Table 3.5.2**. The Finance sector, the largest single sector in terms of contribution to GVA in 2016, recorded a 6.9% increase in factor incomes per worker between 2016 and 2017.

Over the past 5 years, between 2012 and 2017, overall change in factor incomes was highest in the Arts, entertainment and recreation sector at 61%, and lowest in the Real Estate Activities sector at -19.3% as shown in **Table 3.5.2**.

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

		2012	2013	2014	2015E	2016E	2017E
1	Agriculture, horticulture, fishing and quarrying	27,023	27,015	23,034	30,229	30,773	31,490
2	Manufacturing	40,099	40,312	37,833	43,989	43,605	43,306
3	Electricity, gas, steam and air conditioning supply	56,263	57,698	59,813	54,663	55,050	52,089
4	Water supply, sewerage, waste management and	39,941	46,070	29,552	34,913	38,825	34,053
	remediation activities						
5	Construction	39,709	47,065	37,631	39,348	38,060	39,660
6	Wholesale, retail and repairs	57,419	73,593	74,652	73,243	71,090	71,564
7	Hostelry	28,591	27,216	25,481	27,983	28,083	28,473
8	Transport and storage	67,562	44,157	50,773	48,882	46,065	51,333
9	Information and communication	53,925	62,099	61,250	58,722	61,132	56,686
10	Finance	169,334	167,130	175,737	172,839	184,159	192,345
11	Real estate activities	83,493	77,302	86,567	65,336	64,072	61,903
12	Professional, business, scientific and technical	82,617	82,411	82,976	86,133	91,118	88,254
	activities						
13	Administrative and support service activities	82,369	87,394	99,536	72,037	64,199	63,916
14	Public administration and trading bodies	43,025	42,981	43,793	48,479	49,099	49,157
15	Education	28,444	28,860	29,000	27,723	27,051	25,134
16	Human health, social and charitable work	42,936	41,489	41,949	43,144	42,916	41,918
	activities						
17	Arts, entertainment and recreation	37,286	39,811	62,704	88,029	58,764	55,279
18	Other service activities	34,346	30,331	33,787	38,648	38,058	38,650

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

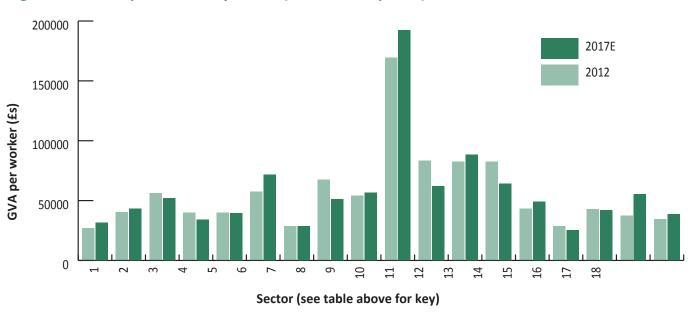


Table 3.5.4 Annual Percentage Change in Factor income per worker by sector (%, constant prices)

pric	ices)										
		2013	2014	2015E	2016E	2017E	Overall % change				
							2012 -2017				
1	Agriculture, horticulture, fishing and quarrying	0.0	-14.7	31.2	1.8	2.3	16.5				
2	Manufacturing	0.5	-6.1	16.3	-0.9	-0.7	8.0				
3	Electricity, gas, steam and air conditioning supply	2.6	3.7	-8.6	0.7	-5.4	-7.4				
4	Water supply, sewerage, waste management and remediation activities	15.3	-35.9	18.1	11.2	-12.3	-14.7				
5	Construction	18.5	-20.0	4.6	-3.3	4.2	-0.1				
6	Wholesale, retail and repairs	28.2	1.4	-1.9	-2.9	0.7	24.6				
7	Hostelry	-4.8	-6.4	9.8	0.4	1.4	-0.4				
8	Transport and storage	-34.6	15.0	-3.7	-5.8	11.4	-24.0				
9	Information and communication	15.2	-1.4	-4.1	4.1	-7.3	5.1				
10	Finance	-1.3	5.1	-1.6	6.5	4.4	13.6				
11	Real estate activities	-7.4	12.0	-24.5	-1.9	-3.4	-25.9				
12	Professional, business, scientific and technical activities	-0.3	0.7	3.8	5.8	-3.1	6.8				
13	Administrative and support service activities	6.1	13.9	-27.6	-10.9	-0.4	-22.4				
14	Public administration and trading bodies	-0.1	1.9	10.7	1.3	0.1	14.3				
15	Education	1.5	0.5	-4.4	-2.4	-7.1	-11.6				
16	Human health, social and charitable work activities	-3.4	1.1	2.8	-0.5	-2.3	-2.4				
17	Arts, entertainment and recreation	6.8	57.5	40.4	-33.2	-5.9	48.3				
18	Other service activities	-11.7	11.4	14.4	-1.5	1.6	12.5				

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 2012 and 2017, as shown in **Table 3.5.3** and **Figure 3.5.3**. The Finance sector, recorded the largest factor income per worker in 2017, at £192,345.

Between 2016 and 2017, the Transport and storage recorded the highest growth in factor incomes per worker (at constant prices), at 11.4%, whilst the Water supply, sewerage, waste management and remediation sector recorded a 12.3% decline in factor incomes per worker (at constant prices) in 2017, as shown in **Table 3.5.4**. The Finance sector, the largest single sector in terms of contribution to GVA, recorded a 4.4% increase in factor income per worker (at constant prices) between 2016 and 2017.

Over the past 5 years, the overall change in factor incomes in constant prices was highest in the Arts, entertainment and recreation sector at 48.3% and lowest in Real Estate Activities at -25.9%.

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 2016 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 were identified and implemented in both the Guernsey Annual GVA and GDP Bulletin in 2016 and this bulletin. Completion of the Housing Stock Monitoring system in 2010 and the Electronic Census in 2014 made available some data that had not been accessible in the past. Data from the Guernsey Economic Model, which became available in 2017 is also used to help determine estimates.

The main revisions in both the Guernsey Annual GVA and GDP Bulletin 2017 and the Guernsey Annual GVA and GDP Bulletin 2016 compared to previous reports:

- 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

4.1 Appendix 1 - Differences between old and new methodology

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.

As you will have gathered, most of the methodological revisions involved including elements that had not been included in the past, contributing to the higher figures in the 2016 and 2017 bulletins compared to those 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 prior to 2017, 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 legislation to enable this has been drafted and it is hoped that it can be enacted on 1st January 2019. Initially, after this, the additional requirements will be requested on a voluntary basis 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.

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For more information go to gov.gg/data