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## An analysis of London's exports

Milja Keijonen <sub>August</sub> 2015



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## **Executive summary**

- In 2013, London's total exports were estimated to be around £139.9 billion, around a £64.7 billion increase from a decade earlier. Service exports accounted for around 77 per cent of the total (worth around £107.3 billion), around double the value in 2003. Goods exports grew significantly slower over the period with around £32.6 billion worth of goods exported in 2013, a 40 per cent increase compared to 2003.
- London's service exports accounted for over half of the UK's total service exports, whilst London's goods exports made up only 11 per cent of the UK total.
- In terms of services, Monetary finance was the largest service export sector with exports worth around  $\pounds$ 24.9 billion in 2013, compared to around  $\pounds$ 10.6 billion in 2003.
- Miscellaneous manufactured articles (including, for example, clothing, toys and games, works of art and antiques) was the largest goods export product by value increasing by 85 per cent (equivalent to around £5.2 billion) between 2003 and 2013 with exports totalling £11.4 billion in 2013.
- International analysis suggests that the value-added derived from service exports the area in which London specialises is often greater than the value-added from goods exports.
- GLA Economics is working with the Office for National Statistics (ONS) and other data users to produce more robust regional estimates for London and other regions. The estimates provided in this report are only interim estimates that will be replaced with the ONS estimates once they become available (expected towards the end of 2015).

## Introduction

London's economy has been shaped by globalisation – the increasingly connected and integrated nature of the international economy. This integrated international economy has, in large part, arisen through increases in trade over time. This paper looks at London's international trade, utilising trade data both at a national but also at the regional level. London's total exports consist of goods exports published by HM Revenue and Customs (HMRC) and GLA Economics estimates of services exports (details on the methodology can be found in the appendix).

As a result of a different approach to estimating services, it should be noted that the total trade export estimates for London in this paper differ from estimates previously published by GLA Economics. The estimates presented in this working paper should also be considered as interim estimates; GLA Economics is working with the ONS and other data users to produce more robust regional estimates for London and other regions. The work that the ONS is undertaking also coincides with HMRC's review of its regional exports of goods statistics and whether the current outputs meet user needs. As a result, depending on the outcome of the review, it is possible that there will be change in the way London's goods exports are estimated going forward as well as service exports.

First, this paper provides an overview of London's total exports outlining some of the existing official data sources and their shortcomings in providing regional breakdowns. Then it looks at how goods and service exports have changed over time in more detail. In addition, a brief analytical piece on the value added of exports at the UK-level is included. The appendix of this publication provides further information on the methods used to estimate London's service exports over time.

## London's total exports

GLA Economics estimates that in 2013 London's total exports totalled around £139.9 billion up by £64.7 billion compared to 2003. This trend was mainly driven by a rise in service exports and GLA Economics estimates that London's service exports more than doubled between 2003 and 2013. In 2013, London's service exports were around £107.3 billion, compared to £51.9 billion in 2003. Growth in London's goods exports also increased over this period but at a more modest rate. According to the HM Revenue and Customs (HMRC) Regional Trade Statistics release goods exports from London were around £32.6 billion in 2013, around 40 per cent (equivalent to £9.3 billion) higher than in 2003.

Figure 1 demonstrates how London's goods and services exports have changed compared to the UK as a whole since 2003. In London, service exports accounted for around three-quarters of total exports in 2013, compared to around 41 per cent in the UK as a whole. And, whilst services share of total exports has increased over time in both the UK as a whole and London, the change in London was almost double the increase for the UK as a whole between 2003 and 2013. Whilst international exports from the UK as a whole increased by more in absolute terms than from London over the period, GLA estimates suggest that the rate of growth in total exports from London was stronger. Overall, London's exports were 86 per cent higher in 2013 than in 2003, compared with 72 per cent growth in the UK as a whole.



#### Figure 1: London and UK exports (£ million), 2003-2013

Source: Trade in goods from HMRC; UK service exports from The Pink Book 2014, ONS; London Business Survey, GLA; and GLA Economics modelling.

#### Box 1: Source of different export estimates

Analysis of London's exports is limited by available data and, whilst detailed data for goods exports are available from HMRC, no official data are currently available on regional service exports. Previously the Department for Business, Innovation and Skills (BIS) produced annual service export estimates incorporating information from the International Trade in Services (ITIS) published by the ONS. However, these estimates only covered between around 29 per cent and 37 per cent of the UK's exports of services between 2003 and 2010 and the latest available data refer to 2010. There are other potential data sources that could provide alternative regional export estimates to the ones presented in this document. This section will briefly outline some of these sources and highlight some of their shortcomings.

The Annual Business Survey (ABS)<sup>1</sup> is the main structural business survey conducted by the ONS and asks businesses about their export and import behaviour for goods and services. However, at this stage the published estimates are considered to be experimental and are currently only available for Great Britain. Furthermore, the ABS does not cover the financial and insurance sector, a key component of London's economy.

Another potential source of export data is the London Business Survey (LBS)<sup>2</sup> undertaken in mid-2014 by the ONS on behalf of the Greater London Authority (GLA) and the London Enterprise Panel (LEP). Estimates from the LBS, suggest that around a third of business units in London, equivalent to around 141,000, exported goods or services in the year to mid-2014. This compares with around a quarter of business units (116,000) that imported goods or services from suppliers based outside the UK. In total, estimates from the LBS suggest that London's exports totalled around £147 billion in the year to mid-2014, significantly higher than the previous London level estimates produced by GLA Economics<sup>3</sup>. However, one of the shortcomings of the LBS is that the data available to us does not distinguish between goods and service exports and is limited in its coverage of data by sector.

For these reasons, GLA Economics' estimate of London's exports is based on the UK level service exports data from the Pink Book 2014 published by the ONS, whilst data on goods exports are obtained from the HM Revenue and Customs (HMRC) Regional Trade Statistics (RTS). Additionally, to apportion UK level service exports to the London level the analysis uses previously published GLA Economics analysis on London's relative productivity compared to the UK<sup>4</sup>, whilst data from the LBS act as a constraint for the total export estimate (see appendix for more details on the exact methodology employed).

<sup>&</sup>lt;sup>1</sup> The ABS is the preferred national level survey for collecting information on exports and imports with a sample of 62,000 businesses in Great Britain and 11,000 businesses in Northern Ireland each year. The industries covered by the survey are: Production industries (part of section A and sections B-E), construction industries (section F), distributive industries (section G), and service industries (sections H, I, J, L, M, N, P (private provision only), Q (private provision only in SIC 86.1 and 86.9), R and S) and insurance and reinsurance industries (section K, SIC 65.1 and 65.2)).

<sup>&</sup>lt;sup>2</sup> GLA Economics (November 2014), 'London Business Survey 2014: Exports'.

<sup>&</sup>lt;sup>3</sup> GLA Economics, Working Paper 50: An analysis of London's exports', December 2011.

<sup>&</sup>lt;sup>4</sup> GLA Economics, 'Working Paper 63: GVA per workforce job in London and the UK', February 2015.

## Exports of goods

In comparison to exports of services, detailed data by product on London's goods exports are available from HMRC UK Tradeinfo<sup>5</sup> database. Introduced in January 1999, Regional Trade Statistics (RTS) provide a flow of detailed imports and exports data between regions (Government Office Regions) of the UK and other countries. RTS data are available at division level with the industry definitions based on Standard International Trade Classification, Rev.4. (SITC)<sup>6</sup>.

Figure 2 demonstrates how London's goods exports have changed over time relative to the UK, whilst Figure 3 provides information on London's goods exports by product category. In 2013, London exported around  $\pm 32.6$  billion worth of goods, accounting for around 11 per cent of UK's total goods exports. This compares with around £23.4 billion in 2003 (equivalent to around 12 per cent of the UK total), approximately a 40 per cent increase in goods exports, whilst goods exports for the UK as a whole increased by almost 60 per cent over the same period.





Source: Regional Trade Statistics, HMRC

<sup>&</sup>lt;sup>5</sup> These data are based on Customs administrative data, declarations of goods exports transactions to non-EU countries and the Intrastat system – a method used to collect information and to produce statistics about the movement of goods between the member states of the European Union. Exports are then assigned to regions by using the postcode associated with a company's VAT registration. HMRC make some adjustment to account for head office bias (which would otherwise artificially inflate London estimates) but some bias is likely to remain. For consistency, the UK estimates of goods exports have also been taken from this source. Although these differ slightly from those published in the ONS Pink Book they allow for a much more detailed analysis of goods exports (as data is available at the 2-digit Standard Industrial Trade Classification (SITC) level). For more information on the regionalisation of goods exports see the Regional Trade Statistics data (RTS) methodology.

<sup>&</sup>lt;sup>6</sup> Further information on SITC Rev.4 is available from <u>the UN website</u>.

Analysis of London's goods exports by goods classification, as demonstrated in Figure 3, shows that exports of Miscellaneous manufactured articles (including, for example, clothing, toys and games, works of art and antiques) increased by 85 per cent (equivalent to around £5.2 billion) between 2003 and 2013 with exports in this classification totalling £11.4 billion in 2013. In contrast, exports of Machinery and transport equipment fell by 15 per cent over the same period from £5.9 billion in 2003 to around £5.0 billion in 2013.



Figure 3: Composition of London's goods exports

Source: Regional Trade Statistics, HMRC

London's share of the total UK goods exports has fallen for most products over time as demonstrated by Figure 4. However, for some products the share remains high relative to the UK as a whole. London's goods exports accounted for almost a third of all Miscellaneous manufactured articles in 2013 and this share was 4.1 percentage points higher than in 2003. London also exported around a quarter of all UK's Manufactured goods classified chiefly by material (including manufactured leather, paper, iron and steel among others<sup>7</sup>). London's exports of Beverages & tobacco and Animal & vegetable oils, fats & wages accounted for 12 per cent and 13 per cent of UK's exported goods in these categories respectively.



Figure 4: London's share of UK exports of goods by SITC product, 2003 and 2013

Source: Regional Trade Statistics, HMRC

<sup>&</sup>lt;sup>7</sup> Further information on components that are included in Manufactured goods classified chiefly by material is available at: <u>http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=28</u>

Historically, London's goods exports have fluctuated significantly from year to year, particularly to the European Union (EU), as demonstrated by Figure 5. Despite this, the EU remains London's largest regional goods export destination accounting for £13.4 billion in 2013, followed by Asia and Oceania (£7.6 billion in 2013).



Figure 5: London's exports of goods by destination, 2003-2013, £ billion

Source: Regional Trade Statistics, HMRC

The US is the largest single country of destination for London's goods exports with a value of around £3.88 billion worth of goods shipped in 2013. Goods exports to India totalled £2.30 billion in value in 2013 making it the second largest goods export destination followed by Switzerland (£2.24 billion) and Germany (£2.20 billion).



Figure 6: London's key goods export destinations, 2013, £ billion

Source: Regional Trade Statistics, HMRC

Table 1 presents a more detailed picture of London's key export goods by destination. According to HMRC data, Miscellaneous manufactured articles not specified elsewhere (including items such as clothing, works of art, antiques, and toys and games) was the top export product in 2013 ( $\pounds$ 7.5 billion) with around 28.9 per cent of these goods going to the United States, followed by 20.6 per cent to Switzerland.

89 - Miscellaneous manufactured articles n.e.s. – £7.54bn						
Country of destination	Value of exports	% of total exports of good				
United States	£2.18bn	28.9%				
Switzerland	£1.55bn	20.6%				
Hong Kong	£0.71bn	9.5%				
France	£0.59bn	7.8%				
United Arab Emirates	£0.21bn	2.8%				
66 - Non-metallic mineral manufactures n.e.s – £4.01bn						
Country of destination	Value of exports	% of total exports of good				
Belgium	£1.23bn	30.7%				
Botswana	£0.65bn	16.3%				
India	£0.55bn	13.8%				
Israel	£0.31bn	7.6%				
Switzerland	£0.29bn	7.2%				
33 - Petroleum, petroleum products & related materials – £3.06bn						
Country of destination	Value of exports	% of total exports of good				
South Korea	£1.29bn	42.2%				
Netherlands	£0.60bn	19.7%				
Ireland	£0.33bn	10.7%				
Chile	£0.15bn	4.8%				
Belgium	£0.10bn	3.2%				
	68 - Non-ferrous metals – £2.78bn					
Country of destination	Value of exports	% of total exports of good				
India	£1.48bn	53.2%				
Germany	£0.27bn	9.5%				
United States	£0.21bn	7.6%				
Canada	£0.13bn	4.7%				
Belgium	£0.12bn	4.1%				
84 - Articles of apparel & clothing accessories – £2.28bn						
Country of destination	Value of exports	% of total exports of good				
Germany	£0.40bn	17.5%				
Ireland	£0.24bn	10.7%				
France	£0.20bn 8.7%					
United States	£0.19bn	8.5%				
Italy	£0.14bn 6.3%					

#### Table 1: London's five key export goods by destination in 2013

Source: Regional Trade Statistics, HMRC

## Exports of services

Data on London's export of services is less readily available than data on London's exports of goods. The Department for Business, Innovation and Skills (BIS) previously produced estimates of London's service exports using ONS data from the International Trade in Services (ITIS). However, these estimates covered only around 29 per cent to 37 per cent<sup>8</sup> of the UK's exports of services<sup>9</sup> and the latest data point refer to 2010. For the purposes of this working paper GLA Economics has produced more up to date estimates using the Pink Book data for the UK from the ONS and apportioned these data down to the London level using information from previous GLA Economics analysis on Gross Value Added (GVA) per workforce jobs<sup>10</sup> and data on total exports from the London Business Survey 2014<sup>11</sup>. For further details of the methodology used see the appendix. Figures provided for London's service exports in this chapter are interim estimates that will be revised once the ONS work stream on regionalising UK's service exports concludes.

GLA Economics estimates that in 2013 London exported around £107.3 billion worth of services, compared to £204.5 billion for the UK as a whole (Figure 7). Overall, London's service exports in 2013 were 107 per cent, or £55.4 billion, higher than in 2003. London's service exports accounted for just over half of all UK service exports in 2013 (around 52 per cent), compared to around 50 per cent in 2003.





Source: UK service exports from The Pink Book 2014, ONS; London Business Survey, GLA; and GLA Economics modelling.

<sup>&</sup>lt;sup>8</sup> The large range reflects changes in methodology used by BIS and the consequential increase in products included in the regionalised estimates.

<sup>&</sup>lt;sup>9</sup> The appendix provides more information on the methodology.

<sup>&</sup>lt;sup>10</sup> GLA Economics, 'Working Paper 63: GVA per workforce job in London and the UK', February 2015.

<sup>&</sup>lt;sup>11</sup> GLA Economics, 'London Business Survey 2014', November 2014.

In addition to the trends in total London's service exports the analysis also looked at how different service export sectors performed over time (Figure 8). Figure 8 demonstrates that in 2013 Monetary finance<sup>12</sup> was the largest service export sector with exports worth around £24.9 billion, compared to around £10.6 billion in 2003. The second largest service export sector in 2013 was Personal travel worth around £11.0 billion followed by Business management and management consulting with an export value of around £9.0 billion.



Figure 8: London's service exports by sector, 2003-2013, £ million <sup>13,14,15,16,17</sup>

Source: UK service exports from The Pink Book 2014, ONS; London Business Survey, GLA; and GLA Economics modelling.

<sup>&</sup>lt;sup>12</sup> 'Monetary finance' includes Balance of Payments components on 'Commissions and fees' and 'Spread earnings' by monetary financial institutions, and 'FISIM on loans' and 'FISIM on deposits'. Overall, these activities involve, for example, fees and commissions on foreign exchange dealing; spread earnings on transactions in foreign exchange, securities and derivatives; financial intermediation services indirectly measured.

<sup>&</sup>lt;sup>13</sup> More detailed data breakdowns of 'Other business services' are available in the data file published alongside this working paper.

<sup>&</sup>lt;sup>14</sup> Insurance services don't appear to be a significant export sector for London in 2013. However, this may at least partially reflect the methodology used to apportion UK level insurance services down to the London level. The apportionment is based on London's relative productivity compared to the UK and as the earlier GVA per job analysis demonstrates GVA per job in the insurance industry for London is considerably lower than the GVA per job in the industry for the UK as a whole (GLA Economics, 'Gross Value Added per Workforce Job in London and the UK', February 2015.

<sup>&</sup>lt;sup>15</sup> 'Other finance' includes 'Baltic exchange' that covers the brokerage and other service earnings of members of the Exchange for Chartering, sales and purchases of ships and other associated activities. Exports in 'Other finance' also include exports by 'Other financial institutions' that refer to financial service transactions not included elsewhere.

<sup>&</sup>lt;sup>16</sup> 'Other business services' includes exports of other trade-related services; operational leasing; miscellaneous business, professional and technical services (such as legal, accounting, management consulting, recruitment and training and public relations; advertising and market research and development). For further details refer to the 'Methodological notes (BPM6 basis)' from the Office for National Statistics.

<sup>&</sup>lt;sup>17</sup> Unallocated services include 'Manufacturing on physical inputs owned by others', 'Maintenance and repair', 'Construction', 'Intellectual property', 'Recruitment of Business management and management consulting', 'Waste treatment and de-pollution, agriculture and mining services' and 'Other Business services exported by UK banks'.

Looking at the service export data for London over time it can be noted that international sales of Postal and courier services grew the fastest between 2003 and 2013 with an annual average growth around 18.0 per cent. Similarly, the second fastest growing sector over the period was Architectural services (15.3 per cent) followed by Telecommunication services (14.7 per cent).

10 Fastest growing service export sectors for London since 2003	Average Annual Growth in service exports between 2003 and 2013
Postal and courier services	18.0%
Architectural	15.3%
Telecommunication services	14.7%
Business management and management consulting	13.4%
Film, television and audio	11.3%
Other finance	10.8%
Insurance	9.4%
Monetary finance	9.0%
Personal travel	8.3%
Accounting, auditing, book-keeping and tax consulting	7.3%

Table 2: Ten fastest growing service export sectors for London since 2003

Source: UK service exports from The Pink Book 2014, ONS; London Business Survey, GLA; and GLA Economics modelling.

#### Box 2: Trade in value added

Trade patterns between countries and the structure of international trade have changed significantly in recent decades. The increased globalisation of supply chains (whereby goods and services are made of inputs from multiple industries across a number of countries) has been one of the key drivers of this shift. In consequence, the traditional trade measures that tend to measure the value of goods and services traded on a 'gross' basis (based on gross flows of exports and imports) are unlikely to accurately identify the contributions of each country and industry to the final value of an exported good or service<sup>18</sup>. The traditional export data measures attribute the full value of an exported good or service to the last country from which it is shipped. The increase in the role of intermediate imports in the production of goods and services for exports has raised interest in the use and measurement of data on trade in value added. The interest around the issue has resulted in a surge of analysis in the value added of trade literature with one of the key projects and consequential data sources being the Trade in Value-Added database published by the Organisation for Economic Cooperation and Development (OECD)<sup>19</sup> and the World Trade Organisation (WTO)<sup>20</sup>.

<sup>&</sup>lt;sup>18</sup> Trade measured in 'gross' terms includes both intermediate inputs and final products and as noted in the International Monetary Fund's research 'Export Performance in Europe: What Do We Know from Supply Links?' official trade statistics "double count" a part of the value of exported goods where a component of the traded good crosses international borders more than once.

<sup>&</sup>lt;sup>19</sup> In order to estimate value added arising from international trade between countries researchers have produced so called harmonised Input-Output tables from different countries and link them using bilateral trade data to assess the share of domestic value added in exported and imported goods and services.

This relatively recent literature has attempted to quantify the real contribution that exports make to an economy and to identify from which sectors and countries this value added originates. This literature tends to focus on trade of goods due to lack of detailed service export data by sector, however the analysis is still relevant for the UK and London.

According to Johnson (2014)<sup>21</sup>, manufacturing accounts for approximately 67 per cent of total world trade (based on 2008 World Input-Output Database (WIOD) data) and services share is around 20 per cent (agriculture and non-manufacturing industrial production account for around 2 per cent and 11 per cent respectively). However, in value added terms both manufacturing and services account for around 40 per cent of total value added exports (services for 41 per cent, manufacturing for 39 per cent, non-manufacturing industrial production for 16 per cent and agriculture for around 4 per cent). Assessing the value added of exports is arguably a better way of demonstrating the relative contribution that services and goods exports make respectively. Value added here is equivalent to the difference between output (in basic prices) and the sum of the intermediate inputs (in purchasers' prices) of goods and services. The estimation of value added is based on international input-output and supply use tables<sup>22</sup>. Unfortunately, at this point in time these value added estimates are only available at a national level and for this reason this box will look at the value added data for the UK in the context of recent trade data.

#### Value added of UK's service sector

Historic time series data on trade, available from 1998 from the Office for National Statistics (ONS), suggests the UK has consistently run a trade deficit with the rest of the world since 1998, as demonstrated by Figure 9. The historic data also suggest that this deficit has been driven by a negative trade balance in goods (the UK has been a net importer of goods since at least 1998), whilst in comparison the trade surplus in services has risen over time. However, studies suggest that the traditional trade statistics do not necessarily capture the real domestic value added, and more sophisticated trade measures may provide a different picture of the UK's trade balance.

In the context of the UK this is relevant for two reasons. Given that the UK economy specialises in services the domestic value added of trade is likely to be higher than in some other economies with a greater manufacturing base, e.g. Germany or France. And, this is indeed reflected in the data in Figure 10. Secondly, it may be that the gross trade balance position

<sup>&</sup>lt;sup>20</sup> Other related work includes the European Commission's FP7 World Input-Output Database (WIOD) project and research by the United States International Trade Commission (ITC) and Institute of Developing Economies Japan External Trade Organization (IDE-JETRO).

<sup>&</sup>lt;sup>21</sup> Johnson, 'Five Facts about Value-Added Exports and Implications for Macroeconomics and Trade Research', Journal of Economic Perspectives, Volume 28, Number 2, Spring 2014, pages 119-142, Figure 1.

<sup>&</sup>lt;sup>22</sup> National input-output tables reflect the interrelationships between domestic industries, between industries and final demand. They also reflect how intermediate imports are used in producing goods and services and how imports of final goods are consumed. However, national input-output tables fail to reflect how intermediate consumption of an industry in one country drives output in another. Bilateral trade statistics can demonstrate these flows. Global table including developed economies is available from the OECD. The rest of the world (developing economies) component can be estimated using information on World GDP and input-output relationships observed in developing economies.

between the UK economy and certain countries in the rest of the world is quite different when considered in value added terms<sup>23</sup>.



Figure 9: UK trade balance in goods and services, 1998 to 2014

Estimates outlined in recent research<sup>24</sup> suggest that the value-added component of exports accounts for around 70 to 75 per cent of the value of gross exports, compared to around 85 per cent in the 1970s. Furthermore, this ratio varies substantially across different countries, between 50 to 90 per cent of the value of gross exports (Figure 10). The UK's relatively high domestic value added content of its exports in 2009 at 83 per cent reflects the increasing specialisation of UK exports in services<sup>25</sup>. OECD/WTO trade analysis generally suggests that "larger economies, those with significant mineral resources, and those that are relatively far from foreign markets and suppliers tend to have higher domestic (and lower foreign) value added content in their exports than smaller economies. Similarly, countries that specialise in activities at the beginning of the value chain (upstream), such as mining and agriculture, and those that specialise in services."

Source: UK Trade, ONS

<sup>&</sup>lt;sup>23</sup> Bilateral trade balances between the UK and some of its major trading partners are shown in 'OECD/WTO, Trade in Value Added (TiVA) Indicators for the United Kingdom'. These data demonstrate that the UK's trade deficit with China, Norway, Spain and France is smaller if measured in value added terms.

<sup>&</sup>lt;sup>24</sup> Johnson, 'Five Facts about Value-Added Exports and Implications for Macroeconomics and Trade Research', Journal of Economic Perspectives, Volume 28, Number 2, Spring 2014.

<sup>&</sup>lt;sup>25</sup> OECD/WTO, 'Trade in Value Added (TIVA) Indicators, United Kingdom', May 2013.



Source: The Trade in Value Added (TiVA) database, OECD

As manufacturing processes can often include imported intermediate products the domestic value added in manufacturing tends to be lower than in service industries. Looking at the ratio of domestic value added content of exports of different sectors for the UK, as displayed in Figure 11, suggests that the ratio is indeed lower for manufacturing than for services trade<sup>26</sup>.

<sup>&</sup>lt;sup>26</sup> The rationale for this includes two reasons: Gross manufacturing exports include value added from the services sector as manufacturing processes includes services as inputs. Additionally, manufacturing features a higher degree of vertical specialisation than services (higher import content of exports).



Source: The Trade in Value Added (TiVA) database, OECD

In the UK in 2013 service exports accounted for around 41 per cent (or 39 per cent in 2011) of total UK exports yet the contribution that the service sector makes to overall exports is indeed higher as demonstrated by the value added of services to the gross exports in Figure 12. Figure 12 shows that the services content of the value added of exports in the UK was around 52 per cent in 2011 compared to around 44 per cent in 1995.



Note: The definition of service industries comprises of businesses whose principal activity is to provide service products<sup>27</sup> and this broad definition includes the UK Standard Industrial Classification (SIC) 2007 Sections G to T<sup>28</sup>. Looking at London's industrial structure as demonstrated by GVA in 2012 services accounted for 91 per cent of London's economy, compared to around 80 per cent in the UK as a whole<sup>29</sup>.

<sup>&</sup>lt;sup>27</sup> Jones, J. (Office for National Statistics), 'UK Service Industries: definition, classification and evolution', August 2013.

<sup>&</sup>lt;sup>28</sup> Sections G to T are: G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H – Transportation and storage; I – Accommodation and food service activities; J – Information and communication; K – Financial and Insurance activities; R –

Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities; O – Public administration and defence; P – Education; Q – Human health and social work activities; R – Arts, entertainment and recreation; S – Other service activities; T – Activities of households as employers.

<sup>&</sup>lt;sup>29</sup> ONS, 'Regional Gross Value Added (Income Approach) NUTS1 Tables', December 2014.

## Conclusion

GLA Economics estimates that in 2013 London's total exports totalled around £139.9 billion, up by £64.7 billion compared to 2003. This trend was mainly driven by a rise in service exports and GLA Economics estimates that London's service exports almost doubled between 2003 and 2013.

In 2013, London exported around £32.6 billion worth of goods, accounting for around 11 per cent of the UK's total goods exports and 23 per cent of London's exports, compared to around £23.4 billion in 2003 (equivalent to around 31 per cent of London's total exports in 2003). London's service exports in contrast totalled around £107.3 billion, accounting for around 52 per cent of the UK total. Overall, London's service exports in 2013 were 107 per cent, or £55.4 billion, higher than in 2003.

London's key service exports in 2013 were Monetary finance services with the sector value totalling around £24.9 billion, compared to around £10.6 billion in 2003. In contrast, total value of exports of Miscellaneous manufactured articles, the key goods export product for London in 2013, was around £11.4 billion. International analysis suggests that the value-added derived from service exports – the area in which London specialises – is often greater than the value-added from goods exports.

# Appendix - GLA Economics estimates of London's service exports

Currently, there is a lack of regional trade data and the only detailed export data for regions that are available refer to goods exports published by HM Revenue and Customs (HMRC). Previously the Department for Business, Industry and Skills (BIS) estimated service exports for the UK regions based on the International Trade in Services (ITIS) Survey and allocated these to the regions using the Inter Departmental Business Register from the Office for National Statistics (ONS). However, in 2012 BIS stopped producing these estimates (with the latest data referring to 2010). For this reason, GLA Economics has had to estimate service exports for London.

These estimates are based on a number of official data sources as well as previous analysis undertaken by GLA Economics. The estimates outlined in this working paper are interim estimates – bridging the gap until the ONS project on developing a methodology to produce regional service export estimates concludes later this year. This Appendix outlines the current approach used to estimate London's service exports based on available data.

To summarise the methodology, London's service exports estimates are based on UK level service exports that are apportioned to the London level using both London's share of UK employment and GLA Economics' previous analysis of London's productivity relative to the UK as whole. The differences in productivity were estimated at a division level and matched with the Pink Book 2014 data for UK service exports, with the latest available data point referring to 2013. These estimates are uplifted to correspond to the London level service estimates obtained from the London Business Survey 2014 (LBS). Additionally, regional information on tourism expenditure in London is available from the International Passenger Survey (IPS) (data from 2003 to 2014 is used in the analysis) and this information is used to apportion UK travel services exports from the Pink Book to the London level<sup>30</sup> (Table 3 summarises the broad export categories used in the analysis).

<sup>&</sup>lt;sup>30</sup> Given that the latest Pink Book data refer to 2013, an average growth rate over time is applied to the 2013 figure to produce a travel estimate for 2014.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Manufacturing on physical inputs owned by others	86	89	115	135	197	343	361	445	502	597	2,937
Maintenance and repair	38	41	51	61	90	154	162	201	224	268	911
Transport	14,041	17,082	18,473	16,497	17,141	20,584	18,216	18,973	21,256	23,003	24,215
Travel	13,876	15,414	16,871	18,803	19,292	19,598	19,353	20,969	21,888	23,178	26,244
Construction	205	280	602	798	1,011	1,228	1,487	1,377	1,514	1,605	3,110
Insurance and pension services	8,890	7,755	11,018	13,085	11,696	13,242	15,801	15,336	20,974	20,978	21,784
Financial	21,934	24,707	29,856	36,905	45,157	43,266	43,613	44,776	46,846	45,091	46,725
Intellectual property	6,537	6,961	8,482	8,777	8,915	8,839	10,442	10,704	10,708	9,757	8,246
Tele- communication, computer and information services	6,239	7,942	7,900	9,359	9,630	10,543	11,430	12,032	12,802	14,829	13,093
Other business	28,545	29,838	31,258	36,791	40,141	43,735	44,366	46,960	48,249	50,433	49,949
Personal, cultural and recreational services	1,942	2,220	2,334	2,268	1,903	2,182	1,974	2,202	3,069	3,485	4,539
Government	1,938	2,029	1,989	2,067	2,133	2,221	2,309	2,266	2,236	2,369	2,712
Total	104,271	114,358	128,949	145,546	157,306	165,935	169,514	176,241	190,268	195,593	204,465

#### Table 3: UK service export data summary by category, £million<sup>31</sup>

Source: Pink Book 2014, summary table, ONS.

<sup>&</sup>lt;sup>31</sup> Manufacturing on physical inputs owned by others; Maintenance and repair and Construction data were apportioned to the regions based on average London shares.

# Table 4: London's share of UK exports based on relative productivity compared to UK as a whole

Standard Industrial Classification (SIC) 2007 Divisions	Ratios applied to the UK service exports
49 : Land transport and transport via pipelines	25%
50 : Water transport	5%
51 : Air transport	45%
52 : Warehousing and support activities for transportation	21%
53 : Postal and courier activities	14%
Divisions 59 and 60 combined: Motion picture, video and television programme production; Programming and broadcasting activities	69%
60 : Programming and broadcasting activities	71%
61 : Telecommunications	14%
Divisions 62 and 63 combined: Computer programming, consultancy and related activities; Information service activities	36%
Divisions 64 and 66 combined: Financial service activities, except insurance and pension funding; Activities auxiliary to financial services and insurance activities	66%
Divisions 65 and 66 combined: Insurance, reinsurance and pension funding, except compulsory social security; Activities auxiliary to financial services and insurance activities	9%
69 : Legal and accounting activities	33%
70 : Activities of head offices; management consultancy activities	69%
71 : Architectural and engineering activities; technical testing and analysis	19%
72 : Scientific research and development	11%
73 : Advertising and market research	49%
74 : Other professional, scientific and technical activities	34%
77 : Rental and leasing activities	5%
84 : Public administration and defence; compulsory social security	16%

Source: Ratios based on GLA Economics, 'Working Paper 63: GVA per workforce job in London and the UK', February 2015.

The methodology makes the assumption that productivity differences between London and the UK are fixed over time as the ratio applied to the historic service export data are based on 2012 workforce jobs and gross value added data (Table 4 provides the shares applied to the UK

service exports data). This is a heroic assumption and unlikely to hold in reality<sup>32</sup>. For simplicity this approach was adopted for this analysis.

Some product categories from the UK service exports data were not regionalised using the division level GVA per job data as suitable Standard Industrial Classification (SIC) was not available or to remain consistent with historic modelling approach. Instead, the average London share relative to the UK was applied to this 'unallocated' UK service exports data (this share excludes travel as travel is treated differently in the analysis on the basis that the London level data are more easily available from the IPS).

The total export estimates in this working paper are based on service export estimates from the Pink Book and for the detailed goods exports data are from HMRC. For this reason, the totals in this paper may not equal the totals presented in the Pink Book 2014

<sup>&</sup>lt;sup>32</sup> ONS, 'Labour Productivity, Q1 2015', July 2015.

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