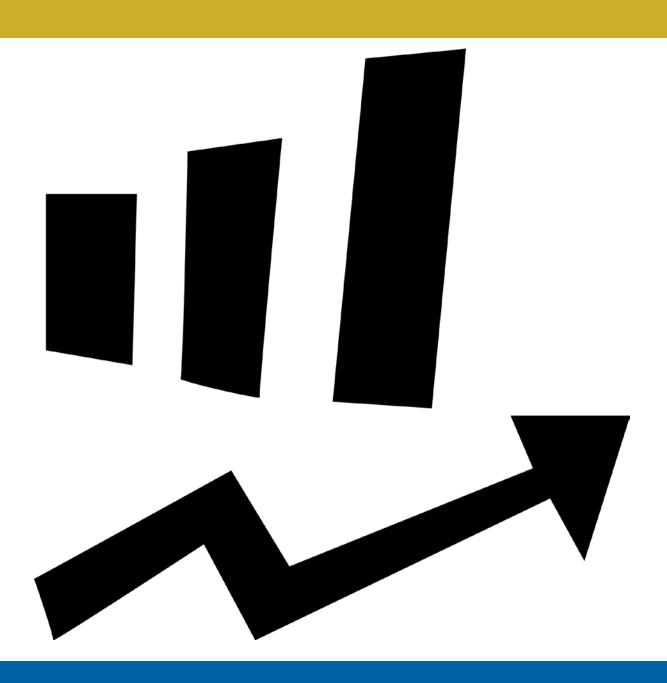
# **GLA**ECONOMICS

Current Issues Note 52

Regional, sub-regional and local gross value added estimates for London, 1997-2015

Emma Christie
April 2017



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### **Key Points**

- In 2015, London's total nominal GVA (as measured by GVA (I)) was over £378 billion (up 3.2 per cent on 2014), helped by strong growth in Human health and social work activities (13.2 per cent) and Information and communication activities (7.0 per cent). Inner London accounts for 67.1 per cent of London's GVA, with Inner London West alone accounting for 41.6 per cent of the total.
- London accounted for 22.7 per cent of the UK's total GVA<sup>1</sup> in 2015, up from 22.6 per cent in 2014 and 18.7 per cent when going even further back to 1997. London has the highest GVA per head at £43,629, 70.4 per cent higher than UK GVA per head of £25,601.
- In 2015, over 16 per cent of London's GVA was generated by the Financial and insurance industry, accounting for more than half of the UK's total GVA in the Financial and insurance industry and 3.7 per cent of the UK's total GVA.
- In 2015, Inner London produced 94.4 per cent of London's GVA in the Financial and insurance activities sector; 80.0 per cent of its GVA in the Professional, scientific and technical activities sector; and 75.7 per cent of its GVA in the Information and communication sector. Outer London accounted for 69.0 per cent of London's GVA in the Manufacturing sector and 63.0 per cent of London's GVA in the Transportation and storage sector.

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<sup>&</sup>lt;sup>1</sup> Unless otherwise stated, UK output/GVA in this document refers to United Kingdom including Extra-Regio and statistical discrepancy. Extra-Regio, comprises compensation of employees and gross operating surplus which cannot be assigned to regions.

## Introduction

In December 2016, the Office for National Statistics (ONS) released provisional estimates of regional, sub-regional and local gross value added (GVA) for 2015 measured by the income approach<sup>2</sup>. Also published in December 2015 were experimental results for regional real GVA as measured by the production approach for the years 1998 to 2014<sup>3</sup>. This note presents the findings for London from the main GVA release (using the income approach) and then outlines the results from the experimental real GVA data. In addition, the note will cover recent changes to the UK National Accounts methodology.

<sup>&</sup>lt;sup>2</sup> ONS, December 2016, 'Regional Gross Value Added (Income Approach), 1997 to 2015'.

<sup>&</sup>lt;sup>3</sup> ONS, December 2016, 'Regional Gross Value Added (Production Approach), 1998 to 2014'.

## **Background notes**

- "Gross Value Added (GVA) is a measure of the increase in the value of the economy due to the production of goods and services"<sup>4</sup>. The GVA estimates in this note are workplace-based, where GVA is allocated to the area in which the economic activity takes place.
- GVA measured by the income approach "involves adding up the income generated by resident individuals or corporations in the production of goods and services. It is calculated gross of deductions for consumption of fixed capital, which is the amount of fixed assets used up in the process of production in any period"<sup>5</sup>. No adjustment has been made to remove the effects of inflation. Over time, even if the true (economic) value of GVA is unchanged, GVA in current prices would increase in line with price rises (inflation).
- The GVA estimates measured by the production approach (currently experimental statistics) calculates the total value of all goods and services that are produced during the reference period (output), "less goods and services used up or transformed in the production process, such as raw materials and other inputs (intermediate consumption)"<sup>6</sup>. These estimates are in real (or constant prices, via chained volume measures (CVM)) prices, meaning adjustment has been made to remove the effects of inflation and therefore the two measures of GVA in this publication are not directly comparable.
- GVA estimates are published using NUTS boundaries from the 2013 review, which came into force on 1 January 2015. The NUTS classification was established by Eurostat in the early 1970s as a single, coherent system for dividing up European Union territory in order to produce regional statistics for the EU.

The GVA data in these releases cover London, its sub-regional and local areas. At the sub-regional (NUTS2<sup>7</sup>) level, London has five areas:

- Inner London West;
- Inner London East;
- Outer London East and North East;
- Outer London South; and
- Outer London West and North West.

At the local (NUTS3) level London has 21 areas:

- Camden and City of London;
- Westminster;
- Kensington & Chelsea and Hammersmith & Fulham;
- Wandsworth;
- Hackney and Newham;
- Tower Hamlets;
- Haringey and Islington;

<sup>&</sup>lt;sup>4</sup> ONS, December 2016, 'Regional Gross Value Added (Income Approach), 1997 to 2015'.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> ONS, December 2016, 'Regional Gross Value Added (Production Approach), 1998 to 2014'.

<sup>&</sup>lt;sup>7</sup> NUTS stands for Nomenclature of Units for Territorial Statistics. It is a European classification for areas based on their size to ensure data across countries at different geographical levels are comparable.

- Lewisham and Southwark;
- Lambeth;
- Bexley and Greenwich;
- Barking & Dagenham and Havering;
- Redbridge and Waltham Forest;
- Enfield:
- Bromley;
- Croydon;
- Merton, Kingston upon Thames and Sutton;
- Barnet;
- Brent;
- Ealing;
- Harrow and Hillingdon; and
- Hounslow and Richmond upon Thames.

#### Box 1: Revisions to the UK National Accounts methodology

Since the publication of the last estimate of regional GVA in December 2015, several changes have been made in the reporting of the UK National Accounts.

In keeping with the UK National Accounts commitment to meeting the new European Commission definition of GNI, as discussed in GLA Economics' Current Issue Note 46<sup>8</sup>, the ONS has made changes to the UK National Accounts measure of GVA. "These impact upon the regional GVA estimates in the form of different national totals for the various components of income, even where no explicit changes to the regional allocation have been needed. Of these, a change to the treatment of Owner-Occupied Imputed Rental has resulted in the greatest impact on the national figures".

In addition, the UK National Accounts 2016 have included the Crossrail business rates supplement (BRS) in the Blue Book for the first time. This is a tax on production levied on behalf of the GLA by the 32 London boroughs and the City of London Corporation. The ONS observe that: "A regional indicator has been compiled using estimates published by the GLA of estimates of income from Crossrail BRS by London borough".

Finally, a third change to National Accounts has been made to show subsidies on production separately in their most recent release. "In previous releases, subsidies have been included in mixed income and profits, and allocated (that is, subtracted) from the profits of each of the sectors (households, public non-financial corporations and private non-financial corporations). In this release, each of the separate subsidies has been regionalised independently, in the same way that taxes on production are processed."

Further detail on these and other changes is available in the ONS Statistical Bulletin that accompanies the Regional GVA release<sup>9</sup>.

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<sup>&</sup>lt;sup>8</sup> Douglass, G., March 2016, 'Regional, sub-regional and local gross value added estimates for London, 1997-2014'. Current Issues Note 46. GLA Economics.

<sup>&</sup>lt;sup>9</sup> ONS, December 2016, 'Regional Gross Value Added (Income Approach), 1997 to 2015'.

## **London GVA (Income approach)**

In 2015, the provisional estimate of London's total GVA was £378,424 million. This was up 3.2 per cent on 2014 and accounted for 22.7 per cent of the UK's total GVA, up from 18.7 per cent in 1997 (see Figure 1). The growth in London's nominal GVA accounted for 28.0 per cent of the UK's total GVA increase between 2014 and 2015.

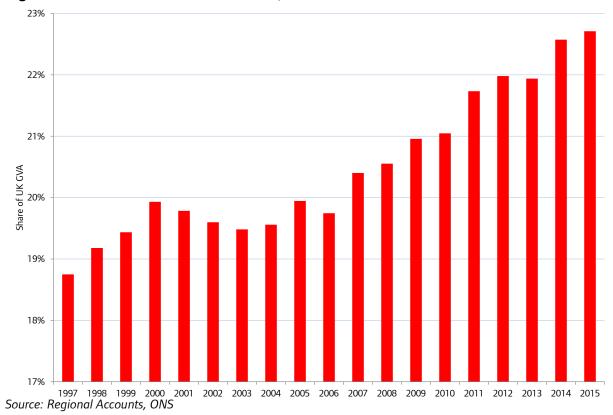


Figure 1: London's share of UK GVA (I), 1997 - 2015

Since 2008, London's GVA has increased by 30.2 per cent in nominal terms (i.e. without taking account of inflation), compared to 17.8 per cent for the UK (see Figure 2). That was the fastest rate of growth among the 12 regions. This is more pronounced when looking over a longer time period. London's GVA has increased by 138.2 per cent since 1997 – when it was £159 billion – compared to a 96.7 per cent increase for the UK as a whole.

140
130
120
110
80
100
80
70
60
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Figure 2: Indexed UK and London's GVA (I) increase since 1997, base value 2008=100

#### **GVA across London**

Over 67.1 per cent of London's GVA was produced in Inner London in 2015 (see Figure 3), with 41.6 per cent of London's total GVA produced in Inner London - West alone. Indeed, Inner London - West had a higher GVA than all UK regions or nations except for the South East (and, of course, London). Inner London - West also saw the greatest change in its relative importance to London's economy. Having accounted for 36.1 per cent of London's GVA in 1997, by 2015 this was up to 41.6 per cent. All other parts of London declined in importance apart from Inner London – East which saw its share of London's economy increase from 23.8 per cent to 25.5 per cent over this period (see Figure 4). In comparison, London has increased its share of the UK's total GVA by 4 percentage points since 1997.

UK -

-London

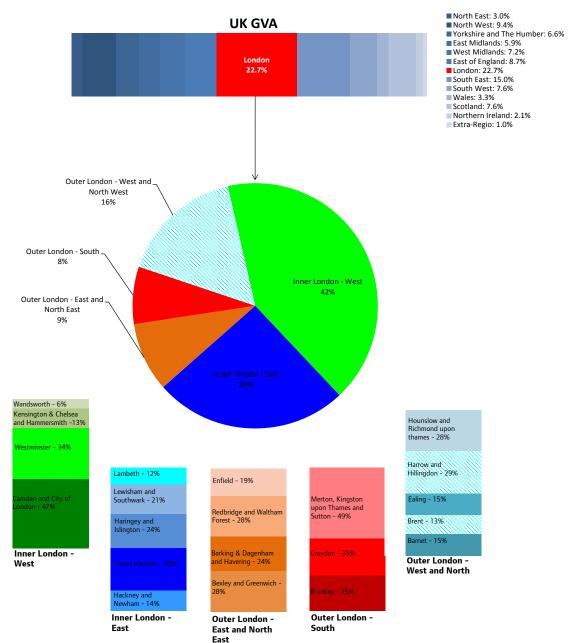


Figure 3: Geographic breakdown of Headline<sup>10</sup> UK GVA (I) in 2015

<sup>&</sup>lt;sup>10</sup> UK includes Extra-Regio (which comprises compensation of employees and gross operating surplus which cannot be assigned to regions)

100% 16% 19% 90% 80% 10% 70% 11% 60% Share of GVA 50% 40% 30% 20% 10% 0% 1997 2015

Figure 4: Geographical breakdown of London's headline GVA (I)<sup>11</sup>, 1997 and 2015

#### Revisions

Revisions to GVA estimates have been made since the previous release of the regional accounts published by the ONS in  $2015^{12}$ . There were data revisions of over 1 per cent of estimated GVA each year during the period 1997 - 2010, where GVA is between £16,891 million and £55,367 million higher in the UK in the 2016 estimates when compared to the estimates published in 2015. In London, these revisions were between £10,100 million and £4,036 million higher in the 2016 estimates when compared to 2015 estimates. These revisions were largely the result of changes to the calculation of imputed rent of owner-occupiers made by the ONS in 2015. Figure 5 illustrates the impact on the growth rates for London and the UK due to the revisions to the series.

■ Inner London - West ■ Inner London - East ■ Outer London - East and North East ■ Outer London - South ■ Outer London - West and North West

<sup>&</sup>lt;sup>11</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>12</sup> ONS, December 2016, 'Regional Gross Value Added (Income Approach), December 2015'.

3% 2% 8% 2% 6% Percentage point change in estimate 4% 1% Annual growth rate -2% -1% -4% -6% -2% 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 "" London total revision (RHS) WWW UK total revision (RHS) United Kingdom 2016 release (LHS) United Kingdom 2015 release (LHS) London 2016 release (LHS) London 2015 release (LHS)

Figure 5: Comparison of the nominal growth rates in GVA (I) in London and the UK 1998 to 2014 from the 2015 and 2016 regional accounts releases

### **GVA** per head and per job

London's GVA performance remains strong even after adjusting for its relative size<sup>13</sup>. GVA per head of population in the capital was £43,629 in 2015 (see Figure 6), the highest of any English region or UK nation and 70.4 per cent higher than that for the UK as a whole which stood at £25,601. Over 2015, GVA per head in London increased by 1.6 per cent, compared to an increase of 1.8 per cent for the UK as a whole. Since 2008, London's GVA per head has risen by 17.3 per cent, compared to a rate of increase of 11.9 per cent for the UK as a whole.

<sup>&</sup>lt;sup>13</sup> Adjusting for relative size is important as it provides a clearer understanding of the regions relative prosperity and is generally correlated with living standards. The importance of this can be observed when we compare national incomes so, for example, China has significantly higher output than Singapore; however the output per head and living standards of Singapore are higher.

£50,000 8% £45,000 £43,629 6% £40,000 £35,000 4% CVA ber head of population GVA ber head of population £30,000 £22,64 £15,000 £10,000 -2% £5,000 £0 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Figure 6: Headline GVA (I) $^{14}$  per head (£) and annual percentage change for London and UK 1997-2015, current prices

However, given the importance of commuters in producing London's output, GVA per head in London might be considered a somewhat misleading statistic. In terms of productivity, a more representative measure is GVA per worker (see Figure 7). As can be observed, GVA per worker is significantly higher in London when compared to the UK as a whole, with it standing in 2015 in London at £67,455 compared to a figure of £49,067 for the UK as a whole. In 2015, GVA per worker increased by 1.3 per cent in London, compared to a growth rate of 1 per cent for the UK. Figure 8 shows the difference between GVA per worker and GVA per head in London<sup>15</sup> and highlights the different growth rates that these two measures give.

UK annual change

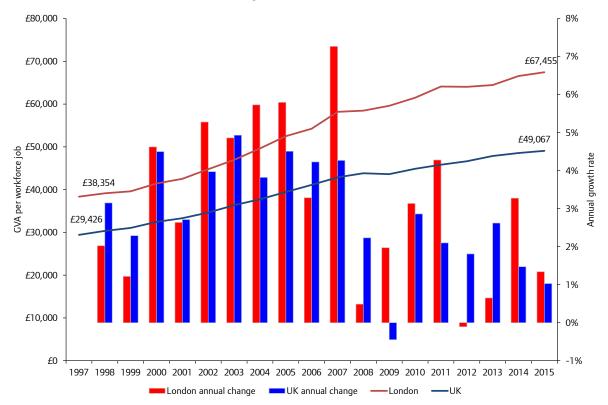
-I ondon

London annual change

<sup>&</sup>lt;sup>14</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>15</sup> In this paper the analysis looks at GVA per workforce job. However, more detailed work on GVA per job, for potential use for appraisal and evaluation purposes for instance, was recently published by GLA Economics in Working Paper 63: Gross Value Added per Workforce Job in London and the UK.

Figure 7: Headline GVA (I) <sup>16</sup> per worker <sup>17</sup> (£) and annual percentage change for London and UK 1997-2015, current prices



Source: Regional Accounts & Workforce Jobs, ONS and GLA Economics calculations

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<sup>&</sup>lt;sup>16</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>17</sup> Calculated by dividing headline GVA by the average workforce jobs level per annum.

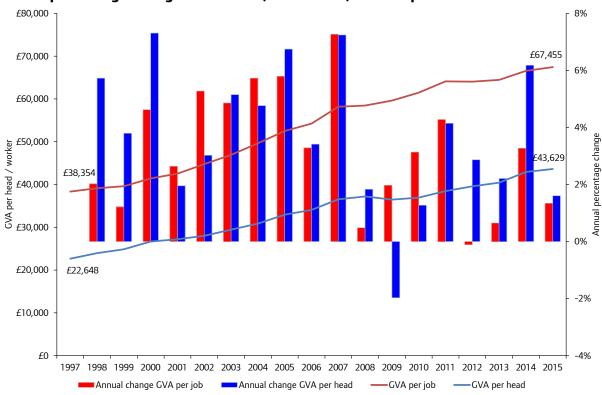


Figure 8: Comparison of headline GVA (I) 18 per worker 19 and GVA (I) per head (£) and annual percentage change for London, 1997-2015, current prices

Source: Regional Accounts & Workforce Jobs, ONS and where applicable GLA Economics calculations

However, the London-wide GVA per worker estimates may hide some significant variation across London's sub-regions and local areas. Unfortunately in order to examine output per job at the sub regional level other measures of employment need to be used as the workforce jobs data that was used to produce the analysis in Figure 7 is not available at the sub-regional level. Thus, instead, employee jobs data from the Business Register and Employment Survey (BRES) will be used in the following analysis. It should be noted that this data gives over 1 million fewer jobs at the London level as it does not include the self-employed which are included in the workforce jobs data. Therefore, this leads to a higher estimate here of output per job in London as this estimate is output per employee job only. Further the data is only available for the years 2009 to 2015 and data is not available for Northern Ireland. Consequently, in the following analysis, London's results will be compared to the results for Great Britain as a whole<sup>20</sup>. Figures 9 and 10 show GVA per job (as measured by employees only) across London since 2009. As can be observed London has a higher GVA per employee job than Great Britain as a whole. Further, all NUTS2 regions in London also outperform Great Britain, although the Inner London regions also outperform London as a whole on this measure.

Looking at these areas in London in more detail, the variance between them is evident. In 2015 there was a GVA per employee job difference of £21,174 between the highest (Inner London – West) and the lowest (Outer London – South) sub-region. Since 2009, all of London's NUTS2 areas saw a rise in GVA per employee job; however there are differences between the growth

<sup>&</sup>lt;sup>18</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>19</sup> Calculated by dividing headline GVA by the average workforce jobs level per annum.

<sup>&</sup>lt;sup>20</sup> This figure is calculated by the sum of the output of England, Scotland and Wales (and thus excludes Extra- Regio) divide by the employee jobs measure given by BRES.

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rates seen between the sub-regions. GVA per employee job increased by 9.3 per cent in Inner London – West over the 2009 to 2015 period, however the increase seen in Inner London – East was lower at 4.6 per cent over the same period. GVA per employee job also increased in Outer London between 2009 and 2015 with Outer London – West and North West rising by 20.7 per cent (the highest of any London NUTS 2 area), compared to growth of 12.1 per cent and 11.3 per cent in Outer London – South and Outer London – East and North East respectively.

£100,000 £90,000 £84,973 £80,000 £80,022 £77,403 GVA per employee job £77,760 £70,000 £69,917 £60,000 £59.260 £56,937 £50,000 £51,880 £40,000 2010 2015 2009 2012 2013 2014 2011 London Inner London - West Inner London - East Outer London - East and North East Outer London - West and North West Outer London - South

Figure 9: Headline GVA (I) $^{27}$  per employee job $^{22}$  at London NUTS2 level and Great Britain, 2009-2015, current prices

Source: Regional Accounts & BRES, ONS and GLA Economics calculations

Great Britain

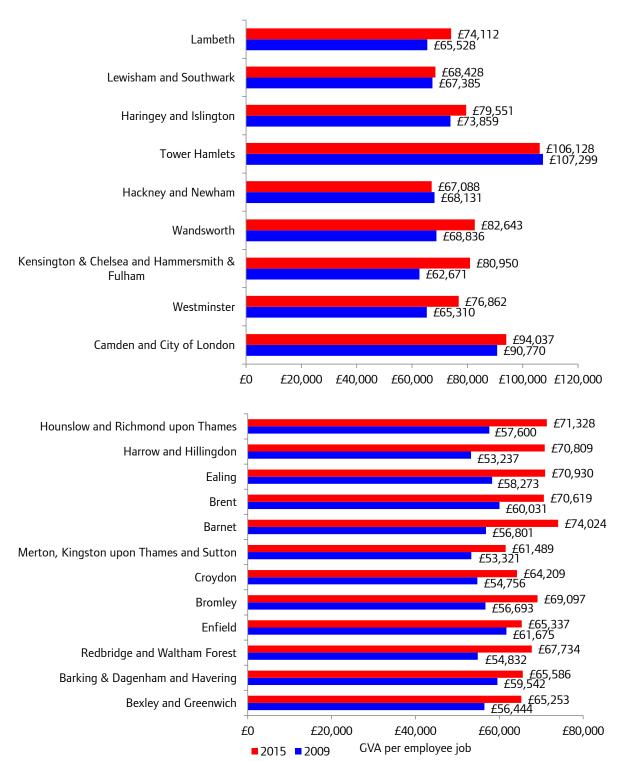
The variations in output in London at the NUTS 3 level are even more marked as shown in Figure 10 with Tower Hamlets showing output per employee job of £106,128 in 2015 (81.7 per cent higher than the Great Britain average) and Camden and City of London showing output per employee job of £94,037 (61 per cent higher than the Great Britain average)<sup>23</sup>. It should also be noted that the only London NUTS 3 areas to see a fall in output per employee job over the years 2009 and 2015 were Hackney and Newham, as well as Tower Hamlets.

<sup>&</sup>lt;sup>21</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>22</sup> Calculated by dividing headline GVA by annual employee jobs data from BRES.

<sup>&</sup>lt;sup>23</sup> Since the publication of the regional GVA data examined in this note the ONS has published estimates of GVA by local authority for the UK. This data includes GVA estimates for all 33 local authorities in London and can be found at: ONS, March 2017, 'Regional GVA(I) by local authority in the UK'.

Figure 10: Headline GVA (I) $^{24}$  per employee job $^{25}$  at London NUTS3 level, 2009-2015, current prices



Source: Regional Accounts & BRES, ONS and GLA Economics calculations

<sup>&</sup>lt;sup>24</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>25</sup> Calculated by dividing headline GVA by annual employee jobs data from BRES.

## London GVA (I) by industry

In 2015, just over 16 per cent of London's GVA was generated by the Financial and insurance industry, totalling £61.7 billion (see Figure 11 and Table 1). The value of this industry has grown from just under 14 per cent of London's total GVA in 1997. Professional, scientific and technical activities also significantly increased its share of the London economy, increasing from 8.7 per cent of total GVA in 1997 to 11.6 per cent in 2015. In 2015, just over half of the UK's GVA in the Financial and insurance industry was generated in London (up from 42.5 per cent in 1997) (see Figure 12). Indeed, London's Financial and insurance industry made up 3.7 per cent of the UK's total GVA in 2015.

Real estate, and Information and communication industries also play an important role in London's economy. In 2015, these two industries combined accounted for 25 per cent of London's GVA (up slightly from 23.6 per cent in 1997).

£400 £350 £300 £250 £200 £ billion £150 £100 £50 £0 2002 2008 2013 2014 2015 ■ Primary & utilities Manufacturing Construction ■Wholesale and retail trade; repair of motor vehicles Accommodation and food service activities Transportation and storage ✓ Information and communication Financial and insurance activities ::: Real estate activities · Professional, scientific and technical activities = Administrative and support service activities = Public administration and defence; compulsory social security **≡** Education Human health and social work activities

Figure 11: Headline GVA (I)<sup>26</sup> in London by industry, 1997-2015, current prices and selected years

Source: Regional Accounts, ONS

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<sup>&</sup>lt;sup>26</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

Table 1: Headline GVA (I)<sup>27</sup> in London by industry (£ billion and as per cent of total London GVA (I)), 1997, 2008 and 2015, current prices

	1997		2008		2015	
	Industry GVA (£b)	% of London's economy	Industry GVA (£b)	% of London's economy	Industry GVA (£b)	% of London's economy
Primary & utilities <sup>28</sup>	£1.9	1.2%	£4.2	1.5%	£4.8	1.3%
Manufacturing	£10.4	6.6%	£8.1	2.8%	£8.4	2.2%
Construction	£6.8	4.3%	£13.6	4.7%	£16.0	4.2%
Wholesale and retail trade; repair of motor vehicles	£17.2	10.8%	£26.2	9.0%	£31.3	8.3%
Transportation and storage	£10.8	6.8%	£14.1	4.9%	£17.9	4.7%
Accommodation and food service activities	£4.4	2.8%	£8.0	2.8%	£11.4	3.0%
Information and communication	£15.5	9.7%	£31.6	10.9%	£41.1	10.9%
Financial and insurance activities	£21.7	13.7%	£49.5	17.0%	£61.7	16.3%
Real estate activities	£22.0	13.8%	£35.7	12.3%	£53.6	14.2%
Professional, scientific and technical activities	£13.8	8.7%	£32.9	11.3%	£43.7	11.6%
Administrative and support service activities	£7.4	4.6%	£14.6	5.0%	£21.9	5.8%
Public administration and defence; compulsory social security	£6.5	4.1%	£11.1	3.8%	£12.0	3.2%
Education	£6.8	4.3%	£13.8	4.8%	£17.7	4.7%
Human health and social work activities	£7.2	4.5%	£15.0	5.2%	£20.9	5.5%
Arts, entertainment and recreation	£3.3	4.1%	£6.0	2.1%	£6.8	1.8%
Total	£158.9	100.0%	£290.6	100.0%	£378.4	100.0%

<sup>&</sup>lt;sup>27</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>28</sup> This includes the following sectors: Agriculture, Forestry and Fishing; Mining and Quarrying; Electricity, gas, steam and air conditioning supply; and Water supply, sewerage, waste management and remediation activities.

Arts and other services Human health and social work activities Education Public administration and defence; compulsory... Administrative and support service activities Professional, scientific and technical activities Real estate activities Financial and insurance activities Information and communication Accommodation and food service activities Transportation and storage Wholesale and retail trade; repair of motor. Construction Manufacturing Primary & utilities Share of UK GVA **■**2015 **■**1997

Figure 12: London's share of UK headline GVA (I)<sup>29</sup> by industry, 1997-2015, current prices

Figure 13 shows how London's GVA by industry is spread between Inner and Outer London and their constituent areas in both 1997 and 2015. Industries with GVA concentrated in Outer London include Manufacturing (69.0 per cent); Transportation and storage (63.0 per cent); and Construction (55.0 per cent), whilst only 5.6 per cent of London's total Financial and insurance industry GVA was located there (down from 12.5 per cent in 1997). Meanwhile, Inner London produced 94.4 per cent of London's GVA in Financial and insurance activities; 80.0 per cent of Professional, scientific and technical activities; and 75.7 per cent of Information and communication.

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<sup>&</sup>lt;sup>29</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

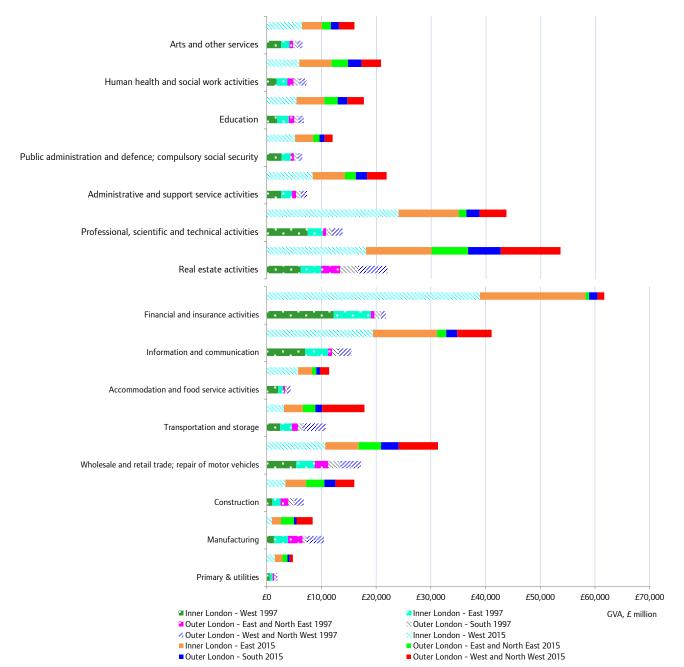


Figure 13: Inner and Outer London GVA (I)<sup>30</sup> by industry, 1997 and 2015, £ million

<sup>&</sup>lt;sup>30</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

## **London GVA(P)**

In December 2016 the ONS published its third estimate of full regional GVA using the production approach in both nominal and real terms for the years 1998 to 2014<sup>31</sup>. It should be noted that the ONS observes that "these estimates are experimental and do not have National Statistics status... The largest difference between current price estimates of GVA(I) and GVA(P) can be seen in London in the financial and insurance activities industry. While work is being carried out to improve these estimates in GVA(P), there continues to be an inconsistency in this industry". As such, the ONS further advise that users "exercise caution in the interpretation and use of these statistics".

As of December 2017, the ONS intends to "take the strengths from both measures and use them to produce a brand new balanced measure of regional GVA", giving a single measure of economic activity within a region. All three measures are to be published, with the balanced data becoming the lead series.

#### **Headline GVA(P)**

Figure 14 shows the growth rate of real GVA(P) in London and in the UK between 1999 and 2014. London's real GVA(P) has generally grown at a faster rate than the UK economy, except for a period in the early-to-mid 2000s and around the time of the economic downturn. Between 1999 and 2014, London's real GVA(P) increased by 54.3 per cent at an average compound annual growth rate of 2.7 per cent. That was the highest of any NUTS1 region, with the South West, Scotland, and the North West, following.

Further, between 1998 and 2007 (pre downturn) London experienced the second largest increase in real GVA(P), increasing by 39.8 per cent at an average annual growth rate of 3.8 per cent over the period, after Northern Ireland which grew by 45.0 per cent at an average annual growth rate of 4.2 per cent over the period. London was followed by Yorkshire and The Humber and the North West, growing at an average annual rate of 3.3 per cent each.

Between 2007 and 2014 London's real GVA(P) grew by 10.4 per cent at an average annual growth rate of 1.4 per cent, faster than any other UK region. This was followed by Scotland, the South East and the West Midlands which have respectively grown by 9, 8.9, and 8 per cent over this period giving respectively average annual growth rates of 1.2, 1.2 and 1.1 per cent. In contrast, real GVA in Northern Ireland and Yorkshire and The Humber have contracted by 10.7 and 7.1 per cent respectively, giving average annual growth rates of -1.6 and -1 from 2007 to 2014.

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<sup>&</sup>lt;sup>31</sup> ONS, December 2016, 'Regional Gross Value Added (Production approach), 1998 to 2014'.

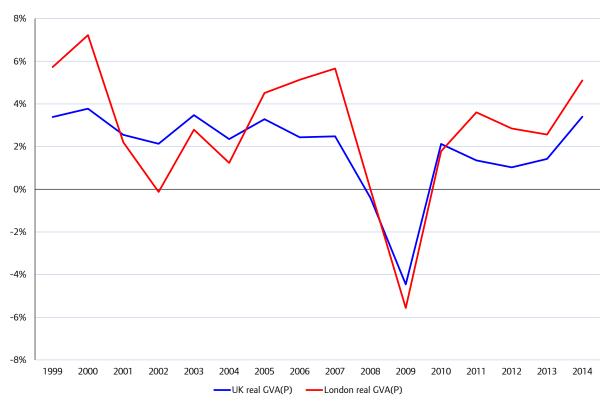


Figure 14: Headline real GVA (P) (chained volume measure) for London and the UK, 1999-2014

Source: Regional Accounts, ONS, GLA Economics calculations

Table 2 shows the growth rate of real GVA(P) in London by sector between 1998 and 2014. Information and communication has been London's fastest growing sector over the period, with total growth of 114.8 per cent and average annual growth of 4.9 per cent. This was closely followed by Professional, scientific and technical activities, with total growth of 111.4 per cent, and average annual growth of 4.8 per cent. In contrast, Manufacturing fell by 30.4 per cent between 1998 and 2014, at an average annual rate of 2.2 per cent. The only other sector to see negative growth over the period was Arts, entertainment, and recreation, which fell by 1.1 per cent, at an average annual rate of 0.1 per cent.

Table 2: Real GVA (P) growth in London for selected key industries, 1998 - 2014

	Total growth	Average annual growth
Primary & utilities 32	16.1%	0.9%
Manufacturing	-30.4%	-2.2%
Construction	57.2%	2.9%
Wholesale and retail trade; repair of motor vehicles	12.9%	0.8%
Transportation and storage	32.2%	1.8%
Accommodation and food service activities	57.7%	2.9%
Information and communication	114.8%	4.9%
Financial and insurance activities	15.2%	0.9%
Real estate activities	87.3%	4.0%
Professional, scientific and technical activities	111.4%	4.8%
Administrative and support service activities	105.8%	4.6%
Public administration and defence; compulsory social security	12.7%	0.7%
Education	39.0%	2.1%
Human health and social work activities	102.6%	4.5%
Arts, entertainment and recreation	-1.1%	-0.1%
All industries <sup>33</sup>	54.3%	2.7%

Despite an increase of real GVA(P) in London between 2007 and 2014, real GVA(P) in a number of industry sectors remained below the 2007 level. For example, between 2007 and 2014, the real GVA(P) of the Financial and insurance activities sector contracted by 24.9 per cent giving an average annual growth rate of -4.0 per cent, while the Arts, entertainment and recreation sector contracted by 18.9 per cent over the period, giving an average annual growth rate of -3.0 per cent.

A comparison between GVA(P) and GVA(I) data expressed in current basic prices at the London level demonstrates that there are differences between the two measures used. As can be seen from Figure 15 the estimate of GVA (P) in London was generally higher than the estimate of GVA (I), although more recently the series have started to converge. This difference is partially due to the two series having different growth rates over 1998 to 2014 with the average annual growth rate for GVA (I) over this period standing at 5.0 per cent (giving a total increase of just over 116.7 per cent between 1998 and 2014) compared to an average annual growth rate of 4.6 per cent for GVA (P) (a total increase of just over 105 per cent over the time period), as well as changes in methodology from the ONS to bring the two series more in line. However, the growth rates of GVA(P) and GVA(I) in current prices nevertheless differ over time; in 2006 the discrepancy between the two measures is the greatest (Figure 16), where the growth rate in GVA(I) exceeds growth in GVA(P) by under 4 percentage points.

<sup>33</sup> This includes industries not listed within the table.

<sup>&</sup>lt;sup>32</sup> This includes the following sectors: Agriculture, Forestry and Fishing; Mining and Quarrying; Electricity, gas, steam and air conditioning supply; and Water supply, sewerage, waste management and remediation activities.

Figure 15: Comparison of current price GVA (I) and current price GVA (P) all industries total for London, 1998 to 2014

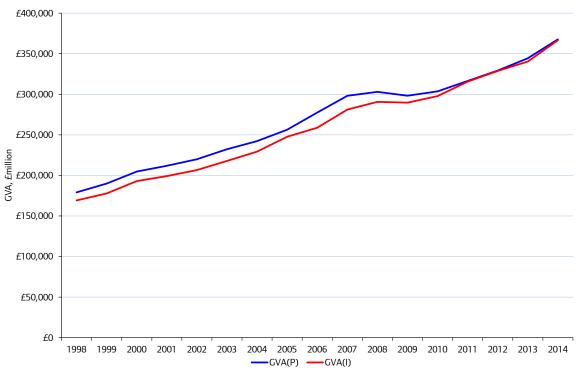
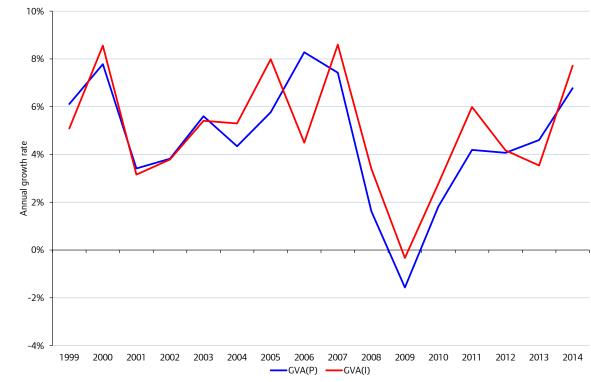


Figure 16: Comparison of growth rates of current price GVA (I) and current price GVA (P) for London, 1999 to 2014



Source: Regional Accounts, ONS

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