GATWICK’S ECONOMIC CONTRIBUTION THROUGH TRADE AND INVESTMENT
Oxford Economics

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# TABLE OF CONTENTS

Executive summary ........................................................................................................... 1

1. Introduction .................................................................................................................. 3

2. The impact of goods transported through Gatwick ..................................................... 5

3. Trade and inward investment in Gatwick’s catchment area ....................................... 8
   3.1 Goods trade in Gatwick Airport’s catchment area .................................................. 10
   3.2 Services trade in the South East region ................................................................. 12
   3.3 Inward investment in the South East region ......................................................... 14

4. Gatwick’s catalytic contribution to productivity ......................................................... 17

5. Conclusion .................................................................................................................... 20

6. Appendix 1: Data sources .......................................................................................... 22
EXECUTIVE SUMMARY

Gatwick Airport is a nationally significant infrastructure asset, and its economic importance emerges through several distinct channels. Previous research by Oxford Economics has assessed various elements of its economic impact, from the operations and supply chains of Gatwick Airport Limited (GAL) and other on-campus businesses, to the benefits that derive from its enabling of international and domestic tourism.

This report examines the contribution that Gatwick makes by facilitating international trade and investment, both directly and indirectly. This includes the goods trade that is sustained by the air cargo operations which use the Airport—amounting to some 97,000 tonnes in 2017—as well as the economic contribution of the firms that produce and distribute these goods. The research then considers how business travel via Gatwick helps to support goods and services trade for the region, as well as its role in creating an environment that is attractive for both foreign and domestic investment. It also assesses how the Airport has boosted the UK’s productive capacity, through helping to establish and maintain these international business interactions.

In 2017, we estimate that £7.5 billion worth of international goods was transported between the UK and overseas markets, through flights that arrived at or departed from Gatwick. Over two-thirds of this trade value (70 percent) was made up of exports from the UK, with the remainder comprising imports. The production and distribution of these traded goods involves substantial economic activity, drawing upon extensive supply chains, and driving a wage-financed consumption multiplier effect.

When including these multiplier impacts, our modelling suggests that the trade activity centred on Gatwick Airport added £7.2 billion to UK GDP in 2017. Around £4.2 billion of this value was driven by the production of goods, with the remaining £3.0 billion attributable to the logistical effort of shipping cargo between the Airport and other regions of the UK. This trade activity also sustained 113,800 jobs across the UK (again once including multiplier effects).

Business travel through the Airport also drives international business interactions, providing further value to the regional and national economy. In 2017, around 1.7 million business travellers passed through the Airport’s terminals; made up of 735,000 inbound visitors and 972,000 outbound UK residents. Businesspeople on these trips establish and renew connections, gain knowledge and competitive insights, make purchases and sales, and strike deals and investments.

It is not possible to quantify exactly what trade and investment flows result from these business journeys. But it is possible to illustrate many of the ways that Gatwick Airport helps to support a flourishing and competitive business environment in its surrounding regions. It is noteworthy that firms in the Gatwick Diamond—the seven local authorities immediately surrounding the airport—are 50 percent more likely to export goods, and are markedly more productive, than the average firm within the UK.
The area surrounding the Airport has also developed a constellation of high-value industries, that attract significant foreign investment, and generate service exports. The Gatwick Diamond is home to measurable clusters of businesses that are specialised in professional and business services, computer services and technical consultancy, transport and insurance. When looking at these sectors across the South East as a whole, they accounted for about two-thirds (65 percent) of all regional services exports in 2016.

In addition, the Gatwick Diamond features a prominent cluster of head offices. The area’s specialisation in head office activities exceeds that of London’s, drawing attention to the importance of air travel for the location decisions of both domestic and international businesses. The Airport’s important role in underpinning local economic activity is also acknowledged by both the Coast to Capital and Enterprise M3 Local Enterprise Partnerships (LEPs) in their respective economic strategies.

The aviation services of Gatwick Airport also provide further ‘catalytic’ benefits to regional and national economy. These benefits derive from the productivity gains that are unlocked when domestic firms and consumers are drawn into a wider global marketplace. This enables firms to achieve greater scale, experience intensified competition, forge new client and supplier relationships, and access an increased flow of ideas and investment. These interrelated benefits enhance the efficiency and productivity of domestic firms, resulting in greater output.

We estimate that the international connectivity provided by Gatwick increased UK GDP by over £2.0 billion in 2017. This is an enduring boost to the ‘supply-side’ of the national economy, an increase in productive capacity that can accrue to firms far-removed from the Airport itself. But this figure does not encompass any estimate of the value of services trade or investment flows that are facilitated by the Airport, that would undoubtedly be many times larger.
1. INTRODUCTION

Gatwick Airport’s presence in the South East delivers economic benefits to the region and to the UK, through a variety of channels. Oxford Economics has previously conducted research to develop evidence on the nature and extent of the Airport’s economic impact, including:

- an assessment of the value and employment sustained by operations on the Airport campus, its supply chains and its consumption spending impact;
- a consideration of its likely future impact, including any potential constraints on achieving this growth; and,
- a review of the impact made by overseas and domestic visitors to the region, whose trips are facilitated by Gatwick.

This study examines another element of the Airport’s economic contribution. It assesses the significance to the UK of the international trade and inward investment that is supported by Gatwick’s services to regions across the globe. This encompasses the trade activity that is directly enabled by air freight shipped through the Airport, as well as the trade activity and economic performance of firms in its local region.

It also considers the services trade and inward investment that take place in the region. It is not possible to identify what portion of this activity is attributable to Gatwick Airport. But through an examination of the economic structure of local areas around the Airport, we consider its role in fostering a thriving business environment and a region that is attractive for investment. We also highlight qualitative evidence from other organisations that describe the Airport’s importance for businesses in the area.

This report also refreshes our previous estimates of the Gatwick’s catalytic impact. This is an important element of the benefits that the Airport delivers to the UK, and encompasses the benefits for firms across the UK of increased connectivity to global markets. This connectivity ultimately drives greater efficiency, increasing the productive capacity of the national economy.

The remainder of this report is structured as follows:

- chapter 2 sets out the gross value of goods trade that is conducted through Gatwick Airport, and its economic impact;
- chapter 3 outlines the role of the Airport in facilitating the export of goods and services by firms its catchment area, as well as attracting inward investment;
- chapter 4 quantifies the contribution that Gatwick has made to productivity, through providing aviation connectivity; and
- chapter 5 provides a brief summary of this analysis.
When discussing the impact of Gatwick Airport’s trade and investment activity, this report follows the official definitions of UK regions, including London and the South East. Where possible, we also focus on the immediate regions surrounding Gatwick Airport. We provide results for the Coast to Capital area, defined along the formal boundaries of this Local Enterprise Partnership. We also set out economic impacts in the ‘Gatwick Diamond’ area, that encompasses seven local authorities within the Coast to Capital LEP. These two areas are set out in Fig. 1 below.
2. THE IMPACT OF GOODS TRANSPORTED THROUGH GATWICK

Flights to and from Gatwick Airport facilitate international trade in goods for businesses throughout the UK. Such trade is enabled directly, by the transport of cargo within the belly holds of flights arriving at and departing from the Airport. This allows domestic firms across the country to deliver consignments swiftly to trade partners across the globe, and for firms and households to obtain imported goods.

Around 97,000 tonnes of freight were loaded and unloaded at Gatwick Airport during 2017. Almost two-thirds of this freight (63 percent) was loaded, amounting to 61,400 tonnes of outbound cargo. Some 35,600 tonnes of inbound cargo were received at the Airport in the same year.

We estimate that this cargo amounted to some £5.3 billion worth of exports, along with imports with a value of around £2.2 billion. Due to data limitations, these valuations are based on the average mix of goods that are traded internationally by air, both for London airports in aggregate (in the case of non-EU trade), and for the UK as a whole (for trade with EU nations).1 This is broken down by product category in Fig. 2 below.

Fig. 2: Estimated value of goods imported and exported via Gatwick Airport, 2017

<table>
<thead>
<tr>
<th>Product category</th>
<th>Trade values via LGW (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imports</td>
</tr>
<tr>
<td>Metals &amp; metal products</td>
<td>915</td>
</tr>
<tr>
<td>Vehicles &amp; parts</td>
<td>546</td>
</tr>
<tr>
<td>Electronics</td>
<td>201</td>
</tr>
<tr>
<td>Machinery</td>
<td>220</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>48</td>
</tr>
<tr>
<td>Chemicals</td>
<td>43</td>
</tr>
<tr>
<td>Clothing &amp; textiles</td>
<td>60</td>
</tr>
<tr>
<td>Fuel &amp; minerals</td>
<td>19</td>
</tr>
<tr>
<td>Wood, paper, printed matter</td>
<td>2</td>
</tr>
<tr>
<td>Cement, glass &amp; ceramics</td>
<td>57</td>
</tr>
<tr>
<td>Food &amp; drink</td>
<td>24</td>
</tr>
<tr>
<td>Other 2</td>
<td>111</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,246</strong></td>
</tr>
</tbody>
</table>

Source: CAA, HMRC, ONS, Eurostat, Oxford Economics

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1 We note that we were not able to use HMRC data for Gatwick Airport specifically, since it records around 70 percent of Gatwick’s trade as taking place at Heathrow. A discussion of data sources on goods trade, their limitations and our estimation procedures is provided in Appendix 1.

2 ‘Other’ predominantly includes arms and ammunition, plastics, office supplies and stationery, artworks, antiques, jewellery, musical instruments.
Gatwick’s economic contribution through trade and investment

Trade activity of this magnitude has an important economic impact. The production and international sale of goods generates value that boosts UK GDP, while supporting jobs and tax revenues. Moreover, while imports are often cast in a negative light, they play a crucial role for the functioning of the domestic economy. Firms and households elect to import goods when these offer the best-value, highest quality and/or timeliest solution to their needs. This helps firms to operate in the most efficient and productive way, and frees up household resources for spending on other items.

We use our input-output (I-O) based models of the UK to establish the contribution these exports make to the domestic economy. Since goods that are exported through Gatwick can plausibly be shipped from any region across the country, we do not have a basis to allocate these to a specific geography within the UK. As such, we focus on the national-level impact of these exports.

Our modelling suggests that exports via Gatwick supported £4.2 billion contribution to GDP in 2017, along with 61,900 jobs. This is set out in Fig. 3 below. The direct impact denotes the activity among the manufacturers and producers of these exports, while the indirect impact encompasses the activity among domestic supply chains that supported their production. The induced channel describes the impact of wage-financed consumption, by both employees of the exporters and of firms in their supply chain.

**Fig. 3: Economic impact of goods exported through Gatwick Airport, 2017**

![Economic Impact of Goods Exported through Gatwick Airport, 2017](image)

Source: CAA, HMRC, ONS, Oxford Economics

This international trade activity centred on Gatwick Airport also has impacts beyond the exporters and their supply chains. Shipping 97,000 tonnes of cargo to and from the Gatwick campus involves the combined efforts of a broad network of wholesalers, distributors and logistics providers. These

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3 I-O models describe the interrelationships within an economy. Oxford Economics’ suite of I-O models is based on ONS’ I-O tables for the UK, that are the most detailed official representation of the UK economy. More detail on our modelling framework is provided in Appendix 1.
transportation specialists generate their own GDP and employment contributions, stimulating their own supply chains and multiplier effects.

**By modelling the impact of this logistics activity separately, we can isolate its economic contribution.** Using ONS statistics on the average trading margins associated with transporting the various types of goods outlined in Fig. 2, we estimate the resultant economic impact.

**We estimate that the logistics activity associated with Gatwick Airport’s goods trade supported a further £3.0 billion contribution to GDP, along with almost 52,000 jobs, when including multiplier effects.** About one-fifth of this impact is centred in the Coast to Capital LEP region, underlining the contributions to the local economy that are made by shipments of cargo through the Airport.

**Fig. 4: Total impact of logistics activity, by geography, 2017**

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4 We estimate the spatial distribution of this activity using the assumption that it is delivered by distributors and logistics providers in London and the South East region. The ‘direct’ impact is allocated to Gatwick Diamond and Coast to Capital, based on their share of transport and logistics employment in London and the South East.
3. TRADE AND INWARD INVESTMENT IN GATWICK’S CATCHMENT AREA

Gatwick Airport handled 45.6 million passenger movements in 2017. After excluding domestic and transit passengers, and adjusting for the approximate double-counting of round trips, we estimate that around 19.2 million international trips (inbound and outbound) were made through the Airport in 2017.

Fig. 5: Outbound and inbound business travellers via Gatwick Airport, 2017

For this chart, country data shows the nations that visitors ultimately originate from or travel to; rather than the destination of their flight into/out of Gatwick (which may have been an intermediate stop on their journey).

Source: ONS, CAA, Oxford Economics
Of these international visits, about 1.7 million were by business travellers. This figure encompasses 735,000 inbound business visitors, and around 1.0 million outbound journeys by UK residents travelling on business. Fig. 5 above shows the international origins and destinations of these business travellers.

When it comes to business travel, Gatwick Airport serves more than the immediate area. Most overnight stays by inbound business visitors tend to be spent in London, with just under one-fifth (18 percent) within the South East region. In terms of outbound business travellers, the region around the airport is relatively more important. Over two-fifths (42 percent) of outbound business travellers via Gatwick began their journeys in the South East, including one-fifth from within the Coast to Capital LEP itself. These breakdowns are shown in Fig. 6.

Fig. 6: Origins of outbound business trips via Gatwick, and regional distribution of nights spent by inbound business visitors via Gatwick, 2017

The international commercial relationships and market opportunities that such visits generate is the fundamental driver of foreign trade in goods and services, as well as foreign direct investment (FDI). It is not simple to ascribe such investment and business decisions to the services of a specific airport. But it is possible to understand an airport’s importance as a key infrastructure asset that enhances efficiency and productivity for many types of firms; helping to support the economy of the region. This extends beyond those

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6 For these figures, our definition of business travel aligns with the International Passenger Survey (IPS). This is a narrower definition of business travel than that used by CAA, and excludes passengers travelling that are (e.g.) taking up a job, international commuters, military, embassy and airline crew.

7 Note that the outbound measure shows visits, i.e. the location within the UK from where each outbound business visitor began an international journey via Gatwick. The inbound measure shows nights: this is because inbound travellers often visit more than one region, meaning the sum of regional visits can exceed the national visit total. Therefore, a geographical breakdown of inbound visits on this comparable basis would appear to exceed 100% of total inbound visits.
that ship goods as aviation cargo, and includes service sector businesses that desire international aviation access.

3.1 GOODS TRADE IN GATWICK AIRPORT’S CATCHMENT AREA

While the shipment of goods through the Airport is the most direct channel through which Gatwick facilitates trade, it also supports international trade in indirect ways. For example, its international connectivity provides opportunities for manufacturers and wholesalers to connect with and visit overseas suppliers and clients, even if their goods are not actually shipped on aircraft that travel via Gatwick. Equally, the Airport’s presence in the region influences businesses’ investment and location decisions, giving rise to clusters, industries and supply chains that enhance productivity and competitiveness.\(^8\)

ONS and HMRC data reveal that £5.1 billion in goods were exported by firms in the Gatwick Diamond region during 2016. When widening this area to include the entire Coast to Capital LEP, the equivalent figure reaches £6.8 billion.

Whether or not they export via the Airport, businesses in Gatwick’s catchment area are more export-intensive than average. HMRC data shows that within the Gatwick Diamond itself, 11.3 percent of businesses exported goods in 2016. This is one and a half times the equivalent share for the UK’s business population in total, which is 7.2 percent. For the Coast to Capital area, around 10.8 percent of businesses exported goods in 2016. These proportions are set out in Fig. 7.

Fig. 7: Proportions of exporting businesses, by geography, 2016

The Gatwick area also features firms that are relatively more geared towards global rather than European trade partners. In 2016, some 60

\(^8\) These aspects of Gatwick’s trade contribution are discussed in more detail throughout Chapter Error! Reference source not found.
percent of goods exports by firms in the Gatwick Diamond went to customers in non-EU countries. Within the Coast to Capital, the equivalent proportion was slightly smaller (57 percent), but still markedly higher than the average proportion across the UK (51 percent), as shown in Fig. 8.

**Fig. 8: Destinations of UK goods exports, by geography, 2016**

![Diagram showing destinations of UK goods exports by geography, 2016](image)

This points towards the importance of longer-haul flight connections for businesses in the Gatwick Diamond and Coast to Capital LEP. Indeed, almost all freight loaded and unloaded at Gatwick Airport is headed to, or originates from, countries outside of the EU.

**Fig. 9 below shows the specific international partners with which firms in the region have trading relationships.** This chart shows the trade activity in the Surrey, East and West Sussex area, which is a larger region than the Coast to Capital LEP.\(^9\) For areas represented in this analysis, just 54 percent of exports are destined for non-EU countries; confirming that the non-EU focus of the Gatwick Diamond and Coast to Capital is especially pronounced, relative to the wider region.

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\(^9\) Country-level data on trade partners are not available at a lower level of geographic disaggregation. Except for Croydon borough, the Coast to Capital LEP is a wholly-enclosed subset of this Surrey, East and West Sussex NUTS2 region. In employment terms, areas in the Coast to Capital LEP make up 57 percent of this NUTS2 area.
3.2 SERVICES TRADE IN THE SOUTH EAST REGION

The availability of aviation connections with other nations is an important facilitator of international trade in services. Despite this key role played by business air travel, it is not possible to link the services trade of a given area to the routes or flights that are provided by a specific airport. The relationships that result in imports or exports of services are built up over time, and may also be established remotely through telecommunications and the internet.

However, we can examine service exports in the wider region, and compare these with the industries and activities that cluster around Gatwick. This comparison can provide an indication of what sectors and activities around the Airport are exporting these services. By proxy, it can also suggest the industries and clusters for which access to Gatwick has been important for their international trade.
Fig. 10: Services exports from the South East, 2015

Fig. 10 above shows a sectoral breakdown of the £34 billion worth of services exports from the South East region in 2015. The South East is the country’s second-largest service exporting region, after London, and contributes around 16 percent of all Great Britain’s service exports.\(^\text{10}\) But for sectors such as professional services, ICT, transport and insurance—that are especially prominent in Gatwick’s catchment area\(^\text{11}\)—the South East accounts for almost a quarter (24 percent) of the British total.

About 55 percent of service exports from the region are sold to nations beyond the EU. This share varies by activity, with almost two-thirds of professional services exports (65 percent) purchased by clients in non-EU nations, along with 71 percent of manufacturing services.

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\(^\text{10}\) Comparable data on service exports for Northern Ireland are not available.

\(^\text{11}\) See Fig. 14 for analysis of the clusters around Gatwick Airport.
3.3 INWARD INVESTMENT IN THE SOUTH EAST REGION

It is widely understood that airports are an important factor in attracting FDI to a region. In EY’s 2017 UK Attractiveness Survey, 26 percent of investors cited transport infrastructure as the most important investment criteria when considering investing in the UK, narrowly second only to the availability and skills of the local workforce. In the case of Gatwick specifically, Grant Thornton’s Business Location Index, quoting UKTI’s Local Investment Showcase, lists the market access provided by Gatwick Airport as one of the top three reasons for investing in the Coast to Capital region.

The inflows of foreign direct investment (FDI) into the London and the South East regions are supported by the presence and operations of these regions’ airports, including Gatwick. Fig. 12 below shows that foreign-owned firms in these regions account for about one-fifth of employment and over two-fifths of turnover. According to Department for International Trade (DIT) data, the South East saw 217 new FDI projects in 2016/17, contributing 5,432 new and 1,940 safeguarded jobs.
The regions’ propensity to attract FDI is also associated with the prevalence of competitive and growth industries within London and the South East. In addition to being well connected with the rest of the UK and the world by their airports, the regions—and the areas around Gatwick in particular—have a considerable concentration of businesses and employment in some of the industries which attract the most foreign investment. To illustrate, Fig. 13 below shows DIT data on new FDI projects and jobs in 2016/17.

14 The data for ‘new jobs’ are estimates of the jobs created by the listed FDI projects.
To further understand what role Gatwick has in facilitating both trade and investment in its local area, we focus on the region’s industrial structure, and any activity-focused clusters that have developed in the local economy. Fig. 14 below shows a selection of sectors, along with shading that represents the extent of that region’s specialisation in this activity.

**Fig. 14: ‘Location quotient’ measures of regional specialisation, 2016**

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Gatwick Diamond</th>
<th>Coast to Capital</th>
<th>South East</th>
<th>London</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting &amp; Law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Distribution and Electronic Commerce</td>
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<tr>
<td>Engineering &amp; Technical Consultancy</td>
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<tr>
<td>Financial Services</td>
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<tr>
<td>Head Offices</td>
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<tr>
<td>Hospitality and Tourism</td>
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<tr>
<td>Insurance Services</td>
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<tr>
<td>IT Consultancy &amp; Services</td>
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<tr>
<td>Marketing, Design, and Publishing</td>
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<tr>
<td>Performing Arts</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Transportation and Logistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key:** (regional specialisation compared with Great Britain average)

- **More specialised**
- **GB-equivalent**
- **Less specialised**

*Source: ONS, Oxford Economics*

**This analysis draws attention to the Gatwick Diamond’s notable concentration of employment in business and professional services, ICT, engineering and technical consultancy.** Each of these sectors feature prominently in DIT’s figures on inward FDI projects. This evidence of clustering points towards the flourishing of competitive industries in the catchment area of the Airport.

**It also highlights the pronounced clusters of transport and logistics activities in the Diamond.** This collection of activities is intimately connected to the presence of Gatwick Airport, being described by the Coast to Capital LEP as “one of the most important air-road-rail hubs in the UK.”

**The prominent cluster of head offices in the Gatwick Diamond region is also striking.** Ease of access to international air travel is an important criterion for head office location decisions, and it is notable that the Diamond’s specialisation in head offices is even greater than that of London itself.

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15 A location quotient expresses the intensity of an area’s employment in a given sector, relative to the national average. In the heat map, the national average is represented with a white panel. Values that are lower or higher than this average (representing lesser or greater specialisation in this activity) are shaded red and blue, respectively.

4. GATWICK’S CATALYTIC CONTRIBUTION TO PRODUCTIVITY

Previous chapters have outlined how Gatwick Airport helps to facilitate trade and investment in the local region and beyond. But there are additional dimensions in which it provides economic benefits. By helping to integrate the regional and national economy into the global air transport network, the Airport expands the spheres of domestic businesses, opening them up to broader markets with more clients and customers, suppliers, and competitors.

**This effective expansion of the markets in which domestic firms operate enhances the productivity of the economy, and hence boosts UK GDP.** This greater reach allows domestic firms to operate at greater scale, acquire more suitable or cheaper inputs, access greater knowledge through collaboration or innovation with global partners, experience higher competitive pressures, and solicit or undertake foreign investment.

**In aggregate, these effects are known as the catalytic effects of air transport connectivity.** They amount to a ‘supply-side’ impact, whereby the productive capacity of the domestic economy is improved by the services and activities of the Airport. We note that this catalytic contribution via connectivity does not encompass the gross value of trade in goods and services that occur with the support of Gatwick, explored in previous chapters. Rather, it refers to the efficiency gains that are unlocked by all manner of cross-border business interactions. It also captures the catalysed productivity gains among UK companies which do not themselves use air transport for goods or services trade.

**To appraise Gatwick’s catalytic economic impact, we first gauge the extent of its contribution to national aviation connectivity.** Our approach to doing so follows an IATA method, whereby a port’s connectivity is estimated as a function of the annual seats available to all destinations, weighted by the economic importance of those destinations. This weighting reflects the fact that one available seat to a large destination port with myriad onward connection possibilities, is more economically beneficial than an available seat to a quiet, provincial airport.

**Based on CAA figures, we estimate that Gatwick contributed 14.5 percent of the UK’s aviation connectivity in 2017.** The 20 routes at the Airport that provided the greatest shares of this connectivity are set out in Fig. 15 below.

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We estimate that Gatwick’s contributions to national connectivity since 2000 have increased the UK’s GDP per capita by a cumulative 0.1 percent. To quantify this effect, we drew upon econometric research published by InterVISTAS, that relates changes in aviation connectivity to changes in national productivity. This analysis controls for other determinants of productivity changes, such as growth in capital and labour inputs, as well as R&D and innovation.

This is equivalent to increasing national GDP by £2.0 billion during 2017. This is a considerable rise when compared to our prior assessment in 2016, and reflects the fact that Gatwick’s annual connectivity growth outpaced that of the rest of the UK’s airports in 2016-17, reflecting the continued growth of its long-haul connections to North America and the Middle East.

It is not possible to identify the geographic regions where these productivity gains are felt most prominently. However, for a purely illustrative comparison, it is revealing to review average productivities seen in regions surrounding the Airport, and further afield. Fig. 16 below sets out these data, showing that productivity in the Gatwick Diamond is 11 percent higher than the national average. Additionally, it is 10 percent higher than the regions of the Coast to Capital LEP that are slightly further from the Airport.

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18 InterVISTAS, “Economic Impact of European Airports” (Report for ACI Europe, 2015).
Fig. 16: Labour productivity (£ of GVA per worker), by region, 2016

Source: ONS, Oxford Economics
This paper has examined the economic significance of Gatwick Airport in facilitating international trade and investment. Relative to previous research by Oxford Economics on Gatwick’s economic impact, this significance is difficult to quantify fully, and data challenges are considerable. But by examining trade and investment activity throughout the region, and the economic structure of the Gatwick Diamond, it is possible to illustrate how Airport has helped shape and drive local economic activity.

In 2017, goods trade through Gatwick Airport supported a £7.2 billion contribution to UK GDP, along with some 113,700 jobs. Much of this activity was concentrated within the local areas around the Airport, as illustrated in Fig. 17. But this goods trade that is carried as cargo on Gatwick’s flights represents only some of the international trade that springs from the Airport’s presence. Business travellers also use Gatwick to establish relationships with international partners, generating trade in both goods and services that add further value to the UK, not reflected in these numbers.

Gatwick’s presence also helps to create a region that is attractive for business investment, both domestic and international. Grant Thornton’s Business Location Index, quoting UKTI’s Local Investment Showcase, lists the market access bolstered by Gatwick Airport as one of the top three reasons for investing in the Coast to Capital region.\(^{19}\)

Clusters of high-value industries have coalesced within the Gatwick Diamond area, including many sectors that depend directly upon cargo and passenger services at the Airport. This clustering also enhances productivity in the wider area through the ‘agglomeration’ effect, where an intensifying concentration of firms within a specific location boosts productivity in the entire area. This means that benefits from Gatwick’s operations accrue even to local firms that do not use the Airport.

The Coast to Capital LEP itself describes the Airport as central to its Strategic Economic Plan. It acknowledges that Gatwick has the “potential to act as the catalyst to a cluster of economic activity” in the Diamond, and explores proposals to leverage Gatwick’s operations to spur future growth in the LEP.\(^{20}\) The Enterprise M3 LEP’s own industrial strategy document also references its links to Gatwick as a vital asset for its businesses.\(^{21}\)

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Similarly, economic strategies developed by many of the area’s local Councils also highlight the importance of, and opportunities emerging from, their proximity to Gatwick. East Sussex Council acknowledges that its ports, including Gatwick, “provide access to major regional, national and international markets.”22 West Sussex Council’s strategy deems the Airport a central asset for the area, and considers maximising the opportunities it provides as one of its five economic priorities.23

These are just some of the myriad ways in which the Airport helps both local and national businesses to flourish. In addition, our modelling suggests that the international connectivity provided by Gatwick increased UK GDP by £2.0 billion in 2017. This impact, delivered through increased nationwide productivity, captures the efficiency gains that firms achieve through operating in a larger effective global marketplace. But it does not include the gross value of services trade or investment inflows that are facilitated by the Airport, that would likely be substantially larger.

Fig. 17: Summary of Gatwick’s identifiable economic impacts via trade and investment, 2017

<table>
<thead>
<tr>
<th>Impact</th>
<th>GDP (£m)</th>
<th>Employment (jobs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gatwick Diamond</td>
<td>Coast to Capital</td>
</tr>
<tr>
<td>Trade via LGW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistics centred on LGW</td>
<td>351</td>
<td>578</td>
</tr>
<tr>
<td>Total trade impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectivity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ONS, CAA, HMRC, Eurostat, Oxford Economics

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6. APPENDIX 1: DATA SOURCES

GOODS TRADE VIA GATWICK AIRPORT: EXTRA-EU TRADE

For non-EU trade, HM Revenue & Customs (HMRC) collect and publish non-EU trade data, that can be disaggregated by UK port of clearance.

However, when comparing the international trade volumes in this dataset with the freight tonnage reported to and published by Civil Aviation Authority (CAA), it appeared that Gatwick’s freight activity is notably under-represented in the HMRC data.

Upon investigation, it emerged that most freight arriving or departing on flights to Gatwick Airport are 'cleared' (for customs and taxation purposes) at a facility at Heathrow Airport. Since HMRC’s data only reports the port of clearance, this freight is then attributed to London Heathrow in the dataset. It was reported by HMRC that approximately 70 percent of Gatwick’s freight is cleared in this manner, and is thus attributed to Heathrow.

To account for this distortion—as well as other possible distortions emerging from any other similar practices at other airports—our assessment is based primarily on Gatwick’s freight tonnage, as reported by CAA.

We then estimate the product mix contained within this trade, using HMRC’s figures for the trade mix across all London area airports in aggregate (Gatwick, Heathrow, City, Stansted and Luton).

GOODS TRADE VIA GATWICK AIRPORT: INTRA-EU TRADE

Statistics on intra-EU trade, by mode of transport or port, are not published by UK statistical offices. As such, we again begin with CAA’s recorded tonnage.

To this total cargo volume, we estimate the mix of goods mix and value of this trade. This uses data on the average product mix seen in air trade between the UK and the EU in aggregate, drawn from Eurostat.

LOGISTICS ACTIVITY ASSOCIATED WITH GATWICK GOODS TRADE

Assessing the impact of this logistics activity required first quantifying the typical distributors’ margins associated with the goods that are traded via Gatwick Airport. For this, we used Annual Business Survey (ABS) data. This disaggregates the turnover for many different types of wholesalers, splitting out the value of the products they ship, from the margins they achieve for their distribution services. We apply this margin rate to the gross value of goods that are imported and exported through Gatwick. This forms our estimate of the direct impact of the logistics providers.

We assign this direct impact to the London and South East region, on the assumption that transport and logistics providers based here would provide goods distribution services that are centred on the Gatwick campus. We then estimate the proportion of this direct activity that is captured by Gatwick Diamond and the Coast to Capital LEP. This is based on these areas’ shares of transport and logistics employment in London and the South East. The Gatwick Diamond, home to a significant logistics cluster, is thereby estimated to accrue about 9 percent of this direct impact. The spatial distribution of the indirect and induced impacts are estimated using Oxford Economics’ suite of regional input-output (I-O) models, as outlined below.
ECONOMIC IMPACT ANALYSIS

The economic significance of goods production and distribution is measured using a standard means of analysis, called an economic impact assessment. This approach disaggregates activity through three channels of impact, namely:

- **Direct impact**, which relates to the activities of the industries that directly produce the goods or provide the distribution services;
- **Indirect impact**, which encapsulates the activity and employment supported in the supply chain of these manufacturers and logistics providers, as a result of their procurement of goods and services; and,
- **Induced impact**, comprising the wider economic benefits that arise when employees within these firms and their supply chains spend their earnings in the consumer economy, for example in local retail and leisure establishments.

Using these pathways, we estimate the ‘economic footprint’ of the activity, via two key metrics:

- **GDP**, or more specifically, the *gross value added* (GVA) contribution to GDP; and,
- **Employment**, as the number of people employed, measured on a headcount basis.

The analysis in this study utilises a suite of bespoke input-output I-O models. These models are based on the national UK input-output tables, as published by the ONS. Oxford Economics use official employment data to adjust these, to reflect the industrial structure and productive capacity in the Gatwick Diamond, Coast to Capital LEP, and South East of England. Our methodology utilises so-called ‘Flegg-adjusted Location Quotients (FLQs)’, which are consistent with the latest approaches and evidence in regional I-O modelling and regional science.\(^\text{24}\)

These I-O models quantify the impact of supply chain demands over their entire length, including suppliers to these suppliers, and so on. The regional modules estimate the extent to which these demands can be met within the Gatwick Diamond, the wider Coast to Capital LEP, the South East region, or elsewhere in the UK as a whole.

CATALYTIC BENEFITS: CONNECTIVITY

Quantifying the wider ‘catalytic’ benefits linked to an airport’s facilitation of aviation services is not straightforward. The benefits of strong air transport infrastructure emerge through its role in boosting competition, promoting international trade, facilitating tourism and encouraging inward investment. These are examples of catalytic benefits that Gatwick Airport delivers to the UK economy. But quantifying them is difficult, because many such effects materialize only over the long-term, and are hard to measure individually, or unpick them from wider economic trends.

\(^{24}\) Anthony T. Flegg and Timo Tohmo, "Estimating Regional Input Coefficients and Multipliers" (Working Paper, University of the West of England, Faculty of Business and Law, 2013), 5.
Estimating Gatwick’s catalytic contribution requires us to disentangle connectivity’s overall contribution to long-term growth, from the many other factors that affect an economy’s performance. This is done by looking at how the economies of countries with faster-growing air connectivity perform relative to ones with slower-growing networks. Many studies have investigated the catalytic impact of aviation on GDP growth. A January 2015 econometric analysis by InterVISTAS deployed the most recent available data on connectivity, isolating its relationship to growth while controlling for other factors that may have an impact of GDP (such as education levels, R&D investment, capital spending, and institutional and regulatory factors).

This study used a definition of air connectivity developed by IATA, that counts the number of seats available from an airport or country, and weights them by the importance of the destinations served from that airport or country. The weights reflect how ‘connected’ each destination is, in terms of potential onward connections, and is approximated comparing the total passengers at each airport to Atlanta (the world’s busiest airport in terms of passenger movements). As such, services to busy international airports therefore provide a greater boost to connectivity than flights to smaller regional ones.

The research found that a 10 per cent increase in connectivity (relative to GDP) was associated with an increase in GDP per capita of 0.5 per cent. As the relationship is expressed in growth terms, a base year must be chosen, from which to estimate connectivity impacts. In other words, the impact is the additional GDP since the base year, associated with the increase in connectivity that occurred over the relevant period.

Using data sourced from Diio (a global aviation business intelligence supplier) and CAA, which records aviation services and their capacities, Oxford Economics applied this methodology to estimate connectivity’s contribution to the UK’s overall productivity growth since 2000 (chosen as base year since this is the earliest available data from Diio). An equivalent calculation was performed using flights and capacity data that excluded services from Gatwick Airport. The difference between these two estimates represents the contribution of Gatwick Airport to UK GDP, through connectivity effects.
Gatwick’s economic contribution through trade and investment