# **GLA**ECONOMICS

Current Issues Note 46

# Regional, sub-regional and local gross value added estimates for London, 1997-2014

Gordon Douglass March 2016



MAYOR OF LONDON

### copyright

#### Greater London Authority March 2016

#### Published by

Greater London Authority City Hall The Queens Walk London SE1 2AA

www.london.gov.uk

Tel 020 7983 4922

Minicom 020 7983 4000

ISBN 978-1-84781-616-0

#### Cover photograph

© Julian Love/London and Partners

For more information about this publication, please contact:

**GLA** Economics

Tel 020 7983 4922

Email glaeconomics@london.gov.uk

GLA Economics provides expert advice and analysis on London's economy and the economic issues facing the capital. Data and analysis from GLA Economics form a basis for the policy and investment decisions facing the Mayor of London and the GLA group. GLA Economics uses a wide range of information and data sourced from third party suppliers within its analysis and reports. GLA Economics cannot be held responsible for the accuracy or timeliness of this information and data. The GLA will not be liable for any losses suffered or liabilities incurred by a party as a result of that party relying in any way on the information contained in this report.

# Contents

Key Points	2
Introduction	3
Background notes	4
London GVA (I)	7
London GVA (I) by industry	22
London GVA (P)	26

# Key Points

- In 2014, London's total nominal GVA (as measured by GVA (I)<sup>1</sup>) was over £364 billion (up 6.8 per cent on 2013), helped by strong growth in real estate (12.8 per cent) and finance and insurance activities (11.6 per cent). Inner London accounts for 68 per cent of London's GVA, with Inner London West alone accounting for 42 per cent of the total.
- London accounted for 22.5 per cent<sup>2</sup> of the UK's total GVA<sup>3</sup> in 2014, up from 22.0 per cent in 2013. London has the highest GVA per head at £42,666, 71 per cent higher than UK GVA per head of £24,958.
- In 2014, nearly 19 per cent of London's GVA was generated by the Financial and insurance industry, accounting for 52 per cent of the UK's total GVA in the Financial and insurance industry and 4.3 per cent of the UK's total GVA.
- In 2014, Inner London produced 95 per cent of London's GVA in the Financial and insurance activities sector; 78 per cent of its GVA in the Professional, scientific and technical activities sector; 75 per cent of its GVA in the Information and communication sector; and 56 per cent of Real estate activities sector. Outer London accounted for over 60 per cent of London's GVA in the Transportation and storage; and Manufacturing sectors.

<sup>&</sup>lt;sup>1</sup> This is GVA as measured by the income approach.

<sup>&</sup>lt;sup>2</sup> The share reported here is calculated as London's GVA divided by UK GVA without taking into account a statistical discrepancy of £6,136 million. If the statistical discrepancy is subtracted from UK's GVA, London's share of UK GVA is 22.6 per cent as reported by the ONS.

<sup>&</sup>lt;sup>3</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 2015 the Office for National Statistics (ONS) released provisional estimates of regional, sub-regional and local gross value added (GVA) for 2014 measured by the income approach<sup>4</sup>. Also published in December 2015 were experimental results for regional real GVA as measured by the production approach for the years 1998 to 2013<sup>5</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 National Accounts methodology and borough-level GVA estimates produced by GLA Economics.

<sup>&</sup>lt;sup>4</sup> ONS, December 2015, '<u>Regional Gross Value Added (Income Approach), 1997 to 2014</u>'.

<sup>&</sup>lt;sup>5</sup> ONS, December 2015, '<u>Regional Gross Value Added (Production Approach), 1998 to 2013</u>'.

### 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>6</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 incomes 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>7</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>8</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 for the first time using new 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>9</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>6</sup> ONS, December 2015, '<u>Regional Gross Value Added (Income Approach), 1997 to 2014'</u>.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> ONS, December 2015, '<u>Regional Gross Value Added (Production Approach), 1998 to 2013</u>'.

<sup>&</sup>lt;sup>9</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 National Accounts estimates of GDP

Since the publication of the last estimate of regional GVA in December 2014 significant changes have been made in the reporting of the national accounts. These changes have been made due to changes in the availability of data, improvements in estimating some measures, to ensure that the data meets the definition of Gross National Income (GNI) as defined by the European Commission, and in order to meet the European System of National and Regional Accounts (ESA2010).

A major change concerned the estimates of household rental income. The ONS noted that "this year has seen a big change to the treatment of household rental income, with three separate changes occurring simultaneously. The first of these was a change in the average house prices used to calculate the regional allocation of imputed rental of owner-occupied dwellings. This change has been necessary because the former data source (provided by the Department for Communities and Local Government) is no longer available. The new data use median house prices from ONS instead of mean house prices, which reduces the impact of the most expensive houses and improves the consistency of estimates over time. The estimates of dwelling stock used have also been changed to build up from Local Authority/Council level data, providing a coherent and consistent framework for use across the Regional Accounts at all NUTS levels. This change has had a considerable impact on GVA estimates for London, Scotland and Northern Ireland in particular".

The second change to household rental income only affects the NUTS2 and NUTS3 areas. Of this change, the ONS observed that "we have improved the regional allocation of rental income by separating the household sector from other sectors and allocating the household part using housing stock and average house prices. This has improved the distribution of rental income at the lower levels of geography, where the housing market was previously regionalised using compensation of employees. This change has had a very wide impact across the NUTS2 and NUTS3 areas".

The third change was made to adhere to the European Commission definition of GNI and the new ESA2010, and impacted on estimates relating to cross-border income from the ownership of second homes. The ONS explained the change, stating that "this includes those in the UK owned by foreign nationals and those owned by UK residents but located in other countries. The activity has two components: property income (import and export), which will feature in

the next release of regional Gross Disposable Household Income (GDHI); and housing services (import and export), which features in both regional GVA and GDHI as a part of rental income".

Of the other changes made the ONS stated that "all other changes made to the UK National Accounts measure of GVA, to satisfy the requirements of Gross National Income or ESA2010, 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". It further noted that the changes to meet ESA2010 "are many and varied, and will be implemented in the UK National Accounts over a number of years", with the UK Regional Accounts aiming "to implement any relevant changes (those requiring a different treatment to be implemented in order to allocate the national total across regions of the UK) in the first regional publication following their introduction to the National Accounts".

Further detail on these and other changes is available in the ONS Statistical Bulletin that accompanies the Regional GVA release<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> ONS, December 2015, '<u>Regional Gross Value Added (Income Approach), 1997 to 2014'</u>.

# London GVA (I)

In 2014, the provisional estimate of London's total GVA was £364,310 million. This was up 6.8 per cent on 2013 and accounted for 22.5 per cent of the UK's total GVA, up from 18.9 per cent in 1997 (see Figure 1). The growth in London's nominal GVA accounted for 32.6 per cent of the UK's total GVA increase between 2013 and 2014.



Figure 1: London's share of UK GVA (I), 1997 – 2014

Since 2008, London's GVA has increased by 28.9 per cent in nominal terms (i.e. without taking account of inflation), compared to 18.2 per cent for the UK (see Figure 2). London's GVA has increased by the most of any UK nation or region (by 144 per cent) since 1997, when it was around £148 billion, compared to a 104 per cent increase for the UK as a whole, with only the South East and South West joining London in seeing their output double over this period.



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

#### **GVA across London**

Over 68 per cent of London's GVA was produced in Inner London in 2014 (see Figure 3), with 42 per cent of London's total GVA produced in Inner London - West alone. Indeed, Inner London - West has 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 per cent of London's GVA in 1997, by 2014 this was up to 42 per cent, with all other parts of London declining in importance apart from Inner London – East which saw its share of London's economy increase from 25 per cent to 26 per cent over this period (see Figure 4). London has increased its share of the UK's total GVA by 3.7 percentage points since 1997.



Figure 3: Geographic breakdown of Headline<sup>77</sup> UK GVA (I) in 2014

<sup>&</sup>lt;sup>11</sup> UK includes Extra-Regio (which comprises compensation of employees and gross operating surplus which cannot be assigned to regions)



Figure 4: Geographical breakdown of London's headline GVA (I)<sup>12</sup>, 1997 and 2014

#### Revisions

Revisions to GVA estimates have been made since the previous release of the regional accounts published by the ONS in  $2014^{13}$ . A major revision occurred during the year to 2013, where GVA is £21,610 million higher in the UK in the 2015 estimates when compared to the estimates published in 2014 (an increase of 1.4 per cent); and £2,531 million higher in London in the 2015 estimates when compared to 2014 estimates (an increase of 0.7 per cent). In 2008, an upward revision of 1.5 per cent has been made to the nominal growth rate of London's GVA in the 2015 publication, from -1.5 per cent to 0.0 per cent. While in the year to 2003, a downward revision of 0.5 per cent has been made to the nominal growth rate of UK GVA. Similarly, in 2003, there has been a downward revision of -0.6 per cent in the nominal growth rate of London and the UK due to the revisions to the series.

<sup>&</sup>lt;sup>12</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>13</sup> ONS, December 2014, 'Regional Gross Value Added (Income Approach), December 2014'.





Source: Regional Accounts, ONS

#### GVA per head and per job

London's GVA performance remains strong even after adjusting for its relative size<sup>14</sup>. GVA per head of population in the capital was £42,666 in 2014 (see Figure 6), the highest of any English region or UK nation and 71 per cent higher than that for the UK as a whole which stood at £24,958. Over 2014, GVA per head in London increased by 5.3 per cent, compared to an increase of 3.4 per cent for the UK as a whole. Since 2008, it has risen by 18.0 per cent, compared to a rate of increase of 12.7 per cent for the UK as a whole.

<sup>&</sup>lt;sup>14</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 with, for example, China has significantly higher output than Singapore; however the output per head and living standards of Singapore are higher.



Figure 6: Headline GVA (I)<sup>75</sup> per head (£) and annual percentage change for London and UK 1997-2014, 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 2014 in London at £66,638 compared to a figure of £48,703 for the UK as a whole. In 2014 GVA per worker increased by 3.7 per cent in London, compared to a growth rate of 1.4 per cent for the UK; Figure 8 shows the difference between GVA per worker and GVA per head in London<sup>16</sup> and highlights the different growth rates that these two measures give.

<sup>&</sup>lt;sup>15</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place. <sup>16</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 <u>Working Paper 63: Gross Value</u> Added per Workforce Job in London and the UK.



Figure 7: Headline GVA (I)<sup>17</sup> per worker<sup>18</sup> (£) and annual percentage change for London and UK 1997-2014, current prices

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

<sup>&</sup>lt;sup>17</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>18</sup> Calculated by dividing headline GVA by the average workforce jobs level per annum.





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, thus leading 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 2014 and data is not available for Northern Ireland thus in the following analysis London's results will be compared to the results for Great Britain as a whole<sup>21</sup>. Figures 9 and 10 show GVA per job (as measured by 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 2014 there was a GVA per employee job difference of £20,342 between the highest (Inner London – West) and the lowest (Outer London – South). Since 2009, all of London's NUTS2 areas saw a rise in GVA per employee job; however there are differences between the growth rates seen

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

<sup>&</sup>lt;sup>19</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>20</sup> Calculated by dividing headline GVA by the average workforce jobs level per annum.

<sup>&</sup>lt;sup>21</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.

between the sub regions. Thus GVA per employee job increased by 13.7 per cent in Inner London – West over 2009 to 2014, however the increase seen in Inner London – East was lower at 5.9 per cent over this time period. GVA per employee job also increased in Outer London between 2009 and 2014 with Outer London – South rising by 19.2 per cent (the highest of any London NUTS 2 area), compared to rises of 15.8 per cent and 14.9 per cent in Outer London – West and North West and Outer London – East and North East respectively.





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

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 £112,318 in 2014 (101.8 per cent higher than the Great Britain average) and Camden and City of London showing output per employee job of £98,180 (76.4 per cent higher than the Great Britain average). It should also be noted that no London NUTS 3 area saw a fall in output per employee job over the years 2009 and 2014.

<sup>&</sup>lt;sup>22</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

<sup>&</sup>lt;sup>23</sup> Calculated by dividing headline GVA by annual employee jobs data from BRES.

# Figure 10: Headline GVA (I)<sup>24</sup> per employee job<sup>25</sup> at London NUTS3 level, 2009-2014, 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.

#### Box 2: Changes to NUTS3 level and GLA Economics borough-level GVA (I) estimates

The estimates of GVA (I) and GVA (P) at the NUTS level 2 & 3 that were published in December 2015 by the ONS were based on the NUTS system in place after 1 January 2015. Rather than just Inner and Outer London as was previously the case, this system now has five geographies at NUTS level 2:

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

#### Map 1: NUTS level 2 geographies in London post January 2015



These areas are split further at NUTS level 3. These breakdowns are as follows:

- Inner London West:
  - Camden and City of London;
  - Westminster;
  - Kensington & Chelsea and Hammersmith & Fulham; and
  - Wandsworth.
- Inner London East:
  - Hackney and Newham;
  - Tower Hamlets;
  - Haringey and Islington;
  - Lewisham and Southwark; and
  - Lambeth.
- Outer London East and North East:
  - Bexley and Greenwich;
  - Barking & Dagenham and Havering;
  - Redbridge and Waltham Forest; and
  - Enfield.
- Outer London South:
  - Bromley;
  - Croydon; and
  - Merton, Kingston upon Thames and Sutton.
- Outer London West and North West:
  - Barnet;
  - Brent;
  - Ealing;
  - Harrow and Hillingdon; and
  - Hounslow and Richmond upon Thames.



Unique estimates of GVA at the borough level are available for some London local authorities, whilst others have been aggregated together. In the past to better understand the sub-regional nature of London's economy, GLA Economics has estimated local authority level GVA(I) for all London's local authorities, using the five sub-regions that were previously available at NUTS3 level<sup>26</sup>.

The approach<sup>27</sup> to estimating Borough level GVA used was to take the estimate for sector level GVA(I) at NUTS3 level and apportion it to the constituent London local authorities, based on the local authorities employment in those sectors compared to overall employment in the sector at the previous NUTS3 level using Business Register and Employment Survey (BRES) data. However for this latest release of GVA(I), as the NUTS3 level data is at a lower level than previously, Borough level estimates can now be based on the smaller ONS sub-regional estimates that are now available. In some instances, a single NUTS3 region covers a single London borough, so no calculations to estimate GVA for that Borough are required. The

<sup>&</sup>lt;sup>26</sup> Keijonen, M., March 2015, '<u>Current Issues Note 43: Regional, sub-regional and local gross value added estimates for London,</u> <u>1997-2013</u>'. GLA Economics.

<sup>&</sup>lt;sup>27</sup> In detail the methodology used calculated full-time equivalent employment from BRES data for 2014 in both the NUTS3 level geography and its constituent boroughs for 10 broad sectors that cover the totality of the economy. This was used to calculate each borough's share of employment for the NUTS3 level geography for each of the 10 broad sectors. This share was then multiplied by the sectors GVA at the NUTS3 level to give the borough's estimated GVA for that sector; this was repeated for all 10 broad sectors and summed to give the estimate of the borough's GVA. It should be noted that this methodology makes a number of simplifying assumptions such as productivity being constant in sectors across boroughs etc.

estimates of Borough level GVA for all London boroughs, based on ONS official estimates where available, and GLA Economics calculations where required, are outlined in Table 1<sup>28</sup> below.

Inner London - West		Inner London – East			
Borough	GVA (£ million)	Borough	GVA (£ million)		
Camden*	£22,758	Hackney*	£8,13		
City of London*	£49,757	Haringey*	£4,69		
Hammersmith & Fulham*	£8,644	Islington*	£16,41		
Kensington and Chelsea*	£8,903	Lambeth	£9,98		
Wandsworth	£9,388	Lewisham*	£4,21		
Westminster	£52,099	Newham*	£6,419		
		Southwark*	£15,699		
		Tower Hamlets	£28,830		
Total	£151,549 <sup>29</sup>	Total	£94,38		
Outer London – West & North West		Outer London – East & North East			
Borough	GVA (£ million)	Borough	GVA (£ million)		
Barnet	£8,057	Barking and Dagenham*	£3,45		
Brent	£7,367	Bexley*	£4,79		
Ealing	£8,616	Enfield	£7,31		
Harrow*	£4,975	Greenwich*	£4,34		
Hillingdon*	£11,920	Havering*	£5,39		
Hounslow*	£9,475	Redbridge*	£4,559		
Richmond upon Thames*	£5,450	Waltham Forest*	£4,26		
Total	£55,863	Total	£34,118		
Outer London - South					
Borough	GVA (£ million)				
Bromley	£6,979				
Croydon	£7,446				
Kingston upon Thames*	£4,368				
Merton*	£5,372				
Sutton*	£4,232				
Total	£28,395				

#### Table 1: Calculations of London local authorities GVA (I) in 2014

A Economics' calculations. Note: \*Denotes GLA

In order to measure the accuracy of this estimation process, Table 2 shows GLA Economics estimates using the new NUTS2 sub-regions to estimate NUTS3 level GVA, and compares these with the official ONS estimates for NUTS3 areas.

<sup>&</sup>lt;sup>28</sup> Note due to rounding by the ONS the sum of the sectors GVA at the NUTS3 level does not perfectly match the stated level of total GVA for each NUTS geography; for London this discrepancy at the NUTS 3 level is around £1 to 2 million. Therefore the calculated sum of borough level GVA for each NUTS3 level geography can deviate slightly from that published by the ONS before rounding to the nearest million was undertaken.

<sup>&</sup>lt;sup>29</sup> The NUTS level totals are totals from the Regional Accounts release.

Area	ONS Regional Totals (£m)	GLAE Estimates (£m)	Difference (£m)	Difference (% of ONS Total)
Inner London - West				
Camden and City of London	£72,516	£73,161	£645	19
Westminster	£52,099	£54,133	£2,034	49
Kensington & Chelsea and Hammersmith & Fulham	£17,546	£17,124	-£422	-29
Wandsworth	£9,388	£7,131	-£2,257	-249
Inner London - East				
Hackney and Newham	£14,556	£14,662	£106	1
Tower Hamlets	£28,830	£27,750	-£1,080	-4
Haringey and Islington	£21,102	£21,929	£827	4
Lewisham and Southwark	£19,912	£20,244	£332	2
Lambeth	£9,986	£9,798	-£188	-2
Outer London – West & North West				
Barnet	£8,057	£9,027	£970	12
Brent	£7,367	£7,197	<i>-£</i> 170	-2
Ealing	£8,616	£8,614	-£2	0
Harrow and Hillingdon	£16,896	£16,217	<i>-£</i> 679	-4
Hounslow and Richmond upon Thames	£14,926	£14,808	<i>-£</i> 118	-1
Outer London – East & North East				
Bexley and Greenwich	£9,134	£9,322	£188	2'
Barking & Dagenham and Havering	£8,849	£8,364	-£485	-5'
Redbridge and Waltham Forest	£8,820	£9,635	£815	9'
Enfield	£7,315	£6,795	-£520	-79
Outer London - South	1	l.	[	
Bromley	£6,979	£7,108	£129	29
Croydon	£7,446	-	-£5	09
Merton, Kingston upon Thames and Sutton	£13,970	£13,846	<i>-£</i> 124	-19

Source: Regional Accounts ONS, GLA Economics calculations

There are significant variations between some estimates; especially for the boroughs of Wandsworth, Barnet, and Redbridge and Waltham Forest. This is likely to, in part, reflect the simplifying assumptions used in this methodology such as the assumption that productivity is consistent in sectors across the boroughs. Further, the especially large discrepancy for the borough of Wandsworth, appears in part to be due to its small relative size when compared to neighbouring boroughs within Inner London - West. Further work to investigate this difference will be conducted but an initial analysis suggests that a large part of the difference could, potentially, be due to output from the Real estate sector.

### London GVA (I) by industry

In 2014 just under a fifth of London's GVA was generated by the Financial and insurance industry, totalling £68.7 billion (see Figure 11 and Table 3). The value of this industry has grown from 14.7 per cent of London's total GVA in 1997 to 18.9 per cent in 2014. Real estate activities also significantly increased its share of the London economy, increasing from 7.6 per cent of total GVA in 1997 to 12.6 per cent in 2014. In 2014, just over half of the UK's GVA in the Financial and insurance industry was generated in London (up from 43 per cent in 1997) (see Figure 12). Indeed, London's Financial and insurance industry made up 4.3 per cent of the UK's total GVA in 2014.

Professional, scientific and technical activities; and Information and communication industries also play an important role in London's economy. In 2014, these two industries combined accounted for 21.5 per cent of London's GVA (up slightly from 19.8 per cent in 1997).



Figure 11: Headline GVA (I)<sup>30</sup> in London by industry, 1997-2014, current prices

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

	1997		2008		2014	
	Industry GVA (£b)	% of London's economy	Industry GVA (£b)	% of London's economy	Industry GVA (£b)	% of London's economy
Primary & utilities	2.0	1.3%	4.5	1.6%	6.1	1.7%
Manufacturing	10.5	7.0%	8.2	2.9%	9.6	2.6%
Construction	7.0	4.7%	14.2	5.0%	16.9	4.7%
Wholesale and retail trade; repair of motor vehicles	17.2	11.5%	26.2	9.3%	27.2	7.5%
Transportation and storage	10.8	7.2%	13.7	4.9%	16.7	4.6%
Accommodation and food service activities	4.4	2.9%	8.2	2.9%	11.0	3.0%
Information and communication	15.5	10.4%	31.5	11.2%	37.6	10.3%
Financial and insurance activities	22.0	14.7%	49.0	17.3%	68.7	18.9%
Real estate activities	11.4	7.6%	26.5	9.4%	46.0	12.6%
Professional, scientific and technical activities	14.1	9.4%	33.9	12.0%	40.8	11.2%
Administrative and support service activities	7.5	5.0%	14.7	5.2%	20.2	5.5%
Public administration and defence; compulsory social security	6.5	4.3%	11.0	3.9%	12.7	3.5%
Education	6.8	4.5%	13.8	4.9%	17.0	4.7%
Human health and social work activities	7.1	4.7%	14.3	5.1%	16.8	4.6%
Arts and other services	6.7	4.5%	12.7	4.5%	17.1	4.7%
Total	149.4	100.0%	282.6	100.0%	364.3	100.0%

# Table 3: Headline GVA (I)<sup>37</sup> in London by industry (£ billion and as per cent of total London GVA (I)), 1997, 2008 and 2014, current prices

Source: Regional Accounts, ONS

Figure 13 shows how London's GVA by industry is spread between Inner and Outer London and their constituent areas in both 1997 and 2014. Industries that are concentrated in Outer London include Manufacturing (68.9 per cent); Transportation and storage (60.4 per cent); and Construction (54.9 per cent), whilst only 5.5 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 94.5 per cent of London's GVA in Financial and insurance activities; 77.7 per cent of Professional, scientific and technical activities; 74.9 per cent of Information and communication; and 56.5 per cent of Real estate industries.

<sup>&</sup>lt;sup>31</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.



# Figure 12: London's share of UK headline GVA (I)<sup>32</sup> by industry, 1997-2014, current prices

Source: Regional Accounts, ONS

<sup>&</sup>lt;sup>32</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>33</sup> by industry, 1997 and 2014

Source: Regional Accounts, ONS

<sup>&</sup>lt;sup>33</sup> Estimates are for workplace based GVA allocating incomes to the region in which the economic activity takes place.

# London GVA (P)

In December 2015 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 2013<sup>34</sup>. It should be noted that the ONS observes that "as these are experimental statistics, users should note that there are still quality issues affecting some of the industry [chained volume measures (CVM)]. Several industries show a conspicuous difference to the GVA compiled using the income approach (GVA (I)) ... For these industries users are advised to exercise caution in their use of the real GVA (P) estimates, as there may be quality issues with the underlying data". Furthermore, the ONS suggests that "where the GVA (P) results differ significantly from the existing GVA (I) measure, the latter should take precedence". Given the experimental nature of the data described below; it should not be viewed as a definitive measure of any regions' real GVA in 2013 or its growth over the preceding years.

#### Headline GVA (P)

Figure 14 shows the growth rate of real GVA (P) in London and the in the UK between 1998 and 2013. London's real GVA (P) has generally grown at a faster rate than the UK economy, except for a period in the mid 2000's and around the time of the economic downturn. Over this period, London's real GVA (P) increased by 47.4 per cent at an average annual growth rate of 2.6 per cent, the highest of any NUTS1 region, followed by Wales (by 39.3 per cent at average annual growth rate of 2.2 per cent), Scotland (by 37.7 per cent at an average annual growth rate of 2.2 per cent) and the South West (by 36.1 per cent at an average annual growth rate of 2.1 per cent over the period). Further, between 1998 and 2007 (pre downturn) London experienced the second largest increase in real GVA (P), increasing by 40.0 per cent at an average annual growth rate of 3.8 per cent over the period, after Northern Ireland which grew by 45.9 per cent at an average annual growth rate of 4.3 per cent over the period. This was followed by Yorkshire and The Humber and the North West, respectively growing by 34.4 and 33.8 per cent at an average annual rate of 3.3 per cent. Between 2007 and 2013 London's real GVA (P) grew by 5.3 per cent at an average annual growth rate of 0.9 per cent, this however was a slower growth rate than Scotland, the South East and Wales which have respectively grown by 7.9, 7.5, and 6.6 per cent over this period giving respectively average annual growth rates of 1.3, 1.2 and 1.1 per cent. In contrast, real GVA in Northern Ireland, Yorkshire and The Humber, and the North East have contracted by 10.0, 6.8 and 2.2 per cent respectively giving average annual growth rates of -1.7, -1.2 and -0.4 per cent respectively from 2007 to 2013.

<sup>&</sup>lt;sup>34</sup> ONS, December 2015, 'Regional Gross Value Added (Production approach), 1998 to 2013'.



Figure 14: Headline real GVA (P) (chained volume measure) for London and the UK 1999-2013

Source: Regional Accounts, ONS, GLA Economics calculations

In terms of industries between 1998 and 2013, London's real GVA (P) in the Information and communication sector increased by 116.7 per cent at an average annual growth rate of 5.3 per cent over the period. Real GVA (P) increased by 27.6 per cent at an average annual growth rate of 1.6 per cent in the Financial and insurance activities sector; by 105.3 per cent at an average annual growth rate of 6.7 per cent in the Professional, scientific and technical activities sector; by 88.6 per cent at an average annual growth rate of 4.3 per cent in the Real estate activities sector; and by 91.6 per cent at an average annual growth rate of 4.4 per cent in the Human health and social work activities sector. However, over this period, real GVA (P) declined in the Manufacturing sector, by 30.3 per cent at an average annual rate of decline of 2.4 per cent. Despite an increase of real GVA (P) in London between 2007 and 2013, real GVA (P) in a number of industry sectors remained below the 2007 level. For example, between 2007 and 2013, the real GVA (P) of the Financial and insurance activities sector contracted by 17.8 per cent giving an average annual growth rate of -3.2 per cent, at the UK level there was also a contraction for this sector over this period of 7.2 per cent giving an average annual growth rate of -1.2 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) except for in 2012 and 2013 when this relationship was reversed. This is partially due to the two series having different growth rates over 1998 to 2013 with the average annual growth rate for GVA (I) over this period standing at 5.2 per cent (giving a total increase of just over 113 per cent between 1998 and 2013) compared to an average annual growth rate of 4.7 per cent for GVA (P) (a total increase of just under 98 per cent over the time period). In

addition, the growth rates of GVA (P) and GVA (I) in current prices differ over time and in 2006 the discrepancy between the two measures is the greatest (Figure 16); when the growth rate in GVA (I) exceeds growth in GVA (P) by over 4 percentage points. Finally it should be noted that while work has been carried out over the past year to improve the estimate of output in the Financial and insurance activities sector in regional GVA (P), there continue to be differences across a number of regions when compared with the GVA (I) estimates. This is particularly an issue with the London estimates, with the nominal GVA in the Finance and insurance activities sector in 2013 £17,736 million lower under GVA (P) than GVA (I), meaning that the estimate of GVA (I) for this sector in London was over 40 per cent higher in 2013 than the estimate of GVA (P).



Figure 15: Comparison of current price GVA (I) and current price GVA (P) all industries total for London, 1998 to 2013

Source: Regional Accounts, ONS





Source: Regional Accounts, ONS

# **GLA**ECONOMICS

Greater London Authority City Hall The Queens Walk London SE1 2AA

Tel 020 7983 4922 Fax 020 7983 4674 Minicom 020 7983 4000 Email glaeconomics@london.gov.uk

http://www.london.gov.uk/gla-economics-publications

**MAYOR OF LONDON**