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# **Evaluation of the Competition Commission's BAA airports market investigation**

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Final report

Prepared for  
Gatwick Airport Limited

25 January 2016

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## Executive summary

Gatwick Airport Limited (GAL) has commissioned Oxera to undertake an independent evaluation of the impacts of the remedies imposed by the Competition Commission (CC) after its 2009 market investigation into BAA. This report is intended to inform the ongoing review of those remedies by the Competition and Markets Authority (CMA). Our analysis focuses on whether the CC's expectations about the extent and form of competition that would arise due to the divestment of Gatwick Airport, and the resulting passenger benefits, have actually transpired.

Our analysis suggests that many of the benefits to passengers that the CC expected when it imposed the separation of Gatwick from BAA have materialised. Meanwhile, the costs of the break-up have been relatively minor, such that, overall, the net outcomes we are able to identify from the decision are substantially positive.

Since the break-up, there has been an increase in the number of airlines gained and lost at Gatwick, consistent with increased competitive pressure from other airports. Gatwick has also attracted an increasing number of new airlines to the airport. The number of destinations served by Gatwick has risen—in every year following break-up, Gatwick has offered more routes to non-US destinations than it did before the break-up.

The extent of route overlaps with Heathrow, Stansted and Luton airports has also increased since the break-up. On these overlapping routes, there is evidence of increased passenger substitution between the airports, and in particular, evidence that Gatwick and Heathrow are placing a greater constraint on one another.

The most noticeable benefits that Gatwick has managed to deliver since its divestment in December 2009 are improvements in service quality. For example, Gatwick has (by Q3 2015) risen to eighth from 12th (in Q4 2009) in a ranking of European airports by Airports Council International (ACI).

This improvement has taken place against the backdrop of rising capital expenditure. Since the introduction of the airport's Commitments, there has been more effective engagement with airlines on service levels and capacity by encouraging bilateral negotiations and investments targeted to particular airlines, and removing the direct link between CAPEX and prices.

At the same time, Gatwick has become a more efficient airport—prior to the change in ownership, Gatwick was underperforming its peer airports on both per-passenger operating and total costs. Since 2009, Gatwick has outperformed the same peers on both measures. In our experience, it is highly unusual for an infrastructure business to increase investment while improving service quality and becoming more efficient, due to the potential operational and service disruption.

Since divestment, Gatwick has had to innovate to meet the demands of its airline and passenger customers, and competition from other airports—both those in the South East of England from which it faces competition for passengers within its catchment area, and those more widely in the UK and Europe that are competing with Gatwick for an airline's new aircraft or route. Examples of this innovation include redesigning security processes, which have led to the airport improving the passenger experience and exceeding airline requirements; and

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Gatwick Connects, which is designed to facilitate transfer arrangements for passengers and airlines.

Importantly, there is evidence that the increase in competition has led to improved relationships with airlines since its divestment. In particular, the increase in competition has led to the airport being able to move to a new regulatory approach—the contracts and commitments regime—in which it enters into long-term agreements with airlines regarding price and service quality. So far, Gatwick has reduced landing charges (in nominal terms) paid by airlines under these deals in the first two years of the current contract period, and is currently pricing some 6.5% below the level assessed by the CAA as a 'fair price'.

Previously, under BAA ownership, there was limited incentive for Gatwick's management to seek to win market share within the London area or to enhance use of its capacity, for example by using a different tariff structure from other group companies. Under new ownership, Gatwick has changed tariff bands to encourage different types of airlines, and optimise use of its capacity, in a way that would previously have been discouraged, except to the extent that it generated traffic that was additional for the group.

Since the change in ownership, Gatwick has introduced a number of initiatives to increase its peak capacity. It has increased from 50 air traffic movements (ATM) to 55 across the seven peak hours of the day. Moreover, the package of initiatives has also increased the proportion of departures that are on time, and reduced aircraft taxi times by 20%.

In addition, as the ongoing debate regarding the next runway in South East England demonstrates, the separate ownership of Gatwick, and its second runway proposition, have enabled a great extent of public engagement regarding the best option. This is unlikely to have happened to the same extent had Gatwick been part of a combined BAA group (as it was in the period leading up to the government's 2003 Air Transport White Paper and associated airport capacity decisions). Moreover, with Gatwick a credible option (according to the Airports Commission), it remains possible that it will be chosen by the government in 2016 to take its scheme forward. Again, it is unlikely that this would have been the outcome under common ownership.

Overall, we consider that since the break-up of BAA, consistent with the CC's expectations and the more competitive airport market enabled by the break-up, GAL has responded as one would expect to the increase in effective competition which it faced as a result of divestment and has adopted a clear strategy and actions to improve outcomes for passengers and airlines at the airport.

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## 1 Introduction

The Competition and Markets Authority (CMA, formerly the Office of Fair Trading, OFT, and the Competition Commission, CC) is evaluating the impact of the decisions of the CC's 2009 market investigation into BAA. The CMA's evaluation will consider the impact, proportionality and effectiveness of the remedies and the remedies implementation process, and identify lessons learned from the market investigation. The evaluation will focus on the passenger benefits arising from the remedies.<sup>1</sup>

Gatwick Airport Limited (GAL) has commissioned Oxera to undertake an independent evaluation of the impacts of the remedies as part of the CMA's review. Our analysis focuses on whether the CC's expectations about the extent and form of competition that would arise due to the divestment of Gatwick Airport, and the resulting passenger benefits, have actually transpired.

### 1.1 Overview of CC market investigation

In 2007, as a result of a reference by the OFT, the CC started an investigation into whether the supply of airport services by BAA prevented, restricted or distorted competition in the UK.<sup>2</sup> The seven UK airports owned by BAA at the time were Heathrow, Gatwick, Stansted, Southampton, Edinburgh, Glasgow and Aberdeen, which together accounted for 62% of passengers in the UK. Most of the CC's analysis considered the South East England airports market (Heathrow, Gatwick, Stansted and Southampton) and the Scottish airports market (Edinburgh, Glasgow and Aberdeen) separately.

As part of its review, the CC focused on answering a few key questions.

- Is there currently competition for airlines and passengers between BAA airports and other airports?
- Is there scope for competition between BAA airports to develop? In other words, if they were in separate ownership would they compete with each other or is their ability to do so limited as they serve different geographic markets or due to other factors, such as capacity constraints?
- What are the current constraints preventing the development of competition?
- Can any aspects of BAA's performance be attributed to a lack of competition from non-BAA airports, or do these aspects of performance themselves adversely affect competition?

The CC looked at a number of factors to help answer these questions, including actual and potential airport competition, capacity, impact of the planning system, government policy, and economic regulation. It undertook a significant amount of analysis as part of its assessment—e.g. catchment area and route overlap analysis—and collected feedback from a wide range of stakeholders.

### 1.2 CC's findings and remedies

In March 2009, the CC published its final report, which concluded that BAA's common ownership of airports in South East England and lowland Scotland gave rise to adverse effects on competition (AEC). The CC also determined that a number of other factors led to AEC, including Heathrow's position as the only

<sup>1</sup> Competition and Markets Authority (2015), 'BAA Airports – Evaluation of the Competition Commission's 2009 Market Investigation Remedies', Terms of Reference, 18 November.

<sup>2</sup> The reference was made on 29 March 2007 under the Enterprise Act 2002.

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significant hub airport in the UK, aspects of the planning system and government policy, and the regulatory system for airports at the time.

As a result, the CC set out six remedies to address the AEC:

- divestment of Stansted Airport;
- divestment of Gatwick Airport (to a different purchaser than that of Stansted);
- divestment of either Edinburgh or Glasgow airports;
- strengthening of consultation procedures and provisions on quality of service at Heathrow;
- undertakings in relation to Aberdeen (to require the reporting of relevant information and consultation with stakeholders on capital expenditure, CAPEX);
- recommendations to the Department for Transport in relation to economic regulation of airports.

BAA appealed the CC's decision to the Competition Appeal Tribunal (CAT) claiming that certain remedies were disproportionate and that the CC's decision was biased. The CAT dismissed the appeal on proportionality, but upheld it on bias. The CC then appealed to the Court of Appeal, which reversed the CAT's decision and restored the CC's original decision from its 2009 report.<sup>3</sup>

However, given the time that had passed while the litigation was ongoing, in 2011, the CC decided to consider whether there had been a material change of circumstances or other reasons which meant that it should not confirm the remedies relating to the divestment of Stansted and either Edinburgh or Glasgow airports.<sup>4</sup> After considering the submissions, the CC confirmed the remedies set out in its 2009 report.

Gatwick and Edinburgh were sold to Global Infrastructure Partners (GIP) in December 2009 and April 2012 respectively, and Stansted was sold to Manchester Airports Group (MAG) in March 2013.<sup>5</sup> The other remedies were also implemented: the economic regulation of airports changed with the passing of the 2012 Civil Aviation Act, undertakings were accepted with respect to Aberdeen Airport, and the CC provided guidance to the CAA on consultation between Heathrow and its airlines.

The timeline for the CC investigation and the sale of Gatwick and Stansted is set out in Figure 1.1 below. This timeline includes the milestones for the CAA's significant market power (SMP) assessments, price control determinations and the establishment of the Airports Commission. In line with the CMA's terms of reference for this review we do not separately assess these policy decisions or determinations; however, they are important in understanding the effects of the break-up. The SMP and regulatory determinations are discussed in more detail in section 2.

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<sup>3</sup> BAA then tried to appeal to the Supreme Court, but permission was refused. Competition Commission (2011), 'Consideration of possible material changes of circumstances', 19 July.

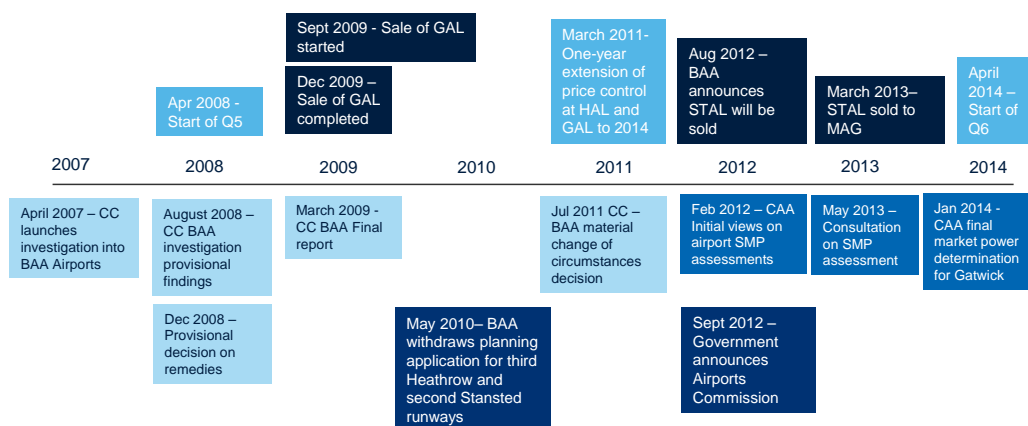
<sup>4</sup> Gatwick Airport had already been divested and other remedies were not appealed by BAA.

<sup>5</sup> GIP also owns London City Airport. MAG also owns Manchester, East Midlands and Bournemouth airports.

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**Figure 1.1 Timeline**



Source: Oxera.

### 1.3 Structure of report

The report is structured as follows.

- Section 2 sets out the evaluation framework for this review, including the scope, relevant counterfactual and evidence base.
- Section 3 reviews the CC's 2009 market investigation and, in particular, its expectations for competition in the South East England airports market as a result of the proposed remedies.
- Section 4 looks at changes in market conditions since 2009, focusing on increased competition for passengers and airlines.
- Section 5 explores the impact of the remedies on outcomes in the market, and evaluates them against the CC's expectations in its 2009 decision.
- Section 6 considers whether there are any costs associated with the CC's remedies.
- Section 7 presents our conclusions.

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## 2 Evaluation framework

### 2.1 Scope

The CMA's terms of reference for this review cover a broad scope of topics. In order to ensure that our report is helpful in the CMA's review, we have focused our assessment as follows.

- **The South East England airports market, and specifically the impact of the divestment of Gatwick Airport.** While we consider other airports in the UK, and in other countries, in order to understand the competitive dynamics and to compare outcomes, our analysis focuses on the changes that have occurred in the South East, and specifically at Gatwick, as a result of the CC's remedies.
- **Passenger and passenger airline market.** We focus on the passenger market, rather than cargo, given that this is the majority of Gatwick's business. We do distinguish between the passenger and the passenger airline markets in our analysis, as well as considering the interaction between the two.
- **The effect of the divestment on outcomes.** We consider the effect of the divestment on factors such as price, service quality and efficiency. We do not review the remedies implementation process—e.g. the effectiveness of the bidder evaluation process or the development and application of the criteria for assessing potential bidders (as set out in the CMA's terms of reference).

### 2.2 Evidence base

In order to undertake our evaluation, we have relied on qualitative and quantitative evidence from a range of sources, including:

- data and information provided by GAL on areas such as pricing, capacity and airline operations at the airport;
- OAG (Air Travel Intelligence) data on flight schedules;
- CAA passenger survey data;
- documents relating to the CC's 2009 market investigation, and the 2011 consideration of material change of circumstances;
- SMP assessments undertaken by the CAA for Gatwick;
- the CAA's price control decisions for Gatwick.

In many cases it is difficult to determine whether certain behaviours or outcomes are specifically caused by the break-up rather than other factors. Therefore, we use a mix of qualitative and quantitative evidence, as well as case studies, to support specific points in the assessment.

### 2.3 Counterfactual

Determining the effect of the CC's remedies on competition in the airports market requires a comparison of the market situation that has resulted from these remedies with the hypothetical situation that would have arisen in the absence of the remedies—in other words, the counterfactual situation.

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Defining a counterfactual scenario is not a straightforward exercise in this instance, and there are a number of alternative counterfactuals that one could consider. However, for the purpose of clarity and simplicity, we consider that the factual and the counterfactual scenarios that would be the most relevant and appropriate for this assessment are as follows.

- **Factual:** the factual scenario is what has actually happened following the CC's market investigation, and is therefore directly observable. The factual scenario takes account of: BAA's divestment of Gatwick and Stansted to different owners, the introduction of a new Civil Aviation Act in 2012, and tailored regulatory regimes at Heathrow (ex ante revenue yield cap), Gatwick (contracts and commitments) and Stansted (de-regulation) since 2014.
- **Counterfactual:** in the counterfactual scenario, in which there are no remedies, we assume that there would have been no change in the ownership and regulatory arrangements—i.e. no divestment of Gatwick or Stansted, continued implementation of ex ante revenue yield cap regulation at Heathrow, Gatwick and Stansted in line with the form of regulation in place for the five previous control periods (Q1–Q5) and no Civil Aviation Act.<sup>6</sup> We also consider how the market would have changed even in the absence of the remedies.

While this is the way we would ideally seek to compare outcomes, it may not be feasible to construct a detailed counterfactual scenario as set out above due to the interactions between the impacts of the remedies and uncertainties about how the market would have evolved absent the interventions. We therefore also rely on a comparison of outcomes before and after the break-up of BAA in this report.

## 2.4 Accounting for regulation

As noted above, the current situation is that there are different types of regulatory regimes in place at Heathrow, Gatwick and Stansted. The change in regimes for the most recent control period (Q6) has largely been catalysed by the divestment remedies imposed by the CC, the resulting increase in competition between airports and the changes in relationship between GAL and airlines after the break-up. This fundamental change in market structure provided the main impetus for a changed regulatory response to each airport. Such a response by the CAA would have been feasible under the former legislation (indeed, the CAA had in its 2008 and 2009 decisions already introduced some differentiation in regulation between Heathrow, Gatwick and Stansted). However, more tailored regulation to the circumstances of each airport has also been facilitated by the Civil Aviation Act, which provided the CAA with some additional flexibility.

The Civil Aviation Act was introduced in 2012, replacing the legislative framework of the Airports Act 1986. The new Act grants the CAA powers to undertake market power assessments to determine whether to regulate each airport under licence and, if so, the form that this regulation should take. The market power test is one of three tests that the CAA needs to look at to

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<sup>6</sup> In the first two price control periods (Q1 and Q2) there was a separate price cap set for Gatwick, as well as an overall price cap set for Heathrow, Gatwick and Stansted together. In Q3, there was a combined formula for Heathrow and Gatwick. From Q4 there has been a separate price cap on Gatwick and this is what we expect would have continued in the counterfactual. Competition Commission (2007), 'BAA Ltd: A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd)', 28 September.

determine whether regulation should be introduced. Under the Act, regulation should only be introduced if:

- the airport has, or is likely to acquire, SMP in a market ('test A');
- competition law does not provide sufficient protection against abuse of that SMP ('test B'); and
- regulation by means of a licence will provide benefits (for users of air transport services) that outweigh any adverse effects ('test C').<sup>7</sup>

The CAA published the findings of its market power assessments in January 2014, determining that Heathrow and Gatwick met the three tests and should be regulated under licences.<sup>8</sup> The CAA determined that Heathrow, which was found to possess the greatest degree of market power, should continue to be subject to ex ante price cap regulation.

Gatwick's licence, however, is based on a new commitments approach combined with bilateral contracting (known as contracts and commitments). Under this framework, price, service quality and investment are subject to a minimum set of commitments from Gatwick but may then be further tailored to individual airlines as determined through bilateral contracting. Gatwick has stated that 'commercial agreements outside of a licence-based regulatory regime will promote competition between airports which will allow greater ability for the airport and airlines to work together, innovate and better serve the needs, desires and interests of passengers.'<sup>9</sup> Gatwick's commitments are included in the airport's Condition of Use and are enforceable by airlines. In addition, under the licence the CAA undertakes monitoring of price, service quality and investment at Gatwick.

More detail on Gatwick's commitments is included in Table 2.1.

**Table 2.1 Gatwick's commitments**

	<b>Commitment</b>
<b>Change mechanism</b>	Price path and service quality regime can be changed if agreed to by Gatwick, at least 67% of airlines paying published charges, and 51% of airlines responding to consultation
<b>Price</b>	No price cap, but limit on the growth in average revenue yield of RPI + 1% per year based on published charges and RPI + 0% per year based on blended charges (including contractual discounts) over the seven-year period Limit on over- or under-recovery in any given year Allowance for adjustment to limits for pass-through of certain costs (notably, costs driven by new security requirements)
<b>Consultation on CAPEX</b>	Publication of a five-year rolling CAPEX plan and information on annual expenditure. Consultation on all major projects and annual meeting with the capital sub-committee of the Airport Consultative Committee to review delivery

<sup>7</sup> Civil Aviation Act 2012, Part 1: Airports, Chapter 1, Section 6(3–5).

<sup>8</sup> Civil Aviation Authority (2014), 'Market power determination in relation to Heathrow Airport – statement of reasons', CAP 1133, 10 January; Civil Aviation Authority (2014), 'Market power determination in relation to Gatwick Airport – statement of reasons', CAP 1134, 10 January.

<sup>9</sup> Gatwick (2013), 'CAA Stansted Market Power Assessment – Response from Gatwick Airport', 21 May.

<b>Commitment</b>	
<b>Minimum CAPEX</b>	Minimum CAPEX of £700m over seven years Explain material differences between its CAPEX forecasts and the forecast included in the CAA's price review
<b>Service quality regime</b>	To maintain core service standards at the levels achieved in Q5, but with greater emphasis on passenger facing metrics than the CAA proposed for Q6. This includes a broader range of measures on airport service, and the addition of measures on airline service performance, with offsetting linkage between monthly payment by airport of rebates for airport service failure and airline achievement of service standards
<b>Accounts</b>	Same information to be published as in 2011/12 statutory accounts. Gatwick is no longer required to publish its regulatory asset base (RAB) figure, but simply to maintain its calculation of the 'shadow RAB' and notify this (in confidence) to the CAA annually
<b>Duration</b>	Seven years (until March 2021)

Source: Civil Aviation Authority (2014), 'Economic regulation at Gatwick: from April 2014: Notice granting the licence', CAP 1152, February.

The CAA found that Stansted did not meet the market power test for services to passenger airlines or for services to cargo airlines.<sup>10</sup> Consequently, Stansted is no longer subject to licence-based economic regulation by the CAA.<sup>11</sup>

These tailored regulatory regimes were put in place five years after the CC's final decision was published. Therefore, the observed outcomes in the first five years following divestment are likely to be a function not only of enhanced competition but also of the Q5 regulatory settlement (2008–14). The Q5 regulatory regime was relatively intrusive and effectively replaced commercial relationships with a regulatory structure at Gatwick and Heathrow (as was probably appropriate under common ownership). It should be noted, however, that even under the former legislation, the CAA had considerable scope to differentiate the regulation of the three BAA London airports by reference to the degree of market power that each was judged to possess. This led the CAA to set a price cap for Stansted for the Q5 period that was not based on the regulatory asset base (RAB), but was set with the aim of protecting users partly by encouraging the development of the competition that Stansted faced.

The new regulatory regimes at Heathrow and Gatwick, and the de-regulation of Stansted, have been in place for less than two years. Therefore, there is limited data with which we are able to examine the specific outcomes resulting from the new regulatory regimes. However, the report does consider the extent to which the new regulatory regimes themselves, and the behaviour that they have driven, are likely to be due to the CC's remedies, and the increased competition that has resulted.

<sup>10</sup> Civil Aviation Authority (2014), 'Market power determination for passenger airlines in relation to Stansted Airport – statement of reasons', CAP 1135, 10 January; Civil Aviation Authority (2014), 'Market power determination for cargo services in relation to Stansted Airport – statement of reasons', CAP 1153, 10 January.

<sup>11</sup> Stansted, along with all other airports which handle more than 5m passengers per year, is still subject to the Airport Charges Regulations 2011, which implement in the UK the equivalent European Directive.

## 2.5 Logic mapping

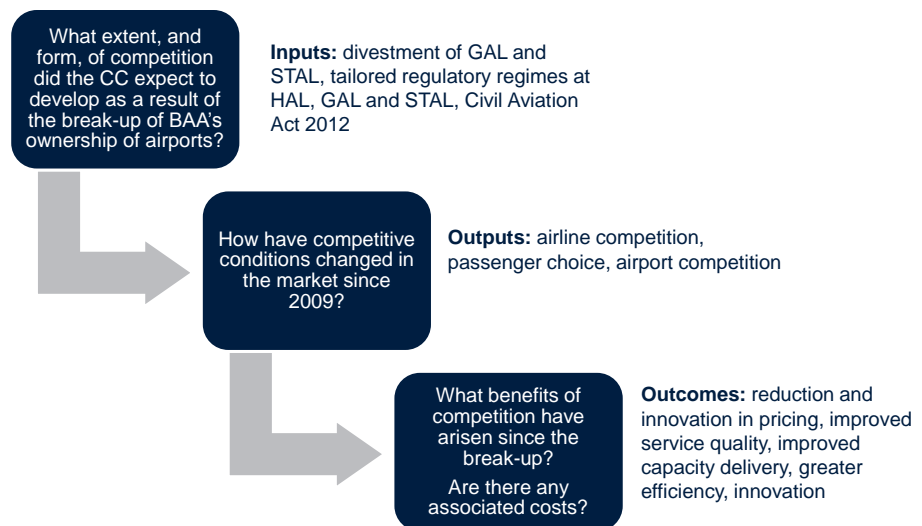
Logic mapping is widely used in the evaluation of interventions after implementation. It provides a clear outline of the key steps required in order to turn a set of inputs into activities that are designed to lead to a specific set of changes or outcomes, and in doing so helps in understanding the mechanisms by which an action leads to a certain result.

We use this framework to undertake our assessment in the next three sections as follows:

- section 3: what did the CC expect in terms of the extent and form of competition as a result of the remedies (i.e. inputs) proposed?
- section 4: how have competitive conditions changed since 2009 in terms of passenger and airline choice and switching as a result of the break-up (i.e. outputs)?
- section 5: what benefits of competition have arisen since the break-up (i.e. outcomes)?

This process is illustrated in Figure 2.1.

**Figure 2.1 Conceptual framework for the assessment**



Source: Oxera.

### **3 The Competition Commission's expectations for competition**

In its 2009 investigation, the CC concluded that BAA's common ownership of the South East airports:

prevents any competition between them...In the London area there is an almost complete absence of competition and almost total market failure...Airlines and passengers at BAA's airports have either been entirely deprived, or substantially deprived, of the innovation, enterprise and concern for their interests that competition brings. These shortcomings, which are extensive, have been felt by airlines and passengers alike in prices and/or quality of service.<sup>12</sup>

The CC suggested that it was not necessary to set out a detailed counterfactual analysis of what would have happened over the last two decades if ownership of the London airports had been separated at the time of privatisation, but noted that 'we are confident that a significant degree of competition would have emerged in all possible counterfactuals.'<sup>13</sup>

The CC did assess how it expected competition to evolve going forward, and the degree of competition that might arise if the airports were separately owned. However, it noted the limits on the extent of competition that might arise due to capacity constraints and current price controls in place at Heathrow, Gatwick and Stansted.

The CC suggested that separate ownership of Gatwick would result in significant competitive interactions between Gatwick and Heathrow (especially for non-transfer passengers) and Stansted (due to catchment overlaps and low-cost carriers at both airports). The CC considered Gatwick to be the closest substitute for both Stansted and Heathrow.

The CC also set out expectations for particular benefits that might arise from an increase in competition. It expected that these would arise over time, and also as a result of other changes in the market—e.g. development of capacity. The CC's expectations are set out below, while the following sections consider whether, and to what extent, they have actually transpired.<sup>14</sup>

#### **3.1 Greater degree of passenger substitution**

The CC expected the degree of passenger substitution between firms under separate ownership to be greater than under common ownership. It noted that this is complicated for London airports given the capacity constraints and presence of regulation, but that it would still expect greater passenger substitution if, for example, the separation of ownership resulted in greater differences in the prices charged, different marketing efforts, and/or an increase in the number of routes served from one or more of BAA's airports.

#### **3.2 Increased competition for airlines**

The CC considered that under separate ownership the airports would have a better understanding and appreciation of their customer base. The CC's analysis of substitutability indicated that in the absence of common ownership, Gatwick would compete intensely with both Heathrow and Stansted—for example, for

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<sup>12</sup> Competition Commission (2009), 'BAA airports market investigation: A report on the supply of airport services by BAA in the UK', para. 9.1. (Hereafter, referred to as 'Competition Commission (2009)').

<sup>13</sup> Competition Commission (2009), para. 5.14.

<sup>14</sup> Section 4 considers the first two CC predictions in terms of greater degree of passenger substitution and increased competition for airlines, as these are considered to be outputs that lead to the ultimate outcomes or benefits for passengers, which are discussed in section 5.

airlines that bring a high number of passengers per ATM.<sup>15</sup> The CC noted that 'Gatwick might also compete with Stansted and Heathrow for particularly valuable users by offering targeted tariff discounts or airline specific improvements to quality.'<sup>16</sup> The CC's analysis also suggested that airlines might be willing to switch some point-to-point routes between Heathrow and Gatwick.<sup>17</sup>

The CC expected:

...Stansted, and perhaps even Heathrow, to be more aggressive in approaching Gatwick airlines to fill new capacity than they would under common ownership. Similarly, under separate ownership, we would expect Gatwick to be more aggressive in retaliating in an effort to prevent the loss of these airlines. The process of rivalry to win and retain airlines will induce the airports to improve their offerings to the benefit of airlines and customers.<sup>18</sup>

### **3.3 Faster delivery of capacity and lobbying for capacity enhancements**

While capacity constraints may arise even if there is effective competition between airports (e.g. given the extent of investment needed to expand capacity), the CC considered that the level of capacity constraints, and delays in the delivery of runway capacity had been exacerbated by common ownership. In particular, BAA's strategy of maximising the utilisation of its runways across all of its London airports before bringing forward new runway capacity at any one of them restricted and distorted competition, and would not have been pursued under separate ownership in a competitive market.

The CC also noted that BAA faced no competitive pressure from other airport operators to introduce new capacity more rapidly and that 'there is enough evidence to support the view that, under separate ownership, the operator of Gatwick would have had a strong incentive to seek government support for a second runway, in order to compete with Heathrow.'<sup>19</sup> The CC predicted that separate owners would not have been willing to operate at full capacity for years. As a result, they would have been incentivised to lobby the government.

### **3.4 Improved capacity delivery**

The CC determined that detailed government policy on the nature and timing of capacity development, and identifying where the capacity should be located, could constrain airports' ability to respond to changes in the market. While a government policy supporting the development of a certain level of capacity in South East England but not specifying the precise location(s) might result in longer planning inquiries, it would not be more costly or result in a slower process than the past approach adopted by the government. In addition, instead of relying on one organisation's (BAA's) assessment of the impact of runway development, the government would be able to compare independent projects in terms of costs, efficiency, deliverability and impact on the environment in determining which capacity expansion scheme to support.

The CC also considered that the scope for airports to compete might drive improvements in the scale and design of facilities, the speed with which capacity is delivered, and the decision-making process relating to the location of capacity.

<sup>15</sup> Competition Commission (2009), Appendix 10.1.

<sup>16</sup> Competition Commission (2009), para. 10.49(d).

<sup>17</sup> Competition Commission (2009), Appendix 10.1.

<sup>18</sup> Competition Commission (2009), para. 5.16(f).

<sup>19</sup> Competition Commission (2009), para. 4.85.



### 3.5 Price competition

The CC noted that there is less of an incentive to compete on price under common ownership since outperformance at one airport might come at the expense of another. Therefore, separation would bring increased scope for price competition. For instance, the CC considered that the divestment of Gatwick might enhance Heathrow's incentives to lower passenger charges (and potentially fares) in order to increase the number of passengers, because the impact on Gatwick would no longer be considered as part of its pricing strategy.

The CC also predicted that there would be competition in terms of pricing structure. For instance, Gatwick and Stansted could compete for off-peak traffic by offering discounts on airport charges, and competition between Gatwick and Heathrow might lead to rebalancing of the landing and per-passenger charges. This might bring about the emergence of different commercial strategies, with services provided to suit different airline and passenger needs.

However, the CC expected the intensity of price competition to be modest if capacity constraints persisted.

### 3.6 Improved service quality

The CC considered that separate ownership could stimulate improvements in the service quality offered, even at price-capped capacity-constrained airports. Separately owned airports would be more responsive to airline views and develop different management strategies and techniques, meaning that the CAA could then benchmark the airports against one another. The CC suggested that:

Divestiture of Gatwick might stimulate improvements in the quality of service offered particularly if improvements can be achieved at relatively low cost, e.g. from good management and organization.<sup>20</sup>

The CC considered that rivalry in the provision of service quality would supplement the effect of the service quality regime (SQR) targets applied by the CAA, but would not replace them, at least in the short term.

### 3.7 Innovation

The CC noted that a principal effect of competition between airports would be that airports would seek to 'leapfrog' each other to win business through superior and innovative design. The CC expected that competition would result in 'constant pressure on airports to innovate in the way in which infrastructure is developed to meet the needs of their customers.'<sup>21</sup> In its response to the CC's investigation, the CAA considered that there might be innovations 'which neither the CAA—nor any other regulatory or competition authority—could reasonably be expected to predict.'<sup>22</sup>

### 3.8 Increased efficiency

The CC considered that, under common ownership, there had been a failure to ensure that airports were operating efficiently, as there had not been comparative performance benchmarking, implementation of effective continuous improvement, or a willingness to consider outsourcing or third-party suppliers. Consequently, costs were higher than they would be in a more competitive environment. The CC predicted that under separate ownership airports would

<sup>20</sup> Competition Commission (2009), para. 10.41.

<sup>21</sup> Competition Commission (2009), para. 5.30.

<sup>22</sup> Civil Aviation Authority in Competition Commission (2011), 'BAA Market Investigation: Consideration of possible material changes of circumstances', 19 July, para. 46 (e).

adopt different approaches, for example, with respect to operating expenditure (OPEX).

### **3.9 Change in regulatory regime, including removal of price controls**

The CC suggested that the price controls in place at Heathrow, Gatwick and Stansted might have been a result of BAA's common ownership of the airports, and that in the absence of common ownership and, importantly, in the absence of capacity constraints, Gatwick and Stansted (at least) would not require price caps.<sup>23</sup> The CC mentioned that 'an expectation of the relaxation of price control regulation at Gatwick would increase the incentive to compete to attract additional or valuable users.'<sup>24</sup> While the CC suggested that even in the absence of common ownership Heathrow would likely have a position of SMP, requiring some form of regulation, this would not necessarily need to be of the same form or strength as under common ownership.

The CC's final decision focused on the deficiencies associated with a RAB-based regulatory regime. Specifically, it noted that the current system had contributed to a lack of responsiveness to the interests of users on CAPEX and poor outcomes on quantity, quality, location and timing of investment, and quality of service. The CC considered that there was scope for a more effective regulatory regime to reduce the distortions of RAB-based regulation, which might be likely to occur under separate ownership.

### **3.10 Lower regulatory costs and better regulatory outcomes**

Under separate ownership, the CAA would be able to collect three sets of accounts produced by independent operators, allowing it to benchmark the operators through comparative competition. This could reduce regulatory costs through a reduction in the level of scrutiny required by the regulator, and might increase the likelihood of an appropriate regulatory settlement. The CC noted that:

common ownership of airports reduces the quantity and quality of independent information available to the regulator and consequently reduces the quality of regulation by limiting the ability of the regulator to make cost and quality comparisons between different operators.<sup>25</sup>

In its submission to the investigation, the CAA also noted that:<sup>26</sup>

continuation of RAB-based price control regulation might well serve to limit competition between airports as it would involve the regulator effectively determining the price, service quality and investment of airports, thus effectively crowding out the potential for competition.

### **3.11 Summary**

Overall, the CC considered that there would be significant benefits from competition, noting:

We recognise that we are unlikely to have identified all of the commercial levers that airports could flex to compete with one other and may therefore have underestimated the benefits that will flow from competition. This is because rivalry is an inherently uncertain process and, to date, there has been no competition

<sup>23</sup> The CC considered that price caps at Gatwick and Stansted were a direct and indirect effect of common ownership (they were a direct effect due to common ownership of the closest substitute airports and an indirect effect due to the effect of common ownership on capacity).

<sup>24</sup> Competition Commission (2009), para. 10.41(f).

<sup>25</sup> Competition Commission (2009), para. 6.81.

<sup>26</sup> CAA in GAL (2013), 'Economic regulation at Gatwick from April 2014: CAA's initial proposals', Response from Gatwick Airport Ltd, June.

between any of BAA's London airports...It is against this complete absence of competition to date that the cumulative benefits from competition, once the airports are separately owned, should be evaluated.<sup>27</sup>

While the CC predicted that these benefits would arise, it did not consider that it was possible to quantify the benefits of separate ownership given the 'complex interactions and the existing regulatory regime.' However, the CC estimated that:<sup>28</sup>

on average the net benefits of competition for the London airports would only need to exceed between 2p and 9p per passenger at Stansted or between 2p and 7p per passenger at Gatwick on average over the next 30 years to exceed our estimate of the maximum relevant costs of divestiture. As a broad indication of the relative scale of the required benefits, these represent less than 2 per cent of the passenger charges at these two airports. We are therefore confident that all the expected benefits...will outweigh the costs of divestiture and note that the development of competition, even in a regulated market, can sometimes exceed all expectations, in terms of both scale and speed.

The market and context in which the CC undertook its assessment were quite different from those that prevail today—for instance, at the time of the assessment, traffic at Heathrow, Gatwick and Stansted was declining. Therefore, the next section considers the changes in market conditions since 2009—both those that would have arisen regardless of the remedies imposed by the CC and those that are likely to be a result of the remedies. Section 5 then explores whether the outcomes predicted by the CC have arisen.

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<sup>27</sup> Competition Commission (2009), para. 5.20.

<sup>28</sup> Competition Commission (2011), 'BAA Market Investigation: Provisional consideration of possible material changes of circumstances', 30 March, para 132.

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## 4 Evidence on changing competition since 2009

This section considers evidence on changes in competition since the break-up. We look at two main sources for the changes.

- Section 4.1 describes changes in the market that would have been likely to have happened even in the absence of the break-up. This is important to consider, as the CC's analysis was specific to the context and market conditions at the time, which may have since changed. For instance, there may subsequently have been changes in airline business models or passenger preferences which affected the attainment of the benefits the CC expected.
- Section 4.2 discusses the changes in the market, and specifically airline and passenger behaviour, that are likely to have been stimulated by increased competition between airports as a result of the break-up. The extent of rivalry between airports will have affected the attainment of the benefits expected by the CC. We focus on competition between Gatwick, Heathrow, Stansted and Luton, but we note that Gatwick also faces competition from other UK (e.g. Southampton, Southend) and European airports.

### 4.1 Context: market developments

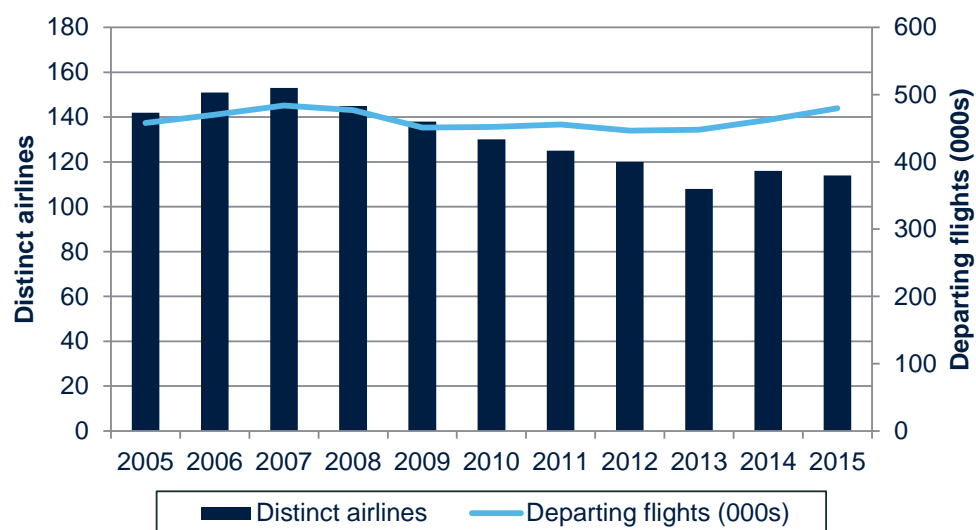
#### 4.1.1 Airline market

Since the CC's market investigation, there have been a number of developments that have affected the airline market. The following sets out a few examples that are relevant in providing context for this assessment.

- **Airline consolidation.** There has been considerable consolidation of airlines in the last six years. Such consolidation has been particularly apparent among airlines from the USA, but there have also been mergers and acquisitions among European airlines—e.g. the mergers of Air France and KLM, and the consolidation of British Airways, Iberia, Vueling, BMI and, most recently, Aer Lingus into the International Airlines Group (IAG). The airlines that are part of IAG carried approximately 7m passengers at Gatwick in 2014.

Figure 4.1 below illustrates the consolidation in the London market, showing the number of flights departing from four London airports (Heathrow, Gatwick, Stansted and Luton) and the number of unique airlines at these four airports.

**Figure 4.1** Number of departing flights ('000) and distinct airlines from selected London airports 2005–15



Notes: Only departing flights are included in this analysis. 'Distinct airlines' measures the number of different airlines that operated flights from Heathrow, Gatwick, Stansted or Luton airports in that year, restricted to those airlines that offered at least 10,000 seats in a year.

Source: Oxera analysis of OAG data.

Overall, while approximately 6% more flights operated from these four London airports in 2015 than in 2009 (approximately 480,000 departing flights in 2015 vs 451,000 in 2009), the number of airlines that provide these flights has declined by around 17% (from 138 to 114). This highlights the trend of consolidation in the industry, and should be taken into account when assessing the extent to which GAL, and other airports, have been able to attract new airlines since the break-up.

- **Convergence in airline business models.** It has been argued that airline business models have become increasingly similar over time.<sup>29</sup> In the market power assessment for Gatwick, the CAA noted that there is no longer a clear separation between low-cost carriers and full-service carriers in terms of demand for specific facilities or the ability of passengers to switch between airlines.<sup>30</sup> This view was based (at least partly) on evidence provided by airlines that the operations of low-cost carriers and full-service carriers were similar in terms of costs, aircraft used, target customer base, and product offerings. Airlines that have traditionally been considered low-cost carriers have introduced assigned seating and greater passenger differentiation, while airlines considered to be full-service carriers now often charge for meals/refreshments and checked baggage on short-haul flights. In addition, some full-service carriers do not interline with other airlines, while many low-cost carriers, such as Norwegian, provide transfer connectivity.<sup>31</sup> Airlines

<sup>29</sup> For an empirical analysis, see Daft, J. and Albers, S. (2015), 'An empirical analysis of airline business model convergence', *Journal of Air Transport Management*, 46, pp. 3–11.

<sup>30</sup> The CAA noted that it 'no longer considers that it is appropriate for the relevant market to be segmented by airline business model. While there are differences in the business models for low cost carriers (LCCs) and full service carriers (FSCs), there is no clear demarcation line between these models, especially with respect to demand for specific facilities at Gatwick. Furthermore, especially at Gatwick, LCCs and FSCs indicated that passengers could easily switch between their services.' Civil Aviation Authority (2014), 'Market power determination in relation to Gatwick Airport – statement of reasons', CAP 1134, 10 January, para. 2.2.

<sup>31</sup> Gatwick Airport Limited (2013), 'CAA's Gatwick Market Power Assessment: Response from Gatwick Airport Limited', 26 July.

should therefore be considered along a spectrum rather than as two distinct groups.

- **Liberalisation of the international aviation market.** While it was agreed before the break-up, the replacement of the Bermuda II agreement with the US–EU Open Skies Agreement on 30 March 2008 has had an effect on the industry, and the London market in particular, in the years after the break-up. The Open Skies Agreement removed the restrictions on the number of airlines allowed to fly between Heathrow and the USA.<sup>32</sup> Following this, a number of airlines, including American Airlines (March 2008),<sup>33</sup> Delta Airlines (April 2012)<sup>34</sup> and US Airways (March 2013)<sup>35</sup> switched flights from Gatwick to Heathrow.
- **Increased presence of Middle Eastern carriers.** Middle Eastern airlines, such as Emirates, Qatar and Etihad, have significantly increased their share of the international aviation market since 2009. Emirates has become the world's biggest airline by international passenger traffic.<sup>36</sup> The dominance of these carriers has also, in part, led to increased concerns from some European and US airlines, which claim that the Middle Eastern airlines are benefiting from unfair subsidies.<sup>37</sup> Combined, Etihad Airways, Emirates and Qatar Airways grew from 2.8m passengers at Gatwick and Heathrow in 2009 to 3.8m in 2014—an increase of 36%. Over the same period, British Airways expanded by 26% at these two airports—a figure which is boosted by the effect of its takeover of British Midland International.<sup>38</sup> Airports in the UK and more widely in Europe compete for the new routes offered by these growing Middle Eastern carriers.

#### 4.1.2 Airport competition

While the CC's 2009 investigation suggested that there might be some competition between UK airports and those further afield (e.g. in Europe), this was not a focus of the assessment. However, since the CC's investigation, there has been an increase in the extent of competition between UK airports, European airports and even non-European airports for both passengers and airlines.

Many airlines, especially those that operate more in line with a low-cost business model, tend to have multiple bases, and can easily allocate aircraft to one of a number of different airports when choosing to open a new route. For instance, Ryanair increased its number of bases from 50 at the beginning of 2012 to 76 by October 2015.<sup>39</sup> These airlines can also easily move routes or frequencies between airports. Airlines that would typically be considered as full-service carriers will also often consider airports in different countries when deciding on a new route, putting the airports in competition with one another. Indeed, as noted

<sup>32</sup> Butcher, L (2010), 'Aviation: Open Skies', *House of Commons Library*.

<sup>33</sup> 'American Airlines to Move Flights to London Heathrow as Part of US/EU 'Open Skies''. See: <http://hub.aa.com/en/nr/pressrelease/american-airlines-to-move-flights-to-london-heathrow-as-part-of-useu-open-skies>

<sup>34</sup> Maslen, R. (2012), 'Delta Air Lines Switches London Flight', *Routes Online*, 23 February. See: <http://www.routesonline.com/news/29/breaking-news/142363/delta-air-lines-switches-london-flight/>

<sup>35</sup> McGrath, G. (2013), 'US Airways starts Charlotte-London Heathrow flights', 1 April. See: <http://business.blogs.starnewsonline.com/23214/us-airways-starts-charlotte-london-heathrow-flights/>

<sup>36</sup> Critchlow, A. (2015), 'Gulf airlines are winning the battle for the skies', *The Telegraph*, 21 March, accessed 14 December 2015, see: <http://www.telegraph.co.uk/finance/newsbysector/transport/11487567/Gulf-airlines-are-winning-the-battle-for-the-skies.html>.

<sup>37</sup> See, for instance, 'Airline subsidies in the Gulf: Feeling the heat', *The Economist*, 6 March 2015, accessed 13 January 2016. Available online at: <http://www.economist.com/blogs/gulliver/2015/03/airline-subsidies-gulf>

<sup>38</sup> Oxera analysis based on CAA data.

<sup>39</sup> Ryanair (2015), 'Ibiza base to open (no. 76) & grow by 25%', press release, 29 October.

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by Stephen Littlechild in relation to legacy flag-carriers, charter airlines and other low-cost airlines:

increasingly they operate on a European and world-wide scale, increasingly willing and able to switch their bases from one airport or country to another.<sup>40</sup>

Many airlines are also able to operate with a high degree of fleet flexibility due to their fleet arrangements. For instance, as a result of the exercise of options and purchase rights, easyJet noted that it has the ability to manage its fleet size between 204 and 316 aircraft by 2019 depending on economic conditions and opportunities available.<sup>41</sup>

In addition to airlines' choice between airports and overall fleet size, a recent report by Copenhagen Economics showed that passengers have increasing choice, with over 60% of European citizens now having a choice of at least two airports within a two-hour drive time. It noted that because of these trends, airports have had to become more commercially focused, as demonstrated by more route development and marketing activities.<sup>42</sup>

Transfer passengers also have increased choice, with the rise of Middle Eastern and Turkish airports, for example, providing alternative options. The number of available seats between Singapore (often used as a transfer point) and Europe between 2012 and 2015 has fallen at the same time that the number of seats between the Middle East and Europe has grown.<sup>43</sup>

#### **4.1.3 Macroeconomic trends**

As well as the trends within the aviation market outlined above, the international and UK market for air travel has been subject to a backdrop of volatile macroeconomic conditions. In December 2009, when GAL underwent its change of ownership, the UK was exiting a period of severe economic contraction. Economic growth rates fluctuated for the next few years, before starting to recover at the beginning of 2013. Changes in UK passenger traffic have been correlated with the changes in GDP, but have exhibited much greater volatility, as shown in Figure 4.2 below. However, other factors need to be taken into account in considering air traffic growth, such as the disruption caused by the eruption of Eyjafjallajökull in 2010.

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<sup>40</sup> Littlechild, S. (2012), 'Regulation of an increasingly competitive airport sector', 26 May, para. 12.2.

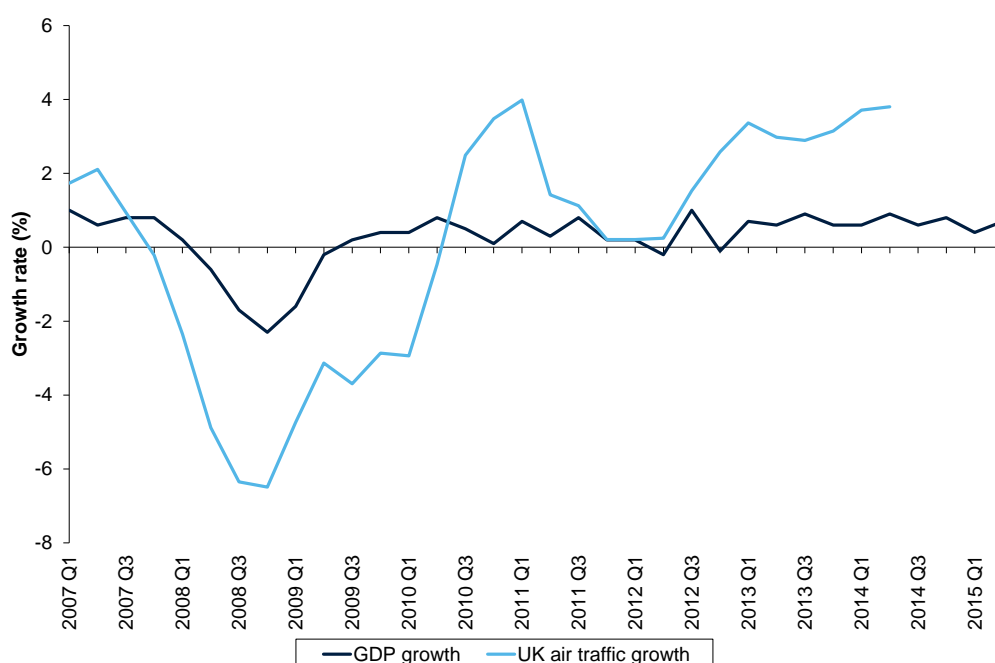
<sup>41</sup> easyJet (2015), 'Annual Report 2014'.

<sup>42</sup> Copenhagen Economics (2012), 'Airport Competition in Europe', June.

<sup>43</sup> Credit Suisse (2015), 'Revisiting: The Rise of the Gulf Carriers', *The Financialist*, 2 January.

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**Figure 4.2 Quarterly UK GDP and air traffic growth (%), 2007–15**



Source: Office for National Statistics; Civil Aviation Authority (2015), 'Aviation Trends Summary traffic data', Q1.

Passenger traffic at Gatwick has grown at an average of 4% per annum since the break-up compared with 2% before. Gatwick has outperformed the UK and European air traffic growth rates, which were both 2% per annum before the break-up and have remained flat since then.<sup>44</sup> Gatwick has also outperformed Stansted (2% growth before the break-up and 0% afterwards) and Heathrow (0% growth before the break-up and 3% afterwards). Before the break-up in 2008, BAA forecast that Gatwick would have just fewer than 40m passengers in 2017/18. Gatwick has exceeded 40m passengers on a rolling 12-month basis in 2015.<sup>45</sup> This is despite the fact that traffic declined for a period due to the economic downturn.

The trends mentioned above have had an effect on the dynamics in the airline and the airport markets, such that they could have an impact on the outcomes expected as a result of the CC's remedies. Therefore they need to be carefully interpreted when considering the outcomes associated with the break-up.

Furthermore, given these factors, it can be difficult to attribute definitively changes in the airports market to the break-up. As previously noted we therefore consider qualitative evidence (such as internal documents relating to GAL's business strategy) alongside quantitative analysis, such as catchment area analysis and the number of airlines and passengers served by Gatwick and its competitors. We also undertake sensitivities in the analysis in certain cases—e.g. excluding US destinations and airlines to account for the effects of the Open Skies agreement.

<sup>44</sup> European traffic growth has been estimated based on the IFR movements registered by Eurocontrol. The pre-break-up period is from 2005 until 2009 and the post-break-up period is from 2010 to 2014.

<sup>45</sup> Gatwick Airport (2009), 'Gatwick Airport Performance Report', August; data provided by GAL.



## 4.2 Market developments relating to the break-up

### 4.2.4 Airline market

As outlined in section 3, the CC expected the break-up of BAA to result in an increase in competition between airports for airlines. This section considers evidence on whether such competitive behaviour developed following the break-up of BAA, and finds that it has manifested itself through a number of channels:

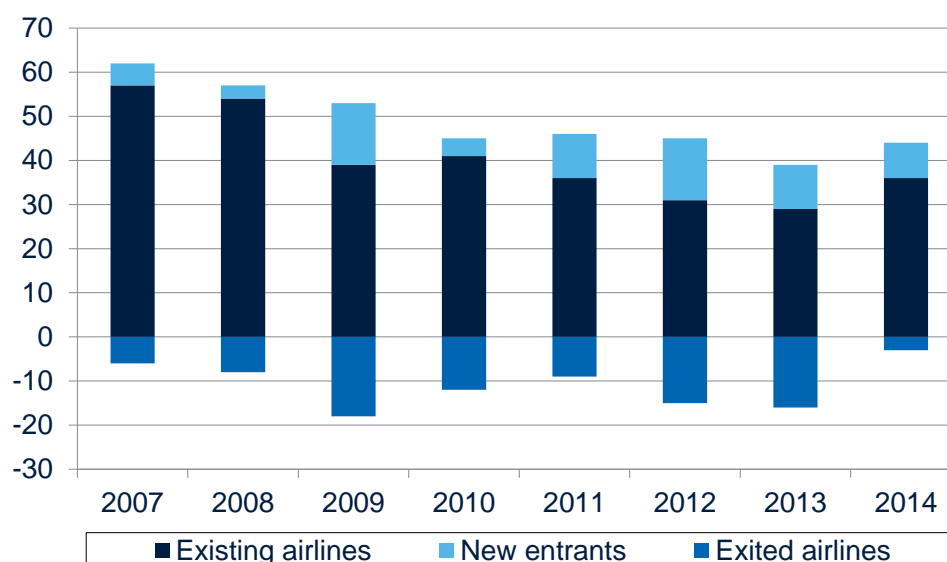
- GAL has successfully sought to bring new airlines to Gatwick, at the same time that it has lost a number of airlines to competing airports;
- GAL has undertaken a range of initiatives with the aim of enhancing its relationships with incumbent airlines, to the benefit of these airlines and (as a consequence) their passengers.

#### GAL has sought to bring new airlines to Gatwick

Since the break-up, a key part of GAL's plans has been to attract new airlines to the airport. For instance, as described in section 5, following separation, Gatwick launched an airline incentive policy, offering discounts on aeronautical charges to airlines starting new long-haul routes.

Figure 4.3 shows the number of distinct airlines operating at Gatwick Airport between 2007 and 2014, broken down by whether these were existing airlines (i.e. those that operated in previous and subsequent years), new to Gatwick in that year, or exited Gatwick in that year (i.e. stopped operating in the year in question). This figure excludes US destinations, in order to account for the effect of the Open Skies Agreement described in section 4.1.1.

**Figure 4.3 Airline churn at Gatwick Airport (excluding US destinations)**



Note: The analysis excludes all US destinations, and considers only scheduled and non-scheduled passenger traffic. 'Existing airlines' are those that operated in a given year as well as the years before and after that year; 'New entrants' are those airlines that operated in a given year but not the one preceding it; 'Exited airlines' are those that operated in a given year but not in the following year.

Source: Oxera analysis of GAL data.

GAL has attracted a greater number of new airlines to the airport after the break-up compared with before: in the three years up to and including 2009, 22 new

airlines commenced operations at GAL; in the three years following (2010–12), this figure is 28, or 34 if the three-year period between 2011 and 2013 is considered. As the overall number of airlines operating from Gatwick has declined (as part of the trend of industry consolidation), this rise in new airlines implies that new airlines comprise an increasing share of GAL's airline portfolio in any given year. Some of the new airlines at GAL include:

- Turkish Airlines, which entered in 2012 and now operates over 2,000 flights a year to/from Gatwick;
- Air China and Vietnam Airlines in 2012, accounting for over 300,000 passengers in 2012, before subsequently exiting;
- Vueling and Icelandair in 2013, adding over 1,400 flights in that year. The former has grown to account for approximately 0.5m passengers each year.

There is evidence that some airlines have added more capacity at Gatwick for reasons that are related to the improved relationship between Gatwick and airlines after break-up. In Gatwick's SMP assessment, Norwegian Air noted that:

Under BAA, NAS [Norwegian Air] was a smaller player and didn't get any attention. BAA's whole focus was on base carriers. BAA's approach was "this is what we have, take it or leave it". It has noticed dramatic changes in attitudes and improvements since new ownership at LGW [and] When travelling around Europe, it always use GAL as an example for how other airports should behave and work with partner airlines'.<sup>46</sup>

We do not have evidence as to why many of the other airlines chose GAL, or whether they were constrained in their choice of where they could operate to/from in London (e.g. due to capacity constraints at other airports). However, Box 4.1 provides evidence that is consistent with the CC's expectation that airports would exert more effort to attract airlines following the break-up. Indeed, Gatwick has been lobbying and marketing to airlines in order to encourage them to choose Gatwick when they are deciding on where to allocate a new aircraft.

#### **Box 4.1      Route development at GAL**

Since the sale of Gatwick Airport, GAL has developed a pipeline of target airlines and routes in order to be able to provide services to key destinations for both business and leisure passengers. GAL has expanded its airline relations team and improved its access to aviation data to help with airline and route business case presentations. GAL has also set up a programme of meetings and communications with airlines, some of which lasted nearly three years before the airline agreed to operate from the airport. The airlines' decisions are based on several criteria including cost, profit margins, speed of access into London, quality of airport facilities and reaching a commercial agreement.

GAL's efforts have led to growth from new and existing airlines at the airport. Since 2009, existing carriers such as easyJet, British Airways, Emirates and Virgin have significantly increased capacity at the airport, while Norwegian has transferred from Stansted and is now Gatwick's third biggest carrier. New carriers, such as Turkish Airlines, Icelandair, Vueling, Swiss, WestJet, Cathay Pacific and Garuda Indonesia have entered, while carriers such as Air China, Korean and Vietnam Airlines have entered and exited.

Source: Information provided by GAL.

A number of the airlines that have been attracted to Gatwick have moved from other London airports, including Air Berlin moving two of its five Stansted routes

<sup>46</sup> Civil Aviation Authority (2013), 'Appendix E: Evidence and analysis on competitive constraint: Airlines', CAP 1134, para. E201.

to Gatwick in February 2011.<sup>47</sup> In October 2011, Air Asia X switched its services from Stansted to Gatwick, although this service was later cancelled.<sup>48</sup>

Figure 4.3 also shows some evidence of an increase in the number of airlines stopping their operations at GAL, and switching to other airports, which is consistent with the CC's expectation of increased competition between airports for airlines. For example, in May 2011 Qatar Airways moved from Gatwick to Heathrow. British Airways also switched a number of routes between Gatwick and Heathrow between 2010 and 2012, although no aircraft were moved between the two airports.<sup>49</sup> There has been some movement of US airlines from Gatwick to Heathrow. While some of these movements of US airlines may be a result of competition between the airports, it is more likely to be a result of the EU–US Open Skies Agreement in 2008.<sup>50</sup>

Similarly, there have been movements from Gatwick to Stansted—in April 2013, Air Moldova switched its limited twice weekly service, and (after an initial expansion) Ryanair withdrew many of their services from Gatwick or switched them to Stansted and other regional UK airports (e.g. Manchester).

### **GAL has better engaged with its incumbent airlines**

A further development that might be expected as a result of the break-up is airports exerting more effort to retain and grow airlines already operating at the airport, to ensure such airlines are not drawn away by competitors. Previously, with Gatwick, Stansted and Heathrow under common ownership, there would have been less of an incentive to engage in such efforts, as many of the alternative options available to airlines would also have been BAA airports. This would particularly have influenced any potential for Gatwick to win airline business from Heathrow, as BAA would have lost the higher aeronautical charges and greater retail and car park yield generated by Heathrow traffic.

GAL has engaged in a number of initiatives that are indicative of improved engagement with existing airlines following its change of ownership:

- GAL has responded positively to a request by easyJet to consolidate its operations into one terminal at Gatwick, while at the same time securing the agreement of the other airlines that would be relocated as part of the move (British Airways and Virgin Atlantic);<sup>51</sup>
- GAL has signed contracts with its largest airlines, resulting in over 80% of passengers at Gatwick now being carried by airlines under such contracts. These contracts enable the airport to offer a different service proposition or charges in return for volume certainty or growth commitments.

These initiatives are described in further detail in section 5.

In 2006, the five largest airlines (by passenger numbers) at Gatwick were British Airways, easyJet, GB Airways, Monarch and First Choice Holidays, as shown in Figure 4.4.

<sup>47</sup> Air Berlin has since closed some routes from Gatwick.

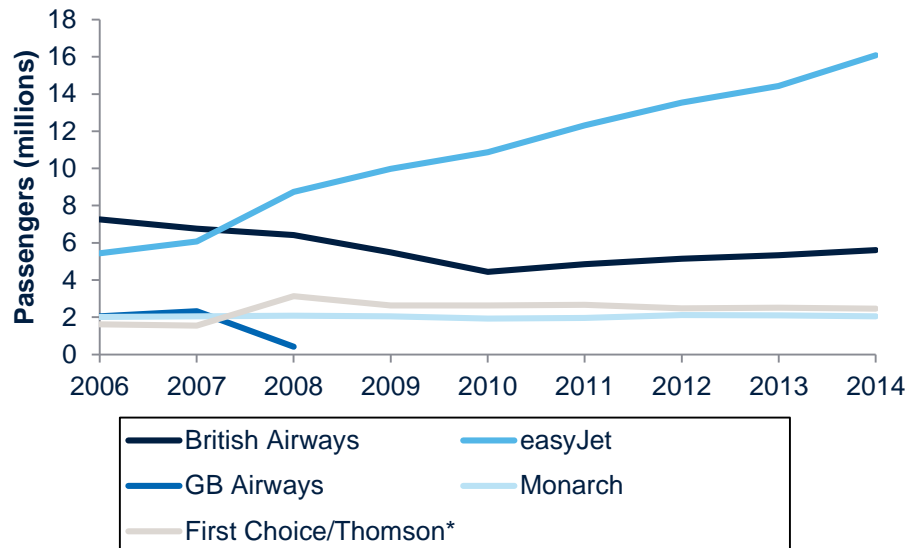
<sup>48</sup> Civil Aviation Authority (2013), 'Appendix D: Evidence and analysis on market definition', CAP 1134, para. D248.

<sup>49</sup> Civil Aviation Authority (2013), 'Appendix D: Evidence and analysis on market definition', CAP 1134, para. D248.

<sup>50</sup> Delta moved from Gatwick to Heathrow in April 2012 and US Airways switched its Charlotte service from Gatwick to Heathrow in March 2013.

<sup>51</sup> Gatwick Airport Limited (2015), 'Airline Engagement – Terminal moves and Transformation Programme', 2 November.

**Figure 4.4 The top five airlines at GAL in 2006 and their performance over time (millions of passengers)**



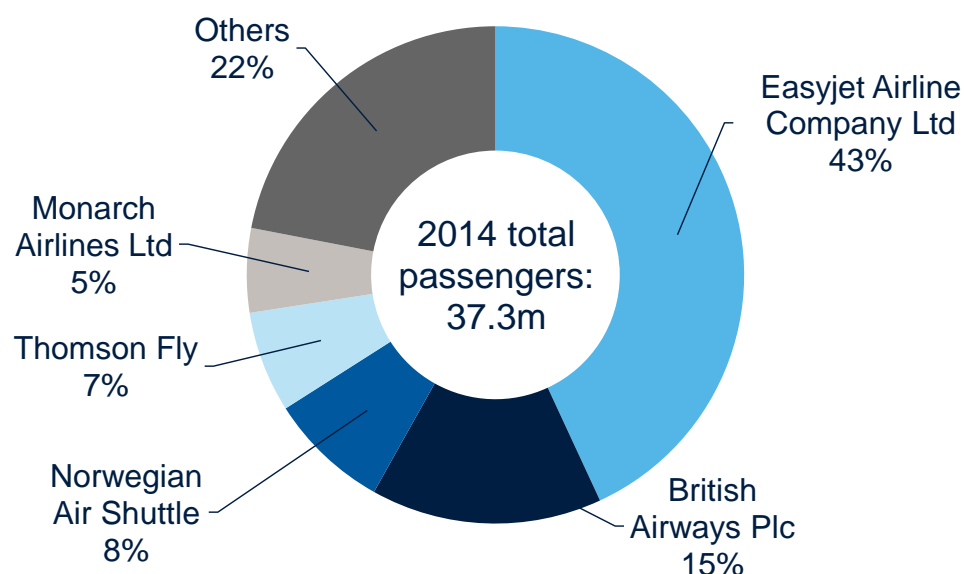
Notes: \*From 2008, figures include passengers for both First Choice and Thomsonfly following their merger to form Thomson Airways.

Source: Oxera analysis of GAL data.

While easyJet has more than tripled its passenger numbers since 2006, British Airways and Monarch have maintained broadly stable patronage levels. GB Airways and First Choice have ceased to exist as separate airlines: the former was acquired by easyJet in 2008, while the latter merged with Thomsonfly to form Thomson Airways in 2008.

Figure 4.5 below shows the result of these developments, detailing the proportion of Gatwick's passengers from each of the five biggest airlines at the airport in 2014. easyJet is by far the largest carrier at the airport, with approximately 16m passengers in 2014.<sup>52</sup> easyJet is now also one of the largest airlines in Europe and Gatwick has become its largest base, with 55 based aircraft in 2014. Norwegian has also grown significantly (following the switch of its operations from Stansted to Gatwick in 2009), and now carries approximately 3m passengers a year to and from Gatwick.

<sup>52</sup> With the exception of easyJet taking over GB airways in 2008, this has largely been organic growth.

**Figure 4.5 Breakdown of GAL's passengers by airline, 2014**

Source: Oxera analysis of GAL data.

#### 4.2.5 Passenger market

In addition to considering airline choice and switching, it is also relevant to look at the passenger market, as airline demand is to some extent derived from passenger demand. Airlines' decisions (e.g. regarding frequency and destinations offered) will be strongly influenced by passengers' preferences and behaviour. For instance, airlines are unlikely to operate a service/route unless there is a sufficient number of passengers willing to travel to a particular destination, while a loss of passengers could mean that it is no longer profitable for an airline to operate that route. However, airlines' and passengers' demand may differ from one another in important respects, and the CC considered a potential increase in passenger substitution to be a separate benefit to enhanced competition for airlines (see sections 3.1 and 3.2).

Oxera has reviewed documents and analysed data provided by GAL, and considered whether there has been enhanced competition for passengers through a number of channels:

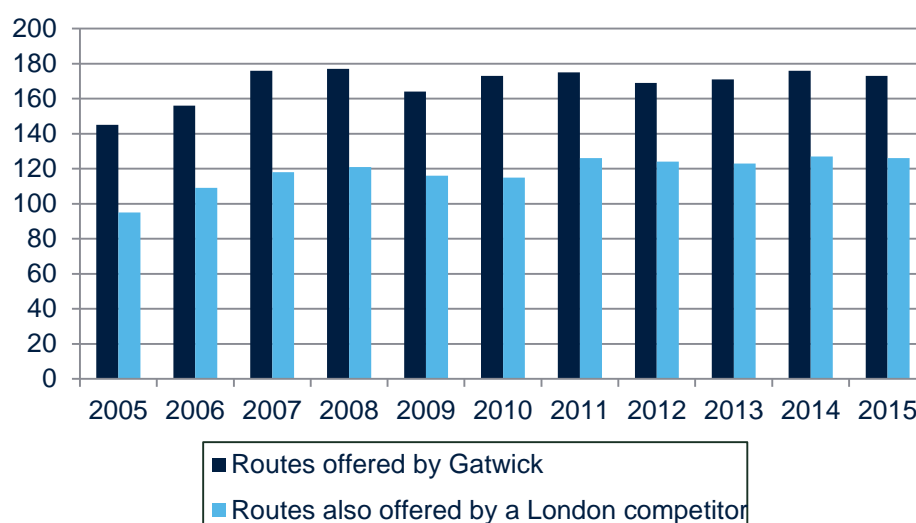
- competition between airports in terms of destinations/routes offered;
- competition between airports on a geographic basis;
- changes in the reasons passengers choose to fly from Gatwick.

#### Competition between airports on destinations offered

Figure 4.6 below illustrates the number of destination cities served by Gatwick Airport between 2005 and 2015. There is a decline in the number of destinations offered in 2009, which is likely to be a combination of economic difficulties and the effect of the Open Skies Agreement. If this latter factor is controlled for by considering only non-US destinations, in every year following divestment

Gatwick has offered routes to more destinations than it did in the years prior to break-up.<sup>53</sup>

**Figure 4.6 Destinations served by GAL**



Note: A destination is counted as a distinct city, rather than an airport—i.e. a city served by two airports would only be counted once. A minimum capacity of 10,000 seats of outbound capacity from GAL in the relevant year has been imposed. The light blue bars represent the subset of these routes where at least one of Heathrow, Stansted or Luton airports also offered this route.

Source: Oxera analysis based on OAG data.

Figure 4.6 also indicates where a given destination served by Gatwick is also served by at least one of Stansted, Heathrow or Luton airports. This demonstrates that of the 173 cities served by Gatwick in 2015, approximately three-quarters of these were also served by at least one of Heathrow, Stansted or Luton airports.

The overlap of destinations between airports is important to understand before considering the catchment area analysis in the next section, as the ability of and willingness for passengers to switch between airports will depend, in part, on whether the destination is offered from another airport. Therefore, the greater the overlap, the greater the choice passengers are likely to have between Gatwick and other airports in order to reach a particular destination.

This is particularly likely to be the case for business passengers and passengers visiting friends and relatives (VFR), who often want to travel to a particular destination. Leisure passengers may be more willing to switch between destinations, as they may simply be looking for a 'city break' or a 'ski holiday', for example. Leisure passengers will also be less time-sensitive and more price-sensitive, and may therefore be more willing to travel to an alternative airport in order to access lower fares.

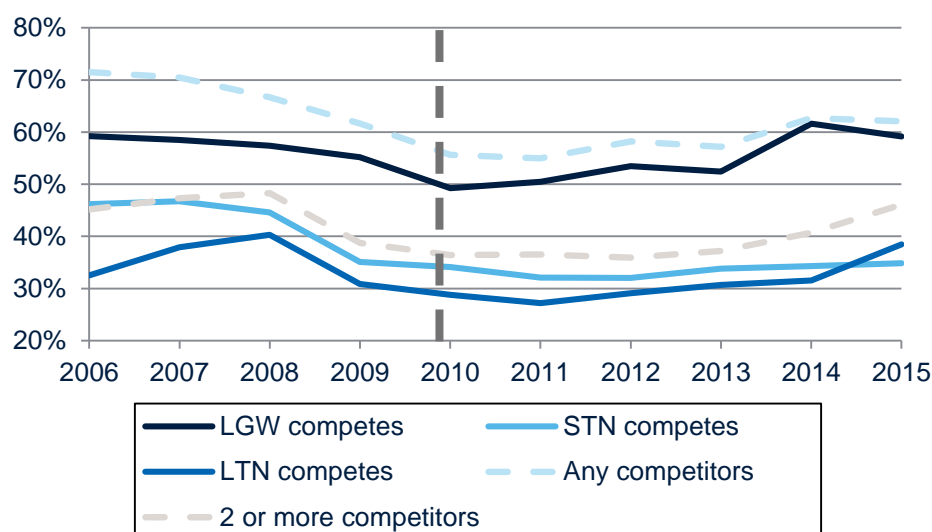
The extent to which the airports compete with one another for passengers is also likely to be affected by whether the destination is short-haul or long-haul due to differences in acceptability to passengers of duration of travel to the origin airport (i.e. long-haul passengers are often willing to travel further to the origin airport). These differences are also considered in the catchment area analysis below.

<sup>53</sup> Between 2005 and 2009, GAL offered on average 151 routes to non-US destinations and a maximum of 163 in 2008. Between 2010 and 2015, GAL offered an average of 168 routes, with a minimum of 164 (in 2012).

Oxera has analysed OAG airline schedules data provided by GAL. This data includes information on the frequency, capacity, destination airport and destination city for each of Heathrow, Gatwick, Stansted and Luton airports between 2006 and 2015 (on a one-way basis). This allows us to investigate the extent to which each of these airports serve common destinations—and thus the extent of choice available to passengers seeking to fly to a given destination—as well as how this overlap has evolved over time.<sup>54</sup> Oxera has measured the 'extent of choice' available to passengers by determining the proportion of routes offered by an airport where passengers may also have been able to choose a different London airport to fly to the same destination.<sup>55</sup>

There are various ways in which the extent of choice can be measured. One approach involves simply counting the number of routes where an alternative airport is available to passengers (as shown in Figure 4.6 above). However, this gives little consideration to the relative importance of routes: for instance, a destination where 100 flights are operated annually would be considered as important an overlap as one where 1,000 flights are offered annually. We therefore use capacity to measure the overlaps, where capacity is the total available seats on flights to a given destination within a year. Figure 4.7 shows the proportion of the capacity offered on flights from Heathrow on which it faces competition between 2006 and 2015.

**Figure 4.7 Proportion of capacity where Heathrow faces competition**



Notes: LGW, Gatwick; LTN, Luton; STN, Stansted. The dashed vertical line represents the divestment of Gatwick Airport in December 2009. Capacity is seats available on the route. Data is aggregated from a monthly to an annual level, and routes are only included if a minimum of 10,000 seats are available on that route in a year (equivalent to approximately one medium-sized aircraft per week).

Source: Oxera analysis of OAG data.

Figure 4.7 shows that until 2010, passengers were able to use alternative airports to travel to a particular destination on a declining proportion of

<sup>54</sup> For this analysis, Oxera used the 'city' variable in the OAG dataset to define a destination, rather than a specific airport. This allows us to capture instances where airports offer routes to different airports within the same city (for example, Paris-Orly and Paris-CDG), and these are classified as an overlap rather than distinct offerings.

<sup>55</sup> We only consider whether passengers would be able to travel to a given destination on another direct flight given that the OAG data is based on first port of call. In some cases, particularly for long-haul journeys, passengers may be willing to substitute two indirect flights (involving a transfer) for a direct flight. This would increase the number of overlaps, so the analysis in this section is conservative.

Heathrow's routes. An alternative airport was available for 71% of Heathrow's total route capacity in 2006, which declined to 56% in 2010. Similarly, an alternative to a given route from Heathrow was available from Gatwick 59% of the time in 2006, but only 49% of the time in 2010. However, in recent years, the existence of a competitive constraint on Heathrow's routes has risen. In 2015 Gatwick competed on 59% of Heathrow's route capacity; the proportion of capacity on which any competitor existed rose from 56% in 2010 to 62% in 2015, and the proportion of routes where two or more alternatives to Heathrow existed rose from 36% in 2010 to 46% in 2015.<sup>56</sup>

If translated into passenger terms, the 10% increase in routes where Heathrow faces competition from Gatwick between 2010 and 2015 would mean that over 7m passengers who would not have had an alternative to Heathrow on their route in 2010 have gained the option to fly from Gatwick by 2015.

These results are not necessarily indicative of causality from the effect of the break-up, and factors such as the volatile macroeconomic conditions described in section 4.1.3 should be considered when interpreting them. However, the evidence of declining 'contested' routes between Heathrow and Gatwick airports was present between 2006 and 2007, providing some evidence that this may not have been entirely driven by the macroeconomic shocks that followed in 2008.

Figure 4.8 below shows the corresponding metric for Gatwick. Overall, Gatwick appears to face competition on a higher proportion of its routes than Heathrow (again, on a capacity-weighted basis). This is likely because a higher proportion of its routes are short-haul destinations (see discussion below). In general, all measures of competition indicated on Figure 4.8 increase between 2006 and 2015. Therefore, while there has been an increase in competition since 2009, there is less evidence that it may have been instigated by the break-up of BAA.<sup>57</sup>

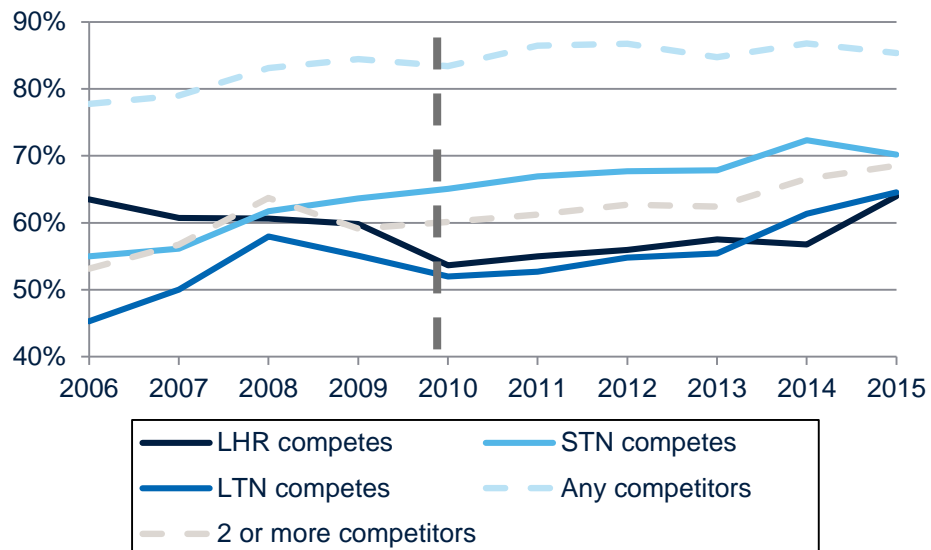
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<sup>56</sup> When considering these results, it is important to note the potential existence of lags between the divestment of airports and observed changes in these measures. For instance, Gatwick was divested in December 2009. At this point, it is likely that many airlines' schedules would already have been in place for a significant proportion of 2010.

<sup>57</sup> It should be noted that while Heathrow and Gatwick both show a general trend of imposing an increasing constraint on one another, the constraints that they impose on one another do not need to be symmetrical. For instance, if a given route becomes an overlap through the entry of Airport A (on a small scale) where Airport B operates on a large scale, this will result in only a small increase in the proportion of seat-weighted routes where Airport A faces competition. However, for Airport B, this route will represent a higher proportion of their overall capacity, and so the measure of constraint will increase by a greater amount.



**Figure 4.8 Proportion of capacity where Gatwick faces competition**



Notes: LHR, Heathrow; LTN, Luton; STN, Stansted. The dashed vertical line represents the divestment of Gatwick Airport in December 2009. Capacity is seats available on the route. Data is aggregated from a monthly to an annual level, and routes are only included if a minimum of 10,000 seats are available on that route within the year (equivalent to approximately one medium sized aircraft per week).

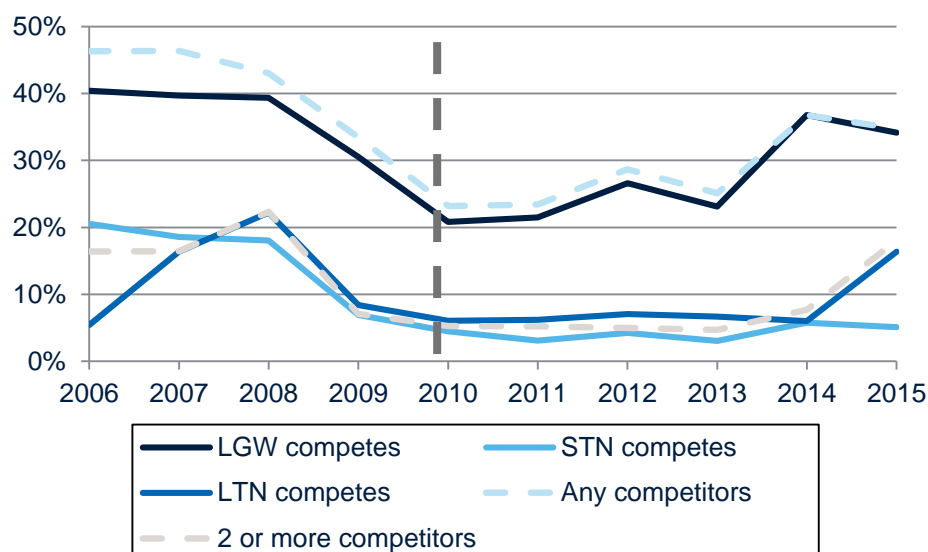
Source: Oxera analysis of OAG data.

One extension of the analysis described above is to consider how these results differ between short- and long-haul journeys.<sup>58</sup> This reveals significant differences in overlaps between the two journey types. The proportion of contested short-haul journeys is very high for both Heathrow and Gatwick: both face competition from at least one other London airport on over 90% of their routes. In 2015, Gatwick operated an alternative to 90% of Heathrow's short-haul route capacity (up from 85% in 2010); and Gatwick faced a constraint from Heathrow on 76% of its short-haul routes (up from 62% in 2010).

For long-haul flights, the trend is less clear. This may be partly due to the switching of US routes from Gatwick to Heathrow following the Open Skies Agreement. In 2008, over 11,000 flights departed from one of Gatwick, Stansted or Luton to the USA; by 2013, the number was 2,000. This explains the pattern observed in Figure 4.9 below, which shows that competition declined on a significant proportion of Heathrow's long-haul routes from 2008.

<sup>58</sup> The OAG data lists the duration of a flight but not an explicit 'long-haul or short-haul' classification. For this analysis, we have defined short-haul flights as three hours or under, and long-haul as a flight duration of over three hours.

**Figure 4.9 Proportion of long-haul routes where Heathrow faces competition**



Notes: LGW, Gatwick; LTN, Luton; STN, Stansted. The dashed vertical line represents the divestment of Gatwick Airport in December 2009. Routes are weighted by seat capacity available on the route. Data is aggregated from a monthly to an annual level, and routes are only included if a minimum of 10,000 seats are available on that route within the year (equivalent to approximately one medium sized aircraft per week).

Source: Oxera analysis of OAG data.

Figure 4.9 also shows that in more recent years, the three other airports have increased their competition with Heathrow on long-haul routes. For instance, between 2010 and 2013, none of these airports offered flights to New York (all did in 2008). However, Norwegian started to operate this route again from Gatwick in July 2014.<sup>59</sup> In July 2015, Luton also re-entered this market, when La Compagnie launched an all-business-class flight serving this route.<sup>60</sup> As flights to New York account for approximately 10% of Heathrow's long-haul routes (by seat capacity), these changes alone explain much of the recent increase in overlap.

A further aspect to consider is the strength of competition on a route offered by an airport. For instance, in the New York example above, while Gatwick has entered on a route which represents approximately 5% of Heathrow's capacity (across routes of all distances), the number of flights offered by Gatwick on this route is still small compared with the number offered by Heathrow (79,000 seats vs approximately 2.6m from Heathrow in 2015).

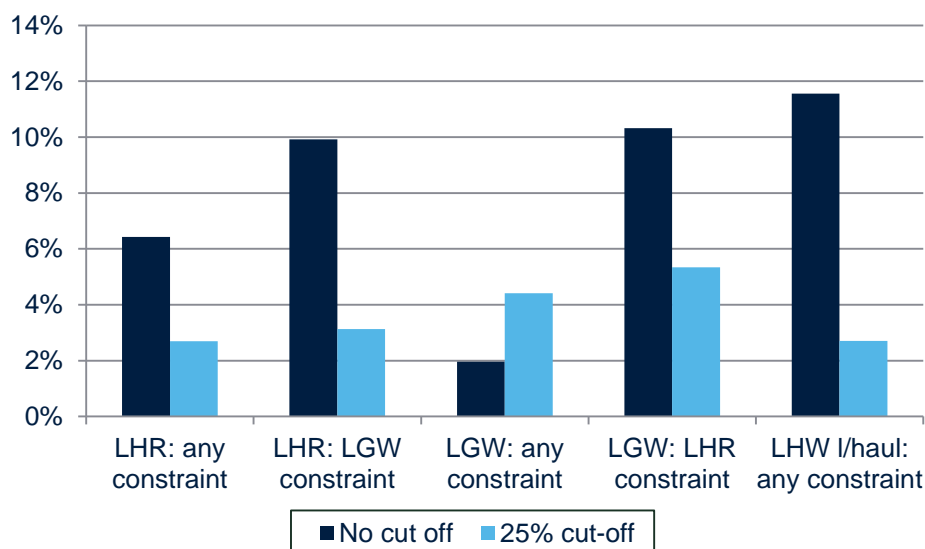
Figure 4.10 imposes a requirement that in order for an airport to be considered to be competing on a given route, it must offer at least 25% as much capacity as the given airport on that route. For instance, the first dark blue bar represents a 6% increase in routes where Heathrow faces any sort of constraint (from 56% in 2010 to 62% in 2015). The light blue bar shows that this change reduces to 3%

<sup>59</sup> Norwegian (2013), 'Norwegian launches new routes from London Gatwick to New York, Los Angeles and Fort Lauderdale', press release, 17 October, <http://media.norwegian.com/en/#/pressreleases/norwegian-launches-new-routes-from-london-gatwick-to-new-york-los-angeles-and-fort-lauderdale-918430>. Last accessed: 4 January 2016.

<sup>60</sup> Luton Airport (2015), 'La Compagnie launches new all-business class flights from London to New York', 3 February, <http://newsroom.london-luton.co.uk/news/la-compagnie-launches-new-all-business-class-flights-from-london-to-new-york-105009>. Last accessed: 4 January 2016.

when only routes where a competitor offered at least 25% as much capacity as Heathrow (on this route) are included.<sup>61</sup>

**Figure 4.10 The effect of a 'strength of constraint' requirement: changes in overlaps between 2010 and 2015**



Notes: LHR, Heathrow; LGW, Gatwick. Each pair of bars corresponds to one of the measures of competition described previously in this section: for instance 'LHR: any constraint' means the routes on which Heathrow faces a constraint from any competitor, which corresponds to the dashed light blue line in Figure 4.7. The bars represent the change in this measure.

Source: Oxera analysis of OAG data.

Overall, the change in the number of overlaps between airports is reduced when such a cut-off is imposed, as would be expected. In particular, imposing such a cut-off reduces the extent to which Heathrow faces a constraint on its long haul routes (the last two set of bars). However, in all cases shown above, the change is still positive, meaning that there has been an increase in overlaps between airports since 2010.

We also note that in some cases, the mere presence of any competition may still provide significant benefits to passengers.<sup>62</sup> It could also be the case that a new route offered from an airport is likely to start on a relatively small scale. This does not preclude the route from growing to exert a larger competitive constraint on other airports in the future.

### Competition between airports on a geographic basis

Catchment area analysis is typically used as part of market definition in order to understand where an airport's passengers originate from. As noted by the CAA, the size of catchment areas and overlaps between catchment areas of airports can also provide useful evidence of the potential competition between airports.<sup>63</sup> We therefore use this analysis to understand how competition between airports has changed since the break-up.

<sup>61</sup> It should also be noted that the level of these constraints is also affected by the imposition of this stricter criteria: in the example discussed the 3% increase is now from a base level of 36%.

<sup>62</sup> For instance, a passenger living next to Gatwick Airport may benefit substantially from the launch of one Gatwick-New York flight compared to a counterfactual where Heathrow is the only airport offering such flights.

<sup>63</sup> Civil Aviation Authority (2013), 'Appendix D: Evidence and analysis on market definition', CAP 1134, para. D248.

Oxera has analysed the CAA survey data provided by GAL for 2009 to 2014. This includes data on the UK origin of passengers departing from Gatwick, Heathrow, Stansted and Luton, and identifies the passengers according to whether they are domestic, short-haul or long-haul, and leisure or business. We focus on the most disaggregated breakdown of origin by looking at the district. This separates London, for example, into a number of boroughs, such as City of Westminster and Kensington and Chelsea. There are 380 districts in the UK in total. Transfer passengers are excluded from this analysis, as, due to the nature of their journeys, the data does not record a 'home' point within the UK for these passengers.

We have combined this data with standard assumptions about surface access travel distance/time. As demonstrated by the CAA passenger survey, location/access to an airport are one of the main reasons why passengers choose particular London airports.

However, passengers may vary in their willingness to travel by surface transport to their departure airport. For instance, passengers going on holiday may be more price-sensitive, and therefore willing to travel further distances to a departure airport, whereas business passengers may be more time-sensitive and likely to travel to the closest airport, regardless of the price differential. Preferences for travel time may also differ according to the flight distance (e.g. long-haul passengers willing to travel longer distances to an airport) and whether they are UK or foreign residents (e.g. UK residents willing to travel longer distances).

For this analysis, we have used standard travel distances used in previous market power assessments. We use a 100km/1-hour travel distance/time, as used by the European Commission in its assessment of Berlin airports. The CAA used 60-, 90- and 120-minute travel times in its assessments for Stansted, Gatwick and Heathrow airports.

It is important to note that it is not expected that all passengers would be willing or able to switch between airports, but even some increase in switching of marginal passengers between airports since the break-up may be indicative of an increase in competition. It is also worth noting the exogenous factors (e.g. Open Skies) that could affect the analysis.

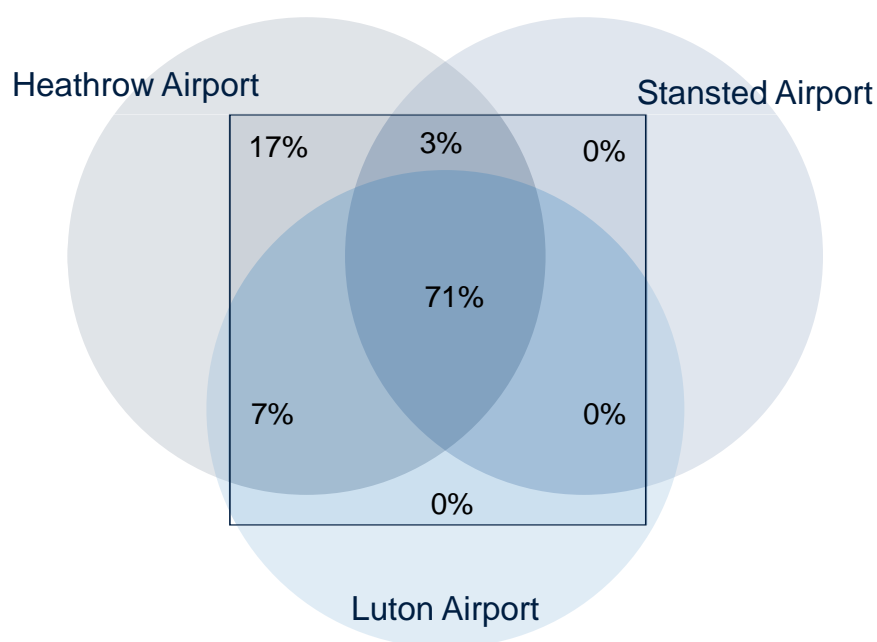
The close proximity of the London airports creates a high degree of potential competition for passengers. For instance, most passengers using Gatwick are in the catchment area of at least one of Stansted, Heathrow and Luton, and therefore may be willing to switch if one of the airports significantly improved or declined in performance. For example, Gatwick draws 76% of its passengers from districts within 100km of the airport.<sup>64</sup> Figure 4.11 below displays a breakdown of the alternative airports that passengers would also be able to reach within 100km. For instance, the central area signifies that of the 26m passengers within 100km of Gatwick, 71% would also be within 100km of all of Heathrow, Stansted and Luton airports. The upper-leftmost figure represents 17% of passengers being able to access Gatwick and Heathrow (but no other airports) within 100km. Overall, 98% would have at least one alternative airport within this distance.

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<sup>64</sup> Based on analysis of terminating (as opposed to transferring) passengers within the CAA dataset provided by GAL.

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**Figure 4.11 Other airports available to passengers within 100km of Gatwick (2014)**



Notes: 26.4m passengers, 76% of Gatwick's total passengers, came from within 100km of the airport in 2014. The diagram above shows which other airports would have also been within a 100km radius for each of those passengers. Approximately 2% of these passengers did not have any of Heathrow, Stansted or Luton airports also within 100km.

Source: Oxera analysis of CAA data provided by GAL.

The figure above shows the current level of overlap between the airports. However, it is relevant to consider how this has changed since the break-up. As a first step, we consider the districts within a 100km radius of each of Gatwick, Heathrow, Stansted and Luton airports. We look at this for total passengers, and short-haul and leisure passengers separately, given that the majority of overlaps at the four airports are for these passengers/routes.<sup>65</sup>

Table 4.1 indicates that there have been no significant changes in the percentage of passengers within an airport's catchment area travelling from that airport between 2009 and 2014. The results of the analysis of different passenger types show similar trends to the results for all passengers.

**Table 4.1 Passengers within 100km of the airport travelling from that airport (%)**

	2009	2010	2011	2012	2013	2014
Gatwick	32%	32%	32%	33%	33%	34%
Heathrow	42%	44%	45%	43%	44%	43%
Stansted	22%	21%	20%	20%	20%	20%
Luton	10%	9%	10%	10%	10%	10%

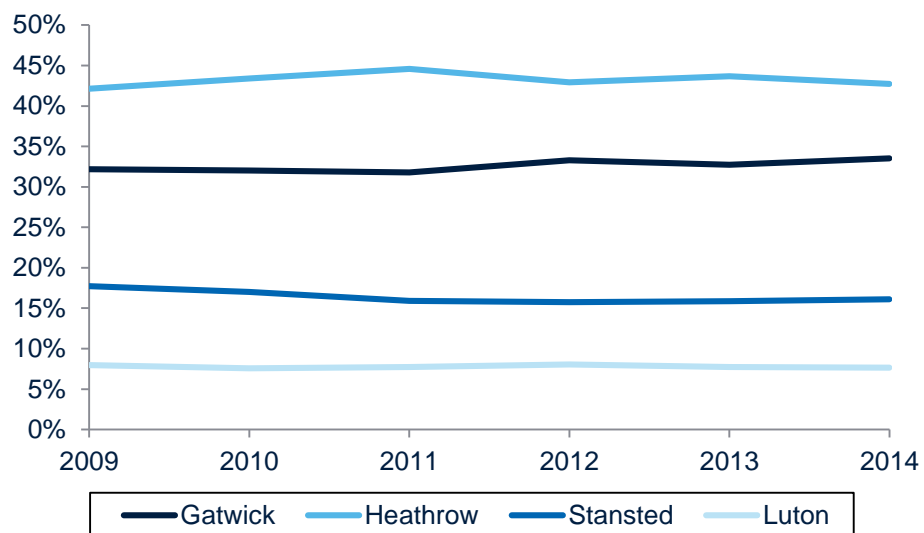
<sup>65</sup> For instance, the route-overlaps analysis detailed in the preceding section suggests that Heathrow faced competition from one of Gatwick, Stansted or Luton airports on approximately 30m one-way 'seats' of capacity in 2015. Approximately 21m of these seats (70%) were for short-haul flights. In the CAA data provided to Oxera approximately one-third of observations from the 2011 dataset are missing information on the type of haul. This results in an underestimate of passenger levels in 2011 when a particular type of haul is specified. However, we do not believe there are any systematic biases within these omissions, and so relative shares of each airport are likely to be unaffected.

Source: Oxera analysis based on CAA passenger survey.

Extending this analysis to a 150km or 200km radius leads to a decline in the market share of an airport within the catchment area considered, as areas which are further from the perspective airport (and therefore possibly closer to competitors) are included. As the available data only includes passengers flying from one of the four airports above, this may understate the rate of decline, as one would expect airports outside of London are increasingly likely to be competitors as larger radii are considered.<sup>66</sup>

Another way to consider the analysis is from the perspective of changes in which airports passengers within Gatwick's catchment area travel to. Figure 4.12 takes the passengers at the four airports as the total market and looks at changes in travel patterns for passengers within 100km of Gatwick. While there have not been significant changes over the years, it shows the high proportion of passengers in Gatwick's catchment area that use other airports.

**Figure 4.12 Market shares of Heathrow, Gatwick, Stansted and Luton for passengers within 100km of Gatwick**



Source: Oxera analysis based on CAA passenger survey. Includes only terminating passengers and passengers who travelled to one of the four airports.

The high proportion of passengers using other airports is evident regardless of flight duration. Looking at only short-haul and domestic flights raises Gatwick's market share to 40% in 2015, but Heathrow (29%) and Stansted (21%) are still substantial competitors.<sup>67</sup>

We have also looked at the changes in passengers coming from outside Gatwick's catchment area, including passengers who are in the catchment area of at least one of Heathrow, Stansted and Luton, but not Gatwick. There have been no significant changes in the proportion of these passengers using Gatwick over time.

<sup>66</sup> For instance, data is available on the number of passengers flying from Gatwick who originate in Birmingham districts, but not on the number of passengers from those districts who fly from Birmingham Airport.

<sup>67</sup> Luton's market share is 10%.

Another way to consider the data is to look at the airport with the fastest-growing passenger numbers in the districts in the catchment area of Gatwick Airport. This provides a slightly different picture of the changes in competitive conditions.

There are 98 districts within 100km of Gatwick Airport. Between 2009 and 2010, Gatwick was the fastest-growing airport in 22 of the 98 districts, while Heathrow was the fastest-growing in 23, Stansted in 20 and Luton in 33. The increase in Stansted's growth in the districts in Gatwick's catchment area is particularly noticeable between 2013 and 2014.

**Table 4.2 Airport with fastest growing passenger numbers in the district, based on Gatwick's 100km catchment area**

	2009 to 2010	2013 to 2014
Gatwick	22	21
Heathrow	23	15
Stansted	20	33
Luton	33	29

Source: Oxera analysis based on CAA passenger survey.

This result is consistent when looking at the results for other airports. For instance, while Stansted was the fastest-growing airport in only 15 of the 109 districts in Heathrow's 100km catchment area between 2009 and 2013, this rose to 36 districts between 2013 and 2014.

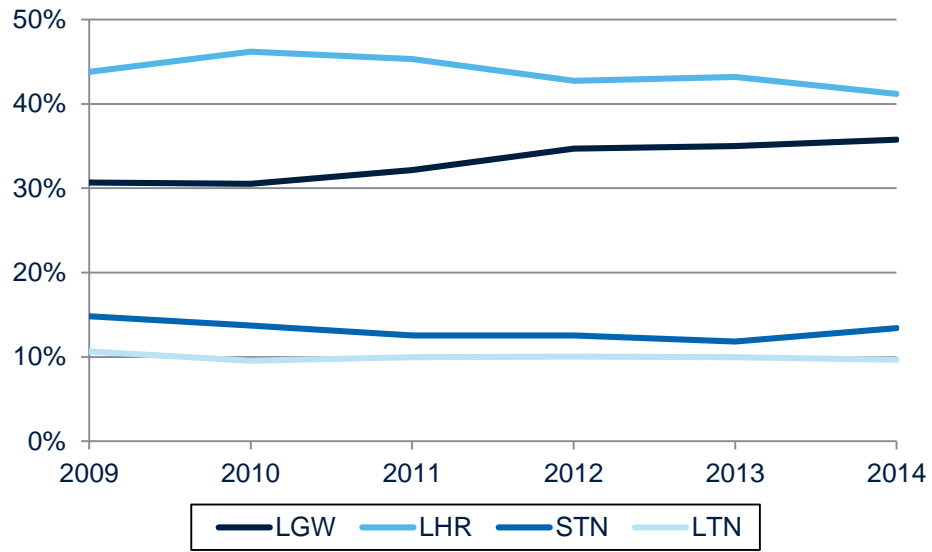
Oxera has also considered whether the degree of competition between airports differs depending on whether the routes between airports overlap.<sup>68</sup> For instance, if a passenger wants to fly to a certain city, and only one airport offers flights to this city, then the passenger may not be willing to switch to another airport. However, passenger substitution may be greater on routes offered by multiple airports.

A simple way to consider this is to look at the evolution of market shares of airports (in particular Heathrow and Gatwick) on routes where these two airports have both always offered flights from 2009 to 2014. Oxera has identified 31 such examples.<sup>69</sup> Figure 4.13 below displays the market shares of the London airports in districts within 100km of Heathrow. This shows significant gains in market share by Gatwick within Heathrow's catchment area. While Heathrow's total passengers within this radius grew by 13% between 2009 and 2014, the corresponding figure for Gatwick was 40%.

<sup>68</sup> We have combined the information on a passengers' destination (CAA data) with the information on which airports offer routes to this destination (OAG data).

<sup>69</sup> We note that these 31 routes are a small number in comparison to the numbers of routes on which Gatwick faces competition as indicated in Figure 4.6. The difference is explained by Figure 4.6 considering competition from Stansted and Luton airports (and Heathrow), as well as the stricter criteria imposed to find these 31 routes (i.e. that a route must be offered throughout the whole period, rather than just in one year).

**Figure 4.13 Market shares of airports within Heathrow's 100km catchment area: routes where Heathrow and Gatwick overlap**

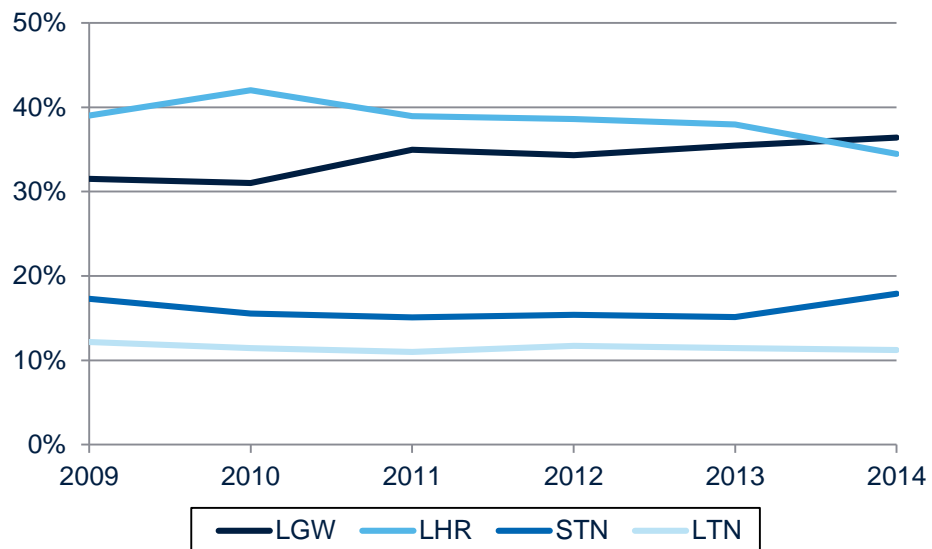


Notes: Restricted to terminating passengers. Only routes where Heathrow and Gatwick have both offered a flight in every year between 2009 and 2014 are considered.

Source: Oxera analysis of CAA and OAG data provided by GAL.

Widening the analysis to all areas shows an almost identical pattern. Also, considering only short-haul routes shows that on routes where Heathrow and Gatwick compete, Gatwick now serves a higher number of passengers than Heathrow. This is illustrated in Figure 4.14 below.

**Figure 4.14 Market shares of London airports: routes where Heathrow and Gatwick overlap, short haul only**



Notes: Restricted to short haul terminating passengers. Only routes where Heathrow and Gatwick have offered a flight in every year between 2009 and 2014 are considered.

Source: Oxera analysis of CAA and OAG data provided by GAL.



When routes which do not overlap between airports are considered, there is little evidence of such patterns. This would appear to support the hypothesis of enhanced passenger substitution on routes where the airports compete.

As described above, these results are driven by Gatwick expanding its passenger numbers at a faster rate than Heathrow. In part, this could be due to the capacity constraints faced by Heathrow during the period considered. However, on routes without the 'constant overlap' criteria, Heathrow has expanded by 5m passengers between 2009 and 2014. This suggests that it is not solely capacity constraints driving the results.

Considering the geographic market analysis as a whole indicates that:

- the geographic locations of Heathrow, Gatwick, Stansted and Luton airports are likely to enable a significant degree of passenger substitution, as many passengers will be within a reasonable travel distance of multiple airports;
- at an aggregate level, there is relatively little evidence of significant (net) gains or losses of market share by airports within their own or other airports' catchment areas;
- however, there is evidence that on routes where airports overlap, Gatwick has imposed an increasing constraint on Heathrow, gaining market share both within Heathrow's catchment area and on a wider basis. Given the evidence that airports are increasingly offering overlapping routes, this may have positive implications for the future competitive landscape of the London airports.

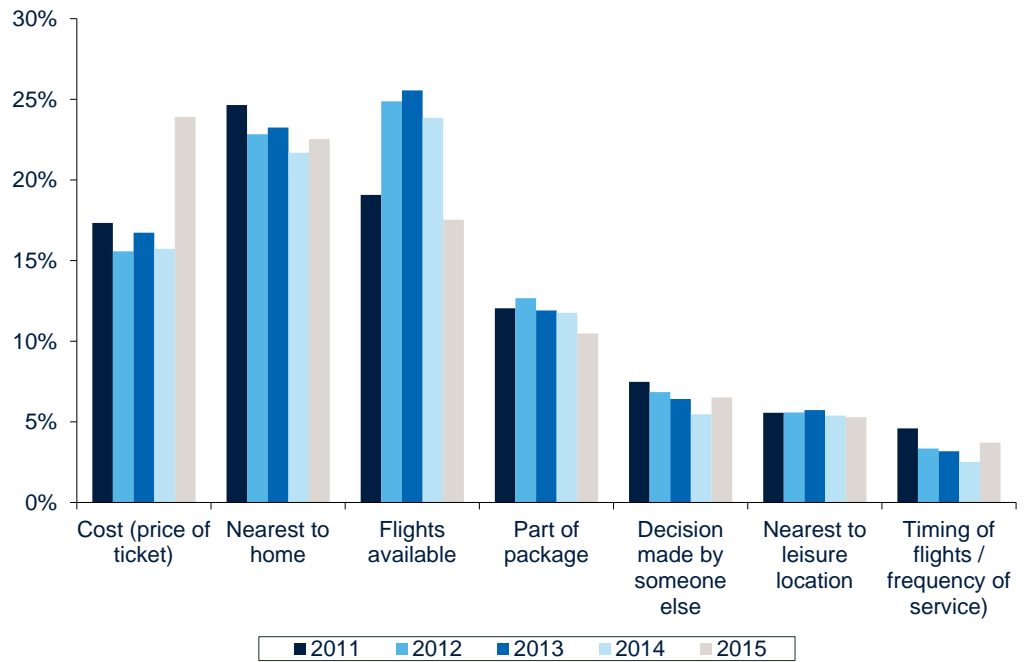
### **Reasons for passenger choice of airports**

Where passengers face a choice between flying from more than one London airport, as they do on many routes, as shown above, a number of factors are likely to influence their choice, including the airport's location, flights available and the experience they expect at the airport. While airports may only exercise limited control over the first factor, the other factors offer scope to make improvements in order to encourage passengers to fly from their airport. Gatwick has focused on these factors to attract and retain passengers.

Figure 4.15 below provides an indication that fewer passengers are choosing Gatwick simply because it is close to their homes, which is consistent with the increasing route overlaps between the airports, and increasing competition at the margins between airports, as shown above.

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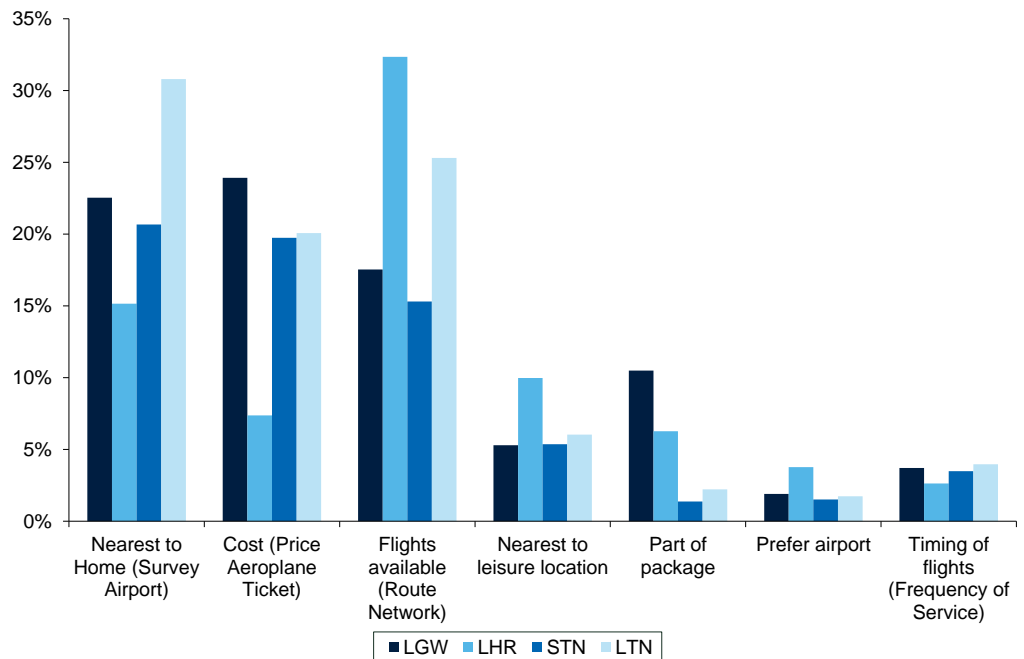
**Figure 4.15 Passengers' motivations for choosing Gatwick (% of total passengers)**



Source: Oxera analysis of CAA passenger survey.

A comparison to other airports indicates that in 2015, more passengers chose Gatwick than Heathrow, Luton and Stansted due to its lower fares.

**Figure 4.16 Passengers' motivations for choosing Gatwick, Heathrow, Stansted and Luton (2015)**



Source: Oxera analysis of CAA passenger survey.

### 4.3 Summary

The CC considered that competition between South East airports would emerge over time, but may be limited by capacity constraints and the presence of

regulation. Assessing the extent to which competition has increased as a result of the break-up is also complicated by external factors such as the global economic crisis, consolidation within the airline industry, and the Open Skies Agreement. Nonetheless, the evidence reviewed by Oxera suggests that:

- GAL has seen an increase in the number of airlines gained and lost, but has attracted an increasing number of new airlines to the airport;
  - the number of destinations served by Gatwick has risen—in particular, in every year following break-up, Gatwick has offered more routes to non-US destinations than it did before the break-up;
  - there is evidence of GAL and HAL imposing a greater constraint on each other in terms of route overlaps and facing more route overlaps in general when also considering Stansted and Luton;
  - competition appears to be linked to the extent to which routes overlap—while at an aggregate level there have not been significant changes in the market shares of airports within their catchment areas, there is evidence of significant market share gains being made by Gatwick (at the expense of Heathrow) on routes offered by both airports.
-

## 5 Impact on outcomes

This section determines whether the benefits expected by the CC from the break-up in the areas of regulation, innovation, price, efficiency, service quality, and capacity have arisen and have had the expected effects on outcomes for airlines and passengers. We consider these benefits both by trying to determine what would have happened in the absence of the break-up and by comparing GAL's performance before and after the break-up.

In assessing these outcomes, it is important to distinguish between the behaviour that is incentivised and likely to be driven by the regulatory framework (i.e. where GAL is rewarded or compensated for outperformance) and that which has resulted from competitive pressures and GAL's own business choices. Therefore, in addition to looking at changes in Gatwick's performance, we consider its performance relative to the targets set by the regulator or by the airport as part of its bilateral contracts with airlines, and relative to comparator airports.

It is also relevant to note that the divestment of Gatwick occurred in the middle of Q5. Therefore, in some cases it was difficult for Gatwick to respond immediately to the change in the competitive setting as it had already agreed investments and levels of service quality, for example, for the control period. Also, after the break-up the new management prioritised certain factors as part of its overall strategy. For example, the divestment required Gatwick to establish relatively quickly its own IT, finance and other corporate services. There were also areas of relative weakness in service delivery identified by the new management team (such as passenger security processing) which were prioritised after the break-up. Therefore, in some cases it took time for other changes to be introduced.

### 5.1 Better regulatory outcomes

In April 2011, the CAA started the process of assessing the extent and nature of market power of Heathrow, Gatwick and Stansted airports.<sup>70</sup> The CAA noted that the assessments were initiated partly to address the CC's view from the 2009 investigation that 'the CAA should keep competition between airports under review, and that the economic regulation of Gatwick and Stansted might need to adapt to facilitate competition.'<sup>71</sup> The assessments were intended to help determine whether the three airports should be economically regulated.

As discussed in section 2, the CAA ultimately decided that while the airports compete with one another to some extent, Gatwick held market power and would continue to be regulated with a licence. However, the price control would be based on commitments offered by GAL rather than the previous RAB-based regime.<sup>72</sup> The CAA also decided that Stansted did not have SMP and would be de-regulated. This is consistent with the CC's expectation that in the absence of common ownership, the extent of price regulation of Gatwick and Stansted (at least) could be reduced.

Since April 2014, in line with the start of the contracts and commitments regime, Gatwick has entered into long-term agreements with a number of key airlines on price and other elements (e.g. service quality). As of September 2015, Gatwick has signed bilateral agreements with eight airlines representing over 80% of

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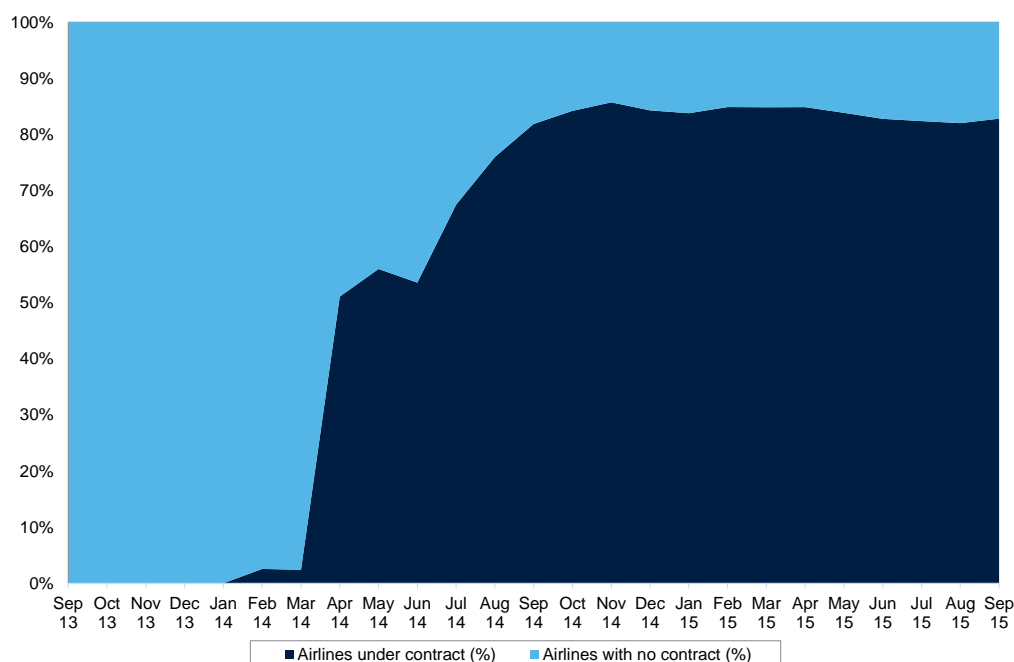
<sup>70</sup> These were the airports designated for price regulation at the time.

<sup>71</sup> Competition Commission (2009), para. 10.339 in Civil Aviation Authority (2012), 'Heathrow, Gatwick and Stansted – market power assessments', Summary of the CAA's initial views – January 2012', para. 4.

<sup>72</sup> We note that GAL disagreed with the SMP assessment and offered commitments as a form of undertaking to help with the transition to competition.

passenger traffic, as illustrated in Figure 5.1. These contracts are an example of a normal commercial relationship in competitive markets.

**Figure 5.1** Passengers travelling with airlines with bilateral agreements with GAL



Source: Data provided by GAL.

The move towards the commitments-based regulatory regime ‘avoid[s] some of the distortions of RAB-based regulation in terms of management distraction and perverse incentives,<sup>73</sup> as noted by the CAA. In GAL’s final price control determination, the CAA considered that the commitments regime was the best way to further users’ interests, as it:<sup>74</sup>

- provides a discount to what the CAA regards as the fair price for a five-year RAB-based control and locks in lower charges for longer, providing certainty to airlines and passengers;
- provides a better framework to allow elements, such as service quality and capital investments to be tailored to the needs of individual airlines and passengers through bilateral contracts, which is only possible through RAB-based regulation to a limited extent. This is particularly a benefit given the diversity of airlines at Gatwick, as noted in section 4;
- promotes competition between airports by facilitating innovation and diversity of offerings;
- encourages GAL to reduce OPEX and undertake efficient investments.

A move away from a RAB–WACC regime was identified by the CC as one of the potential benefits of the break-up.

<sup>73</sup> Civil Aviation Authority (2013), ‘Economic regulation at Gatwick from April 2014: final proposals’, CAP 1102, p. 9.

<sup>74</sup> Civil Aviation Authority (2013), ‘Economic regulation at Gatwick from April 2014: final proposals’, CAP 1102.

If the CC had not required the break-up of BAA, it is likely that GAL would have continued to be regulated according to the RAB–WACC regime in place for the last nearly 30 years (Q1–Q5).<sup>75</sup> Indeed, in its response to the CC's consideration of material change of circumstances, the CAA noted that if the airports started to adopt different commercial approaches under separate ownership, this might encourage differentiated regulatory approaches 'allowing the CAA to adopt more targeted and proportionate regulation.'<sup>76</sup> This suggests that, at that time, in 2011, the CAA considered that there would need to be a material shift in market structure, such as that brought about by divestment, in order to warrant a move away from traditional ex ante price controls.<sup>77</sup>

Furthermore, if GAL had continued to be under common ownership, and therefore regulated under a RAB–WACC regime, neither GAL, nor airlines, would have had the incentive or opportunity to develop commercial relationships and form bilateral contracts to the same extent.

The scope for these contracts has encouraged and enabled Gatwick to be more responsive to the needs of users and has led to a number of benefits including better alignment of incentives between Gatwick and airlines, a reduction in charges and more targeted service quality, as set out in the following sections.

## 5.2 Innovation

One of the CC's expectations in the 2009 market investigation was that the break-up would increase incentives for airports to innovate, particularly in terms of infrastructure delivery.

There are a number of examples of innovative approaches being introduced by GAL after the break-up. Many of these could have been implemented by BAA prior to the break-up, but it might not have had the incentive, as any such innovation would be likely just to transfer business away from other BAA airports while potentially creating financial and operational risk for the airport. After the break-up, GAL had an incentive to try to 'leap-frog' other airports as the CC predicted. However, not all potential innovations could be implemented at once; as with any substantive programme of change, there was a necessary period of assessment of options, financial prioritisation and management of delivery risks. As a result, GAL adopted a sequential approach according to the areas of highest priority for the new management.

A number of the examples of innovation are developments that increased efficiency, service quality and capacity and are therefore included in the following sections. However, this section sets out some clear examples of initiatives pursued by GAL after the break-up, none of which were required or specified by the CAA.

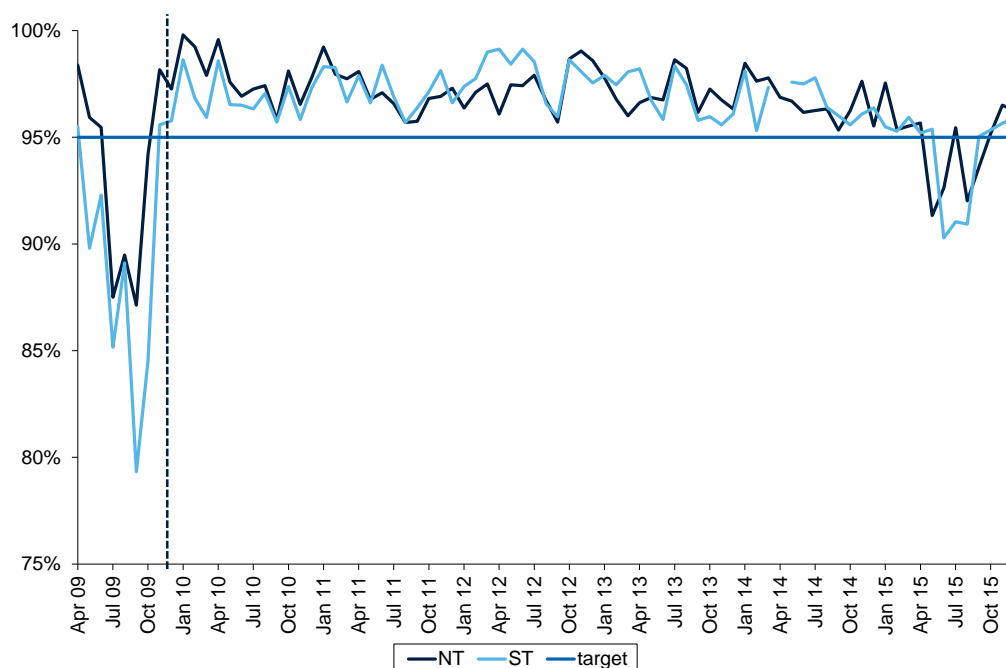
Immediately after the break-up, GAL placed significant focus on improving passenger security screening, as this had been an area where the airport had performed poorly in the past. As demonstrated in Figure 5.2 below, Gatwick failed to meet its regulatory service standards (SQR) in the North Terminal in July to October 2009 and in the South Terminal from May to October 2009.

<sup>75</sup> The first price control, Q1, was set in 1987/88.

<sup>76</sup> Civil Aviation Authority (2011), 'BAA market investigation – Provisional consideration of possible material changes of circumstances', 26 April.

<sup>77</sup> It should be noted that the CAA had previously, in 2008, started to differentiate the regulation of Stansted from Gatwick and Heathrow in light of the CAA's assessment of emerging competitive constraints. However, this would have been more difficult to justify for an undivested Gatwick.

**Figure 5.2 Security performance in North and South Terminals**



Source: Data provided by GAL.

Following this, Gatwick made a number of significant operational improvements.<sup>78</sup>

- Developing a new security area in the South Terminal by consolidating three separate central search facilities into one and introducing more automated processes (Gen I Security programme). This reduced travel time through the security area by 25%. There was no allowance in Gatwick's Q5 settlement for the £45m cost for this development or the forgone commercial revenues from the disruption. Gatwick decided to fund the costs from capital efficiencies made after the break-up and absorbed the under-recovery on commercial revenues, rather than wait until the next control period when an allowance would have been made for the lost revenues.
- Implementing new technology and processes to improve the passenger throughput in the South Terminal (Gen II Security programme) in May 2015. This was motivated by the pressure that the increase in passengers placed on Gatwick's ability to deliver efficient security procedures. The primary objective was to speed up the flow of passengers and make more efficient use of staff, while maintaining passenger experience and consistently high levels of security compliance. This programme will be introduced in the North Terminal starting in February 2016.
- Introducing an assistance lane for security screening for passengers with reduced mobility (PRM) and families with young children to provide a more targeted service offering at both terminals. These new service standards exceed the regulatory requirements and have directly improved passenger experience both for the targeted groups and for passengers more generally who have a more streamlined process as a result. These new dedicated lanes were the first of their kind among UK airports, and were subsequently

<sup>78</sup> GAL (2011), 'Airport competition: Competing to grow and become London's airport of choice: An initial submission from Gatwick Airport to inform the CAA's review of airport competition', November; information provided by GAL.

adopted by Heathrow. In its response to the material change of circumstances, the CAA noted that this innovation by Gatwick is an example of a positive change in the airport's behaviour as a result of separation, where the differing approaches adopted by airports has led to benefits for consumers.<sup>79</sup> GAL has not benefited from any regulatory incentives as a result of these improvements.

Partly as a result of these innovations, GAL has met or exceeded regulatory targets for security queues in nearly all periods since the sale, although there were several months during summer 2015 when service standards were missed as a result of the transition to the new Gen II security processes which are themselves an example of further innovation.

Another example of an innovative approach that Gatwick has recently implemented to improve passenger experience is GatwickConnects. GatwickConnects helps airlines and passengers by improving the service offering for airlines that wish to exploit the connecting market, but do not have the capability to offer these services themselves. It is also intended that GatwickConnects will enable Gatwick to compete with Heathrow's transfer traffic and offering.

### **Box 5.1 GatwickConnects**

When passengers want to undertake a connecting journey by combining tickets from different airlines (when they are not part of the same alliance), they have to treat the transactions as separate journeys. These self-connecting passengers are typically required to claim their baggage and check in for their onward flight.

Gatwick has implemented a service at the airport to help passengers connect between journeys on any airlines without increasing the cost for airlines. This service, referred to as GatwickConnects, offers an improved service to self-connecting passengers by relocating the check-in element of the process.

This is the first self-connect service in the UK and it highlights how GAL is investing in innovative alternatives to the traditional 'hub' airport model. It is now possible to book a connecting journey through the GatwickConnects booking platform.

Source: GAL (2013), 'Gatwick's response to the CAA's Gatwick Market Power Assessment', Annex 4, 26 July; information provided by Gatwick.

These innovations are consistent with the CC's expectation that under separate ownership, airports would pursue different approaches to infrastructure delivery and innovate for passengers and airlines at an efficient cost. Indeed, already in 2011, the CAA noted 'a degree of competition and innovation not seen under common ownership',<sup>80</sup> and this has continued over the last few years (see below).

## **5.3 Charges**

### **5.3.1 Tariffs**

For the control periods Q1–Q5, the CAA set an average maximum yield per passenger that Gatwick was able to recover. The airport could in principle price below this cap and set individual charges (e.g. passenger, landing and take-off, parking) subject to not exceeding the cap. However, Oxera understands that

<sup>79</sup> Civil Aviation Authority (2011), 'BAA market investigation – Provisional consideration of possible material changes of circumstances', 26 April.

<sup>80</sup> Civil Aviation Authority (2011), 'CAA response to CC provisional consideration of possible change of material changes of circumstances', April.



with the exception of a long-haul incentive scheme, which was introduced after the break-up (discussed below), GAL charged up to the cap until Q6.<sup>81</sup>

As previously noted, from 1 April 2014, GAL has been operating under a 'contracts and commitments' framework which is underpinned by a licence granted by the CAA. The commitments are a seven year legally binding contractual undertaking between GAL and its airline customers. Under this framework, default tariff and service standards continue to be set out in GAL's Conditions of Use but there is scope for GAL to enter into bilateral contracts with individual airlines, with modifications to elements of the published tariff (both price and service levels).

Under the commitments framework, there continues to be a limit on the aeronautical revenue per passenger (yield) that GAL may generate over the seven year term, as follows:

- underlying gross yield—the pre-discount yield that is consistent with GAL's published price commitment (equivalent to annual increases of RPI+1%);
- underlying net yield: the post-discount yield that is consistent with GAL's published price commitment (equivalent to annual increases of RPI).

There is scope for the charges to be higher or lower than the price path in a given year, with the commitment relating to the overall price profile across the seven years. Any profiling decisions are reflected in the yields that are actually achieved by GAL, which are referred to as the:

- core yield—the pre-discount yield actually achieved by GAL;
- blended yield—the post-discount yield actually achieved by GAL.

In considering the price commitment offered by GAL, the CAA provided a 'fair price' benchmark for the net yield of RPI-1.6%.<sup>82</sup>

Table 5.1 below sets out the evolution of GAL's yield during the first three years of the commitments regime. With respect to the core and blended yields, the values for 2015/16 reflect GAL's latest outlook for the year and the values for 2016/17 reflect GAL's tariff proposal, as published in November 2015.

- GAL has decided to price below its published price commitment in the first three years of the commitments regime. At the pre-discount level, GAL priced at RPI-1% in 2014/15 and RPI-0.5% in 2015/16. GAL intends to price at RPI+0.9% in 2016/17. GAL's core yield is expected to be 3.4% below the underlying gross yield in 2016/17.
- As well as pricing below the published price commitment at the gross (i.e. pre-discount) level, GAL has offered discounts that have brought the blended yield below the published price commitment. GAL's blended yield is expected to be 8.2% below the underlying net yield in 2016/17.
- GAL's pricing strategy has delivered yields that are below the CAA's fair price benchmark. GAL's blended yield was 5.8% below the benchmark in 2014/15 and is expected to be 6.3% and 3.8% below the benchmark in 2015/16 and 2016/17, respectively.

<sup>81</sup> Oxera understands that the discounts offered had to be 'self-financing', i.e. discounts given had to be recovered through volume gains.

<sup>82</sup> The CAA fair price benchmark is the price that the CAA believes would prevail in a competitive market without capacity constraints.

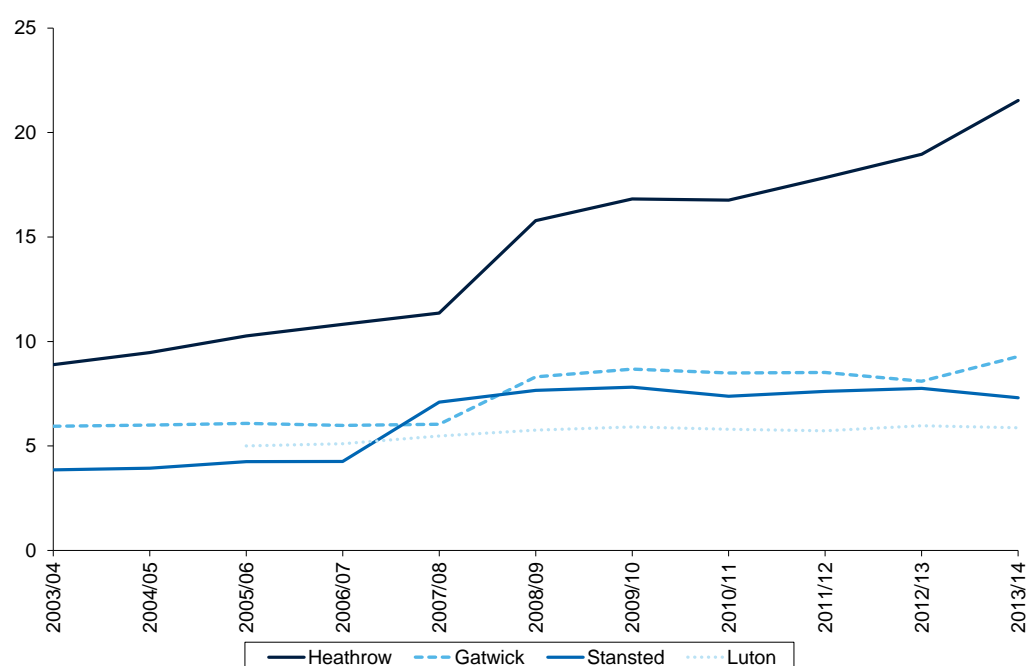
**Table 5.1 Changes in GAL's yields**

Nominal	2013/14	2014/15 Actual	2015/16 Forecast	2016/17 Forecast
<b>Retail Price Inflation</b>		<b>3.3%</b>	<b>2.4%</b>	<b>1.1%</b>
<b>Pre-discounts</b>				
Underlying gross yield	£8.894	£9.276	£9.590	£9.790
Core yield	£8.894	£9.042	£9.140	£9.454
Difference		-£0.234	-£0.450	-£0.336
% Difference		-2.5%	-4.7%	-3.4%
<b>Post-discounts</b>				
Underlying net yield	£8.894	£9.187	£9.406	£9.508
Blended yield	£8.894	£8.519	£8.542	£8.727
Difference		-£0.668	-£0.864	-£0.781
% Difference		-7.3%	-9.2%	-8.2%
<b>CAA fair price benchmark</b>				
CAA fair price benchmark	£8.894	£9.045	£9.116	£9.069
Blended yield	£8.894	£8.519	£8.542	£8.727
Difference		-£0.526	-£0.574	-£0.342
% Difference		-5.8%	-6.3%	-3.8%

Source: data provided by GAL.

Considering a more extensive period since the break-up shows that aeronautical revenue per passenger has increased by 3% a year on average between 2010 and 2014, however this is compared with an average growth of 7% between 2003 and 2009. Figure 5.3 below shows the evolution of aeronautical revenue per passenger at Gatwick, and also compares this with Heathrow, Luton and Stansted.

**Figure 5.3 Aeronautical revenue per passenger (£, 2013/14 prices)**

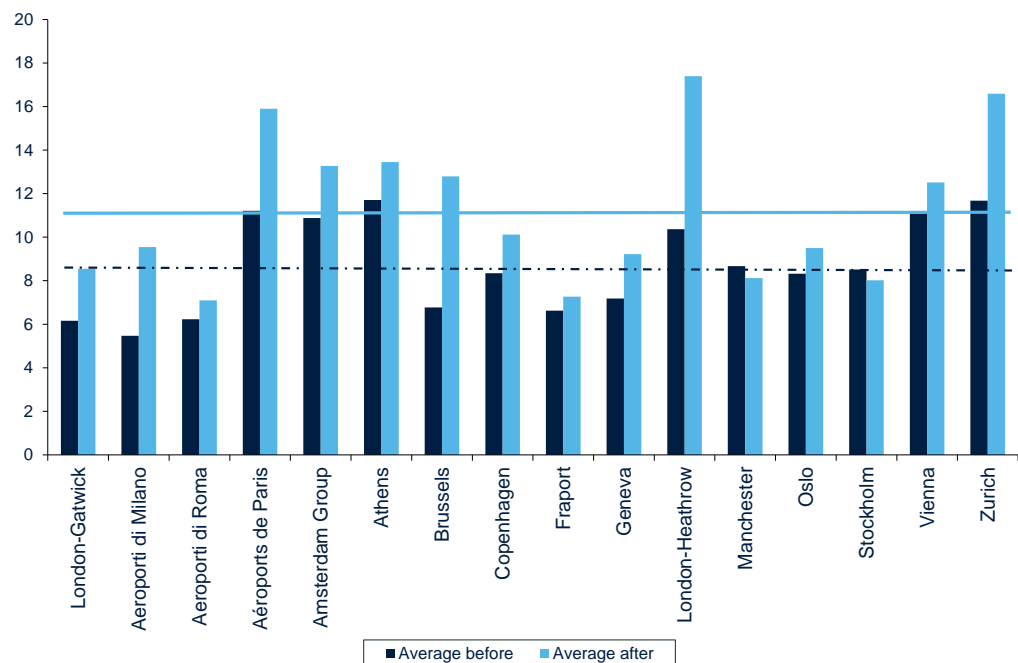


Note: Luton's financial accounts are published on a calendar year basis. We have converted calendar data into fiscal year data. For Stansted, 2013/14 accounts covered 15 months of data, we have therefore adjusted to represent only 12 months.

Source: Regulatory accounts of Heathrow, Gatwick and Stansted. Financial accounts for Luton.

In addition to considering how Gatwick's prices have changed before and after the break-up, and how they have changed relative to other London airports, it is relevant to look at how its prices have changed relative to European comparator airports over this time period. Figure 5.4 below compares Gatwick's average aeronautical revenue per passenger with a number of European airports for the period before the break-up (2004–09) to the period after the break-up (2010–13), and finds that Gatwick's tariffs have increased by less than the average of European airports since the break-up.

**Figure 5.4 Aeronautical revenue per passenger at European airports before (2004–09) and after (2010–13) the break-up (£, 2013/14 prices)**



Note: The data includes airports for which we had data for the period before and after the break-up. Some airports (BAA Group, Berlin, Birmingham, Düsseldorf, Finavia, Finnish Airport Group, Frankfurt, Prague, Swedavia and Swedish Airport Group) have been excluded because no comparison was possible for the periods before and after the break-up. In addition AENA and ANA were excluded as these operators manage a large group of airports, some of which are quite small and are not of a comparable size to Gatwick. The Airport Performance Indicators report for a specific year includes data from the previous calendar or fiscal year. Therefore, while the post-break-up period starts in 2010, we included data from the 2011 report in the post-break-up period. The data has been converted from Special Drawing Rights into British pounds.

Source: Jacobs & Leigh Fisher Airport performance indicator reports and Oxera analysis.

### 5.3.2 Tariff structure and discounts

GAL introduced a long-haul incentive scheme for the first time after the break-up. This was intended to share the start-up risk with airlines in order to help them establish and sustain new long-haul services from Gatwick to serve previously unserved routes. This scheme constituted a 50% discount off charges in the first year, 30% in the second year, and 15% in the third year. At the start of the

commitments period, this was replaced by the discounts that GAL now offers through bilateral contracts with airlines, as set out above.

In addition to overall pricing, it is relevant to consider innovations made to the tariff structure, as the CC expected that airports might compete on tariff structure to attract high-value traffic.

Before the break-up, there were limited changes to the structure of the tariff, with no structural change to departing passenger charges or parking charges between 2003/04 and 2006/07. In 2007/08 there were only limited changes, for example with the landing charges increasing by proportionately more than departing passenger and parking charges.

Since the break-up, Gatwick has undertaken a more significant restructuring of its tariffs. A key principle adopted by GAL in re-structuring its tariffs has been to incentivise more efficient use of airport infrastructure. In particular, GAL has sought to encourage efficient use of the airport's facilities at peak times, and develop traffic at off-peak times.

- In 2011/12, GAL set landing charges in the winter season to zero and increased landing charges in the summer season to offset this reduction.
- In 2013/14, GAL introduced a separate take-off charge (50/50 split between take-off and landing charges).<sup>83</sup>
- In 2014/15 GAL re-defined the peak and off-peak periods applying to take-off and landing charges and introduced a new peak take-off charge in certain summer months (July and August).<sup>84</sup>
- In 2015/16 GAL introduced a new night charge band with higher charges. This was driven by the exhaustion of the summer night movement limit that applies under the government's night flying regime.<sup>85</sup>
- Since 2014/15 GAL has also been progressively equalising the departing passenger charge from three categories (domestic, Republic of Ireland and other international) to one. This has been done to better reflect passengers' common use of airport infrastructure and to simplify the charging structure.<sup>86</sup>

Gatwick's decision to increase its summer landing charges in 2011, led to a challenge by Flybe which claimed that this change in tariff structure was anti-competitive and discriminatory under the Airports Act 1986. In 2012, the CAA determined that:

although GAL's increased landing charges discriminated against users of small aircraft, the discrimination was not unreasonable as GAL's objective in re-structuring its charges of increasing the efficient use of its single runway justified its decision to make the changes challenged by Flybe...The CAA considers that some passengers may be harmed by GAL's changes to its charging structure.

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<sup>83</sup> For instance, under the old structure, a flight that arrived in the peak would pay the full peak landing charge, but an outbound flight in the peak would not, as the charge was only on arrivals.

<sup>84</sup> This applied between 05:00 and 08:59 UTC in July and August.

<sup>85</sup> This applied to all take-offs and landings that occur between 22:30 and 04:59 UTRS. in the summer season (1 April to 31 October). The charge for a movement (take-off or landing) during this period will be set at a level that is equal to the charge during periods of the day defined as 'Base'.

<sup>86</sup> In 2014/15, in Phase 1 of the transition, the domestic charge was 75% of the international charge while the Republic of Ireland charge was 90% of the international charge. In 2015/16, in Phase 2 of the transition, the domestic charge was 85% of the international charge and the Republic of Ireland charge was aligned with the international charge.

However, the CAA's conclusion is that the numbers involved are likely to be small and the adverse effects would be balanced by benefits to other passengers.<sup>87</sup>

As mentioned by the CAA in its decision against Flybe, the changes to the tariff structure since the break-up were made to ensure the most efficient allocation of the airport's assets in the peak (hours and seasons), and to encourage the use of the airport in the off-peak. This type of approach is a feature of competitive markets.

Indeed in its 2012/13 tariff proposals, GAL noted that:

the public interest in the efficient use of existing airport infrastructure is aligned to that of the airport and the airlines – increased traffic handled through the existing infrastructure will, other things being equal, reduce the unit operating and capital costs for the airlines and enhance the competitive positioning of Gatwick in both the South East and broader Northern European airport systems.<sup>88</sup>

For each change in the tariff structure, GAL consulted with airlines and presented scenarios and sensitivities to help airlines understand the impact it would have on their businesses. GAL also provided individual airline impact analysis of the proposals based on historical volumes.<sup>89</sup>

## 5.4 Efficiency

An assessment of the efficiencies achieved by the airport, benchmarked against both the targets set as part of the price controls and the efficiencies achieved by comparator airports, can provide insight into the extent to which GAL faced increased competitive pressure after the break-up as expected by the CC. The subsections below examine separately the efficiencies achieved by Gatwick in incurring OPEX and CAPEX.

### 5.4.1 Operating costs

Figure 5.5 below shows the impact of the break-up on OPEX per passenger. Before the break-up, Gatwick was achieving lower efficiencies than expected by the CAA's Q5 forecasts as part of the price control. In the years since the break-up, Gatwick has outperformed the CAA's forecasts, with the exception of 2013/14.<sup>90</sup> Indeed, before the break-up, operating costs per passenger were growing at an average rate of 3% per annum; after the break-up, operating costs per passenger have declined by an average of 2% each year. This is a result of several factors, including implementing efficient new processes, industrial best practices, and cost discipline, and it provides evidence that the break-up might have been one factor incentivising Gatwick to manage its operations more efficiently. Furthermore, it provides evidence that there are unlikely to have been significant increases in OPEX or scale effects associated with the break-up (discussed in section 6).

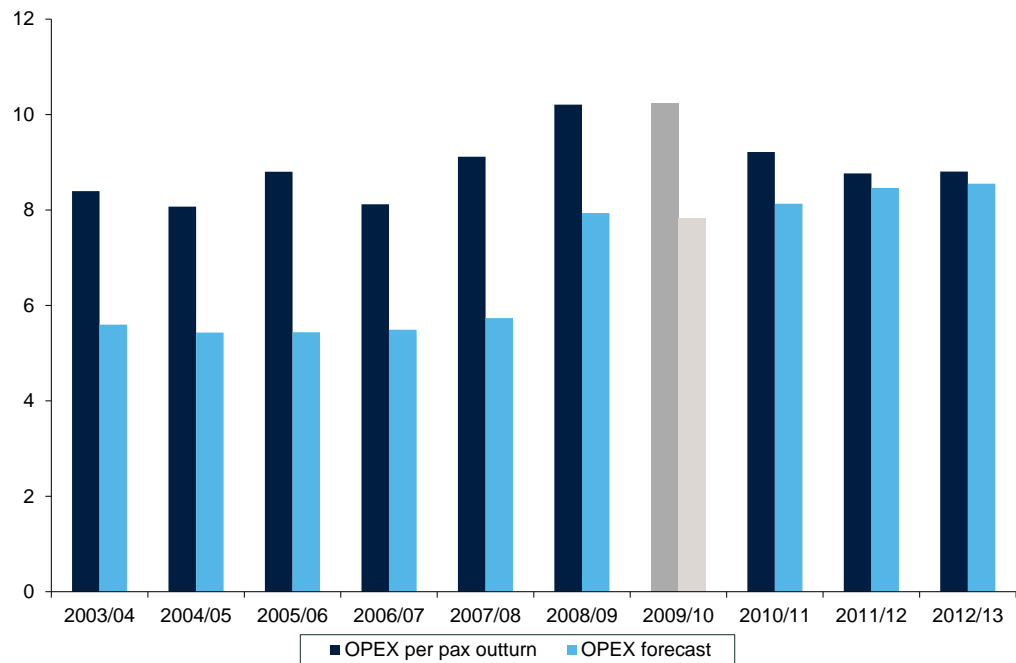
<sup>87</sup> CAA (2013), 'Investigation under Section 41 of the Airports Act 1986 of the structure of airport charges levied by Gatwick Airport Limited-CAA decision, 17 January, paras S2 and S5.

<sup>88</sup> Gatwick (2011), 'Finance, Performance and Regulatory Charging Group ("FPRCG") Consultation on airport charges for 2012/13', 9 November, p. 4.

<sup>89</sup> Gatwick (2010), 'Gatwick 2010/11 Airport Charges', 29 January.

<sup>90</sup> For this comparison we looked at Q4, Q5 and Q6 forecasts. The period before the break-up includes financial years from 2004/05 to 2008/09 and after the break-up from 2010/11 to 2013/14.

**Figure 5.5 Comparison of outturn vs forecast OPEX per passenger before and after the break-up (£m, 2013/14 prices)**



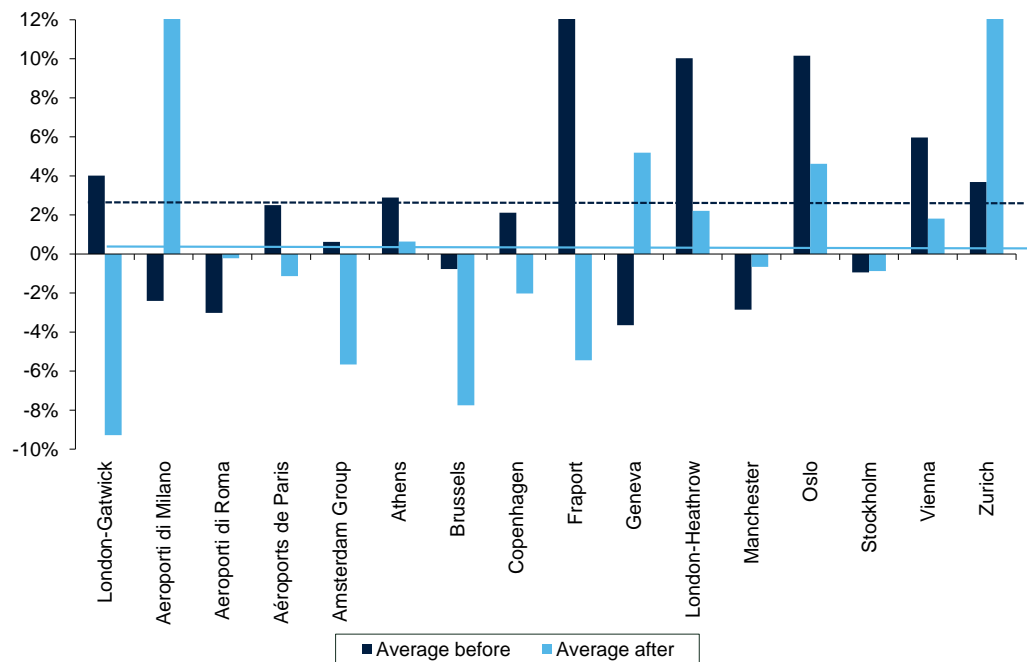
Note: The bars in grey represent the transition year, as the fiscal year started in April 2009 when Gatwick was part of BAA and finished in March 2010 after the break-up from BAA.

Source: Gatwick's regulatory accounts.

There are other factors that also need to be taken into account, as they affect the level of OPEX. For example, changing security requirements in 2006/07 and 2007/08, which were driven by external shocks, led to increases in OPEX above those expected at the beginning of the price control period. However, the longer-term pattern is suggestive of more than solely effects from these external influences.

It is also relevant to consider how Gatwick has performed relative to other European airports before and after the break-up. Figure 5.6 below looks at the growth rate in OPEX per passenger before and after the break-up at a number of European airports.

**Figure 5.6 Average growth rate in OPEX per passenger at European airports before (2004–09) and after (2010–13) the break-up (2013/14 prices)**



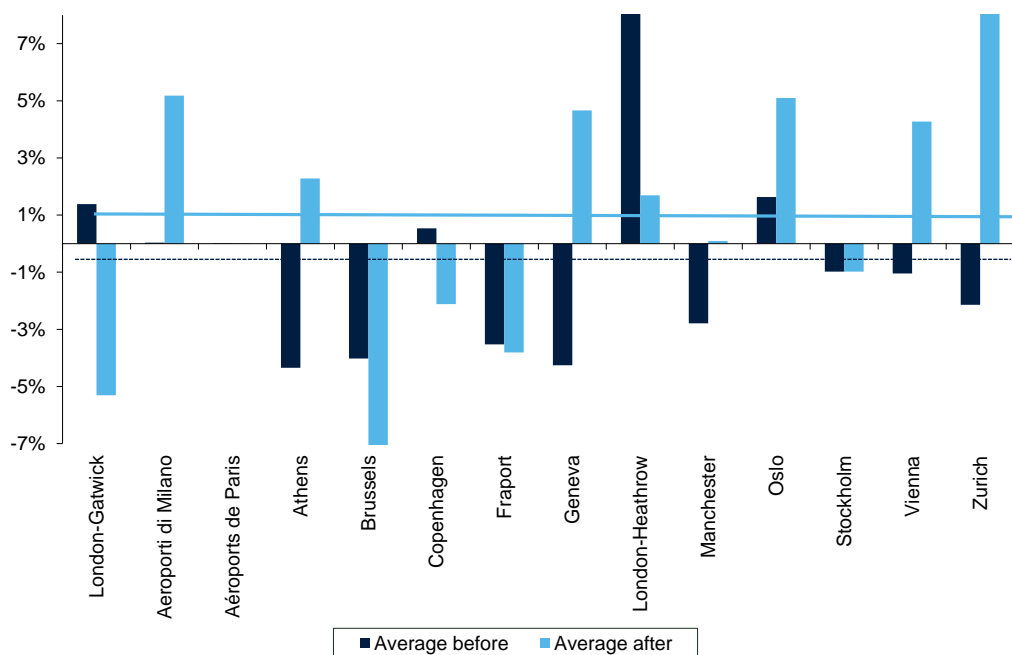
Note: The data includes airports for which we had data for the period before and after the break-up. Some airports (BAA Group, Berlin, Birmingham, Düsseldorf, Finavia, Finnish Airport Group, Frankfurt, Prague, Swedavia and Swedish Airport Group) have been excluded because no comparison was possible for the periods before and after the break-up. In addition AENA and ANA were excluded as these operators manage a large group of airports that are not of a comparable size to Gatwick. The Airport Performance Indicators report for a specific year includes data from the previous calendar or fiscal year. Therefore, while the post-break-up period starts in 2010, we included data from the 2011 report in the post-break-up period. The data has been converted from Special Drawing Rights into British pounds.

Source: Jacobs & Leigh Fisher Airport performance indicators reports and Oxera's analysis.

While OPEX per passenger was growing faster than the average of its peers before the break-up, it has grown at a lower rate than its peers since then. A similar trend can be observed for total costs per passenger. Gatwick was underperforming relative to its peers before the break-up but is now outperforming. Its total costs per passenger have been decreasing since the break-up (see Figure 5.7 below).

It is important to note that these comparisons do not take account of differences in service quality, the type of services provided, location, or other factors that could have an effect on costs per passenger. For instance, GAL's costs per passenger have declined at the same time as it has increased service quality (see section 5.5).

**Figure 5.7 Annual growth rate in total costs per passenger at European airports before (2004–09) and after (2010–13) the break-up (2013/14 prices)**



Note: The data includes airports for which we had data for the period before and after the break-up. Some airports (BAA Group, Berlin, Birmingham, Düsseldorf, Finavia, Finnish Airport Group, Frankfurt, Prague, Swedavia and Swedish Airport Group) have been excluded because no comparison was possible for the periods before and after the break-up. In addition AENA and ANA were excluded as these operators manage a large group of airports, some of which are not of a comparable size to Gatwick. The Airport Performance Indicators report for a specific year includes data from the previous calendar or fiscal year. Therefore, while the post-break-up period starts in 2010, we included data from the 2011 report in the post-break-up period. The data has been converted from Special Drawing Rights into British pounds.

Source: Jacobs & Leigh Fisher Airport performance indicators reports and Oxera's analysis.

An illustration of Gatwick's efforts to reduce its operating costs after the break-up is its decision to tender the services to operate Air Traffic Control (ATC) at the airport. While Gatwick could have tendered these services in the years preceding the break-up, BAA decided on each occasion to renew agreements with NSL (NATS (Services) Limited). However, in 2014, when the contract came up for renewal, Gatwick became the first major UK airport to tender its contract for ATC services. Gatwick invited four parties to tender (DFS, NATS, IAA and Serco). DFS was ultimately selected after a thorough review, allowing Gatwick to make substantial savings.<sup>91</sup>

### 5.4.2 Capital expenditure

As part of the Q5 price control review, the CAA introduced a new framework for constructive engagement that was intended to create a greater role for airlines in the periodic review process. In particular, it was expected that negotiations between airlines and the designated airports would help to identify the key regulatory inputs and generate user agreement for each airport's CAPEX programme at an early stage of the review process.

While the introduction of the constructive engagement process was largely considered to be positive, there were a number of practical issues that affected

<sup>91</sup> Information provided by Gatwick Airport Limited.



its implementation in Q5. The CC ultimately concluded that constructive engagement had generated little input for the Q5 review, as the capital programme remained contested by the time of the price control referral. In its market investigation decision, the CC stated:

Although the process of Constructive Engagement introduced by the CAA has undoubtedly had some positive effects at Heathrow and Gatwick, it seems to us, from our recent regulatory review of these airports and from significant other evidence, to have been conducted in a way which excludes genuine two-way dialogue and exchange of views. Its weaknesses include asymmetry of information; the scope for BAA to take advantage of the differing requirements of individual airlines; its control over the timetable for releasing information and conducting discussion; and the lack of dispute resolution mechanism.<sup>92</sup>

However, the CAA considered that constructive engagement led to better price control decisions, as they were informed by a broader and deeper understanding of airlines' views as well as BAA's responses to its users' requirements.<sup>93</sup>

Constructive engagement was one part of the overall regulatory process in which many of the cost parameters were determined by the CAA. Airlines were therefore, in effect, asked to consider CAPEX projects without sight of the implications of these projects for charges. There was also limited ability to negotiate capital projects that were genuinely targeted at individual airline needs (unless there would also be benefits for other airlines) given that regulation was focussed on aggregate CAPEX and services at the airport.

As part of the contracts and commitments regime, GAL has agreed to invest, on average, at least £100m per annum, but the projects are not specified in advance. The ability to make agreements with individual airlines, and to change the CAPEX programme to suit the changing needs of users, has made it easier to agree CAPEX. GAL also agreed a new structure for consultation with airlines in March 2014 as part of the contracts and commitments regime. This includes establishing a number of working groups for projects that are over £10m.

After the sale, GAL undertook a detailed review of the BAA Capital Investment Plan (CIP) to ensure it was in the best interests of passengers and airlines. GAL was able to identify cost savings and deliver more, and different, projects than BAA had planned in cases where other projects would better meet airline and passenger needs. For instance, it adopted a new approach to pier service in the North Terminal, saving more than £200m and providing operating efficiency benefits for airlines.

In the CIP for 2010, GAL noted that it re-evaluated the capital programme to 'set out a more efficient and effective use of the remaining capital, that considers the needs of our airlines and passengers.'<sup>94</sup> This included combining a rebuild of Pier 1 and a new baggage facility in South Terminal, and the decision not to build pier 7 in North Terminal. In particular it noted that:

From the first day of new ownership, one of our top priorities was to review circa £1 billion (£985 million) of planned investment to make sure that every pound Gatwick spends is focused on delivering value and efficiencies for airlines and passengers. It's been a tough process, and this has meant that some difficult decisions were required. We are still committed to invest close to £1 billion in the development of our infrastructure and facilities, but we are striving to deliver more

<sup>92</sup> Competition Commission (2009), p. 13, para. 26.

<sup>93</sup> Civil Aviation Authority (2008), 'Economic Regulation of Heathrow and Gatwick Airports 2008-2013: CAA Decision', 11 March.

<sup>94</sup> Gatwick (2011), 'Gatwick Capital Investment Programme', January, p. 3.

value by working more efficiently, challenging everything we do and delivering “more for less”.<sup>95</sup>

GAL has also made targeted investments requested by particular airlines at the airport—for example, the terminal moves and transformation programme, which has been agreed and, once completed, will result in the transfer of all of the operations of each of three different airlines (easyJet, Virgin Atlantic Airways and British Airways) into one terminal, as described in Box 5.2.

### **Box 5.2 Terminal moves and transformation programme**

Following a request by easyJet, Gatwick is planning to move a number of airlines between its two terminals in order to allow airlines to operate from a single terminal instead of having their operations split across two. This will increase the operational efficiency of the airport and enable airlines to increase their own efficiency—for example, removing the duplication of their operational staff's facilities. It will also reduce confusion for passengers when they book a flight, and reduce connecting time.

Before undertaking this programme, Gatwick examined various possible solutions. It then engaged in bilateral and multilateral consultations with its top 12 airlines (representing 93% of passengers) and the passenger advisory group. In 2015, Gatwick determined that easyJet would be moved to the North Terminal, as only this terminal was large enough to accommodate all of the airline's operations and services while also allowing room for growth. In addition to moving easyJet, British Airways will be moved to the South Terminal and Virgin Atlantic Airways to the North Terminal. This means that each major airline will be able to operate from a single terminal by 2016/17.

This project will be one of the most significant operational challenges that GAL has ever undertaken.

Source: Gatwick Airport (2015), 'Airline Engagement – Terminal Moves & Transformation Programme', Non-Confidential version, 2 November.

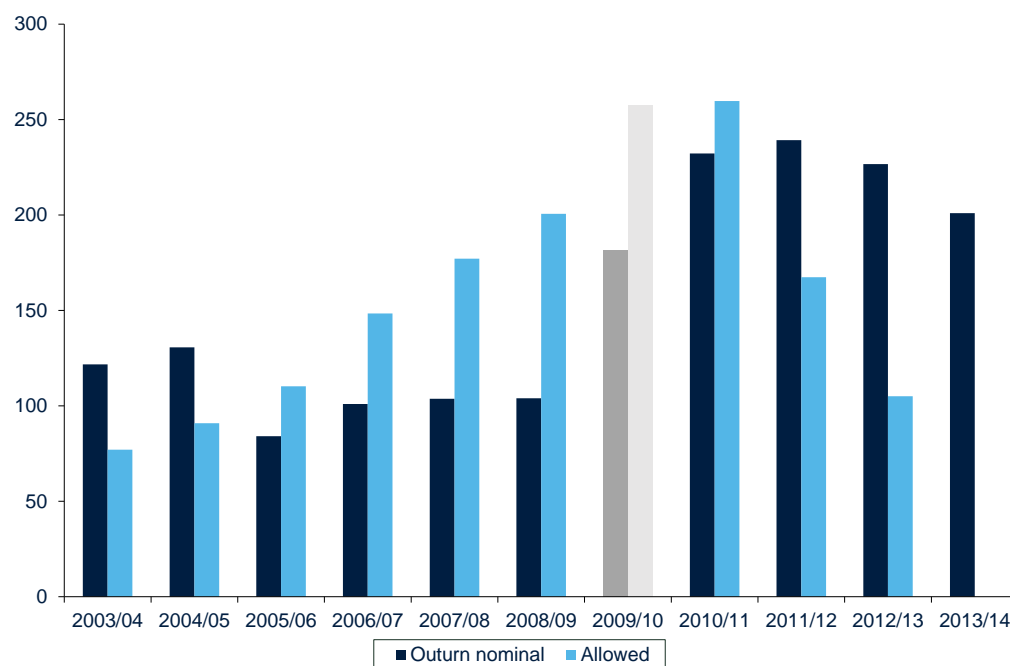
This project, and the bilateral and multilateral negotiations with the airlines involved, has been facilitated by the contracts and commitments regime, but the initiation of the move started in Q5 after the break-up. Indeed, under the former price control regime, prices were closely linked to costs so that airlines generally tried to advance CAPEX that benefited them while delaying those projects that benefited competitors. In contrast, the new regime has allowed GAL to more easily conduct commercial discussions with individual airlines on a bilateral basis. This has enabled agreements to be reached faster and more efficiently, which is ultimately to the benefit of passengers.<sup>96</sup>

Gatwick not only reprioritised CAPEX but also increased investment, and, in some cases, exceeded the allowed CAPEX in the years following the break-up in contrast to underspend in a number of years before the break-up (see Figure 5.8 below). In real terms, GAL invested £148m a year, on average, before the break-up, which has increased to £236m on average after the break-up. This increased expenditure could be in part a result of underinvestment in the period before the break-up.

<sup>95</sup> Gatwick (2011), 'Gatwick Capital Investment Programme', January, p. 6.

<sup>96</sup> Gatwick Airport Limited (2015), 'Airline Engagement – Terminal Moves & Transformation Programme', Non-Confidential version, 2 November.

**Figure 5.8 Comparison of outturn vs forecast CAPEX before and after the break-up (£m, 2013/14 prices)**



Note: The grey bars represent the transition year, as the fiscal year started in April 2009 when Gatwick was part of BAA and finished in March 2010 after the break-up.

Source: Gatwick's regulatory accounts.

In the SMP assessment, the CAA noted that:

GAL's approach to addressing efficiency appears to be much improved compared to that seen under previous ownership. The CAA considered that this was indicative of GAL looking to differentiate Gatwick from other airports and attract new traffic to it.<sup>97</sup>

The evidence above supports the CAA's assessment, showing: improved efficiency in OPEX; and more, and better targeted, capital investment since the break-up.

### 5.5 Service quality

An evaluation of the improvements in service quality at Gatwick requires an assessment of the improvements themselves, as well as an assessment against benchmarks set as part of the price control and relative to comparator airports.

To that effect, we consider the following key questions:

- have there been significant improvements in service quality at Gatwick Airport since the break-up?
- have these been above improvements required by the regulator or set by GAL as part of the contracts and commitments framework, and have these exceeded the targets more than before the break-up?

<sup>97</sup> Civil Aviation Authority (2013), 'Appendix G: Evidence and analysis on indicators of market power', para. G30.

- have these been greater than improvements achieved by Gatwick's competitors?
- have any additional initiatives been undertaken to improve performance?

The previous sections have examined evidence of Gatwick's investment in a number of different programmes to improve passengers' experience at the airport. The results presented below suggest that these efforts have led to better service quality performance and passenger satisfaction.

### **5.5.3 Performance relative to regulatory targets**

The service quality regulation scheme, known in Q4 and Q5 as SQR(B),<sup>98</sup> now Core Service Standards (CSS), has been in place at Gatwick since 2003, although it has been subject to continual debate and revision. This scheme sets out a number of elements, including the different service quality indicators, the targets for each indicator, and the amount of revenue at risk.

In April 2008, with the start of Q5, the CAA and the CC conducted a thorough examination of the operation of the service quality regime. A broader range of metrics were introduced and targets were tightened in a number of areas compared with Q4, including for cleanliness, flight information and seat availability. The amount of revenue at risk (i.e. penalty) was raised from 3% to 7% of aeronautical revenue, and a reward system allowing up to 3% of additional revenue for outperformance was introduced. Airlines were also involved through constructive engagement (previously discussed) to provide detailed input in the design of the regime. Given the change in the regime, it is difficult to compare Gatwick's performance between Q4 and Q5, so we focus on the period from April 2008.

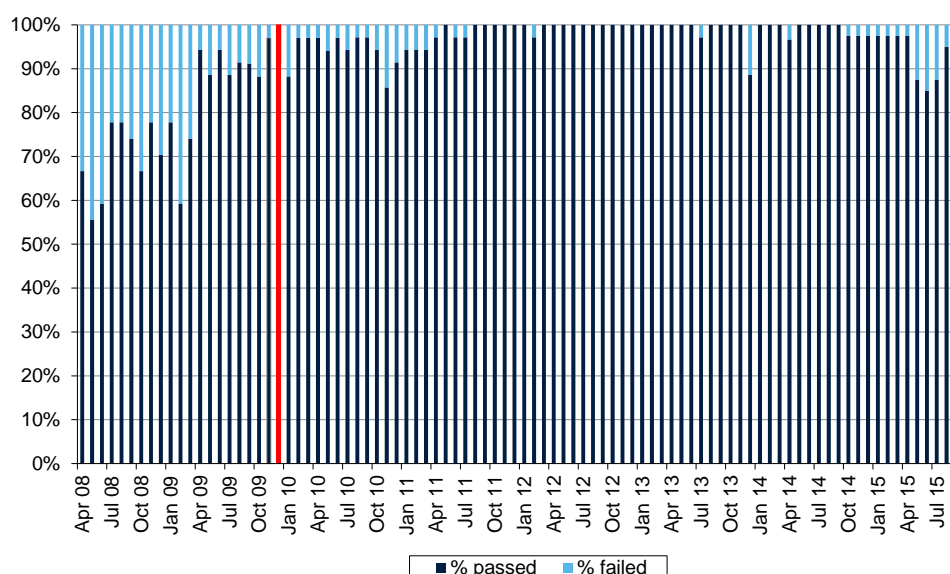
From the beginning of Q6, as part of the new regulatory regime, GAL set the service standards (scope and metrics) which were then adopted by the CAA as part of the price review, and in bilateral contracts with airlines. However given that the regime is fairly similar to that from Q5, we include the years of Q6 in the analysis below.

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<sup>98</sup> In Q5, the service quality regulation scheme included both rebates paid by Gatwick to airlines for poor service and bonuses earned (paid in the form of higher airport charges) for service significantly above defined target levels.

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**Figure 5.9** Proportion of service quality indicators failed and passed (% of the total number of indicators)



Source: Data provided by Gatwick Airport Limited.

Figure 5.9 illustrates that GAL's performance exceeded the requirements and significantly improved after the break-up. For instance, for the North Terminal, on average 72% of the indicators were above target before the break-up (April 2008 to December 2009). This has increased to 91% after the break-up (January 2010 to September 2015). Although a bonus scheme was introduced in Q5 to reward Gatwick for outperformance on some indicators, this trend can also be observed even when the criteria attracting bonuses are excluded.<sup>99</sup> In addition, some targets which had never been passed before the break-up, such as the pier service target, were passed for the first time after the break-up. This provides evidence that the change in performance was likely to have been motivated, at least in part, by an increased focus on service quality as a result of facing competitive pressure rather than simply a change in regulatory regime.

The stricter targets introduced in the service quality regime at the beginning of Q5 may also explain why in 2008 and at the beginning of 2009, Gatwick missed the targets on a number of indicators before its performance significantly improved. The rebates paid by Gatwick to airlines have declined from about £5m in 2008/09 to no more than £1m in any year between 2010/11 and 2013/14.

In the one area where Gatwick has not met service standards (North Terminal cleanliness), it has consulted with airlines and implemented plans to restore performance to the service standards specified in the airport's Commitment to users.<sup>100</sup> As previously noted, some of the recent lower scores are temporary, the result of the transition to new security processes and facilities, which themselves represent significant innovation in service and efficiency.<sup>101</sup>

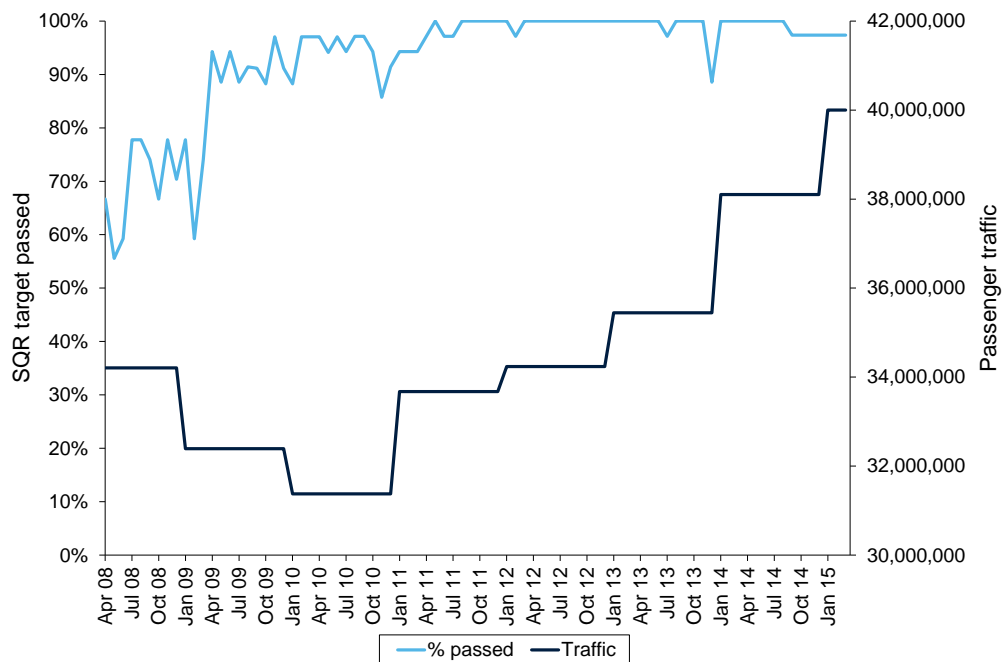
<sup>99</sup> When the service quality criteria eligible for the bonus scheme are excluded, the number of outperforming criteria increases from 83% to 93% after the break-up.

<sup>100</sup> Gatwick Airport Limited (2015), 'Performance monitoring report for 2014/15', August.

<sup>101</sup> Gatwick Airport Limited (2015), 'Performance monitoring report for first half of 2015', 11 November.

The general increase in service quality and improved performance has also occurred at a time when traffic was growing, as indicated in Figure 5.10.

**Figure 5.10 SQR scores (left axis) and passenger traffic (right axis)**



Note: Traffic figures are annual, the forecast for 2015 was made based on a forecast GAL made in October 2015 for the full year traffic. SQR scores represent the proportion of criteria that passed the CAA targets.

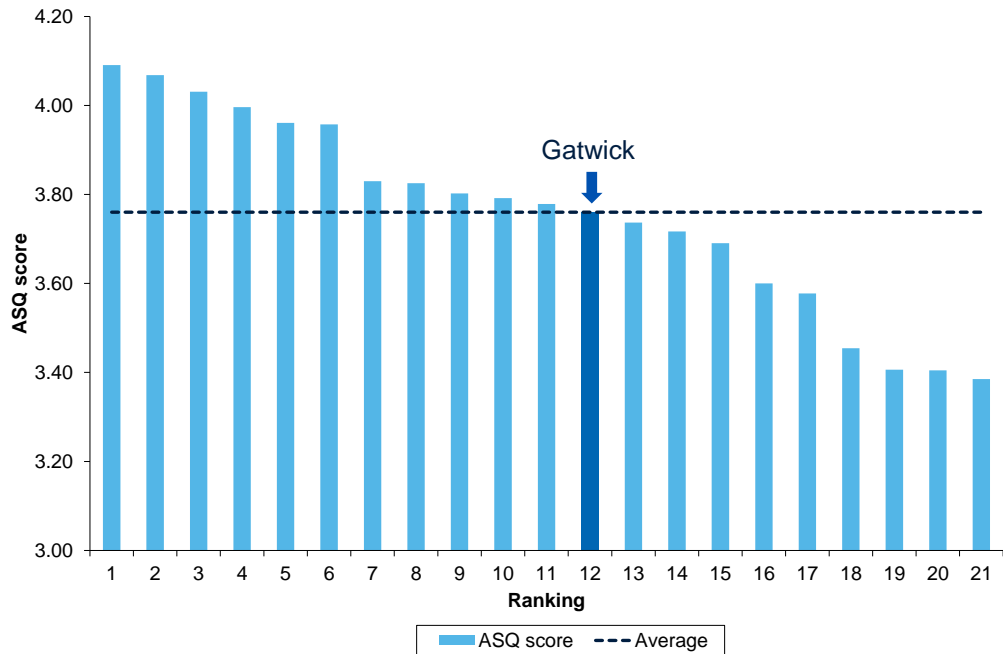
Source: Data provided by Gatwick, CAA traffic figures.

### 5.5.4 Comparison to international airports

Gatwick has also improved its ranking on service quality performance since the break-up compared with a number of other European airports. Figures 5.11 and 5.12 report the results of a survey of 22 airports conducted by Airports Council International (ACI), which looks at passengers' overall satisfaction with the airport. Comparing the results from just before the break-up (Q4 2009) with Q3 2015 illustrates that Gatwick has improved its performance on service quality more than comparator airports. Gatwick was ranked 12th for overall satisfaction among an Airport Service Quality survey (ASQ) panel of 20 of its peer airports at the point of takeover; by Q3 2015 it had progressed to eighth (with an extended panel of 21 comparator airports).<sup>102</sup>

<sup>102</sup> Data provided by Gatwick Airport Limited.

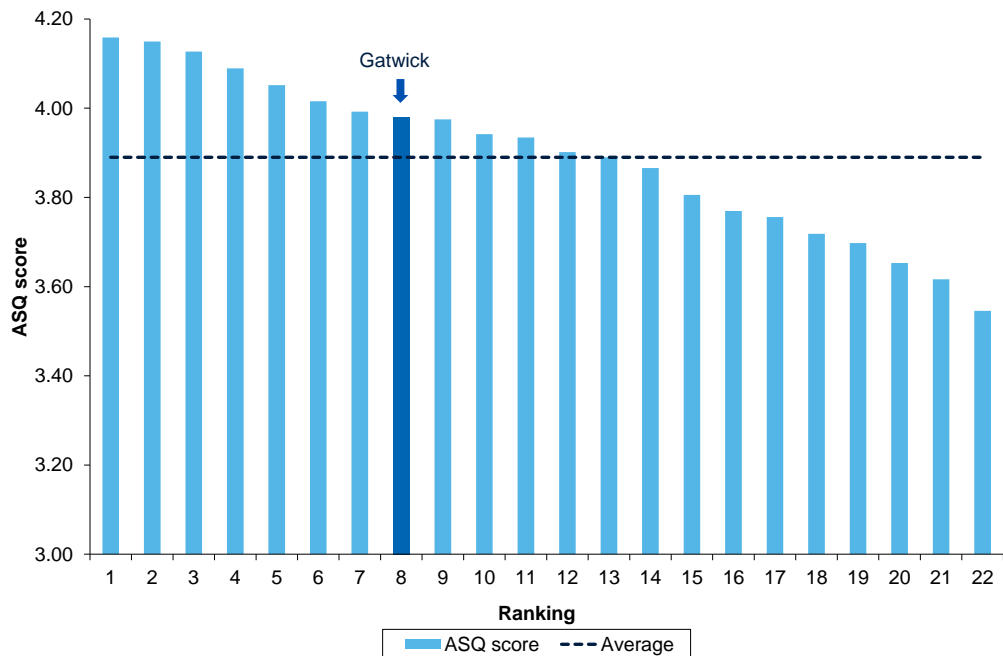
**Figure 5.11 Gatwick's performance just before the break-up (Q4 2009)**



Note: 21 airports were included in the Q4 2009 survey. The dark blue bar represents Gatwick's score.

Source: Gatwick ASQ surveys.

**Figure 5.12 Gatwick's recent performance (Q3 2015)**



Note: 22 airports were included in the Q3 2015 survey. The dark blue bar represents Gatwick's score.

Source: Gatwick ASQ surveys.

### 5.5.5 Other initiatives

These improvements in service quality have been achieved largely because of Gatwick's initiatives and innovations. For instance, one initiative undertaken by GAL to increase passenger satisfaction is GatwickConnects, as explained in Box 5.1.

GAL has also gone beyond the regulatory service metrics in a number of areas and introduced Airline Service Standards as part of its commitments. This mechanism tries to ensure focus on passenger interests in key areas under airlines' control—e.g. inbound baggage delivery. If an airline fails an airline service standard and Gatwick fails a core service standard, then the airline is not entitled to the full rebate from Gatwick.<sup>103</sup> This shows that Gatwick is focusing on service to passengers rather than targets established as part of the price control.

### 5.5.6 Summary

Since the break-up of BAA, passenger satisfaction, as measured by the CAA's service quality targets and compared with other European airports, has improved. Gatwick has also gone beyond the service quality metrics included in the price control in several areas. In its SMP assessment of Gatwick, the CAA concluded that:

Since the introduction of the SQR scheme at Gatwick, there has been an improvement in the service quality at the airport... Since the change of ownership, there had been a further increase in the service quality at the airport. For example, GAL has gone beyond the regulatory targets that were set in a number of areas.<sup>104</sup>

GAL has also noted that 'since the sale of Gatwick... we are seeing increased passenger satisfaction as measured by the CAA's service quality metrics, our own QSM findings, the ratio of complaints to compliments, our passenger focus groups and the direct feedback received via our social media platforms.'<sup>105</sup> Indeed, according to YouGov BrandIndex data, most of Gatwick's passengers are satisfied, have a positive general impression of the airport, consider it to be of good quality and would recommend it to a friend.<sup>106</sup>

## 5.6 Capacity

### 5.6.7 Improved capacity delivery

Gatwick is the world's busiest single-runway airport. Although it operates very close to full capacity, since 2010 GAL has been making enhancements to improve capacity.

Gatwick is trying increase runway capacity within the existing infrastructure, as this is fundamental to driving growth at the airport. In the CC investigation, the peak movements at Gatwick were reported by BAA as 50.<sup>107</sup> Since the take-over, Gatwick has progressively increased capacity to 55 ATMs for seven peak hours of the day—see Figure 5.13.

<sup>103</sup> If airlines fail their service standard and Gatwick passes its standard, then nothing happens.

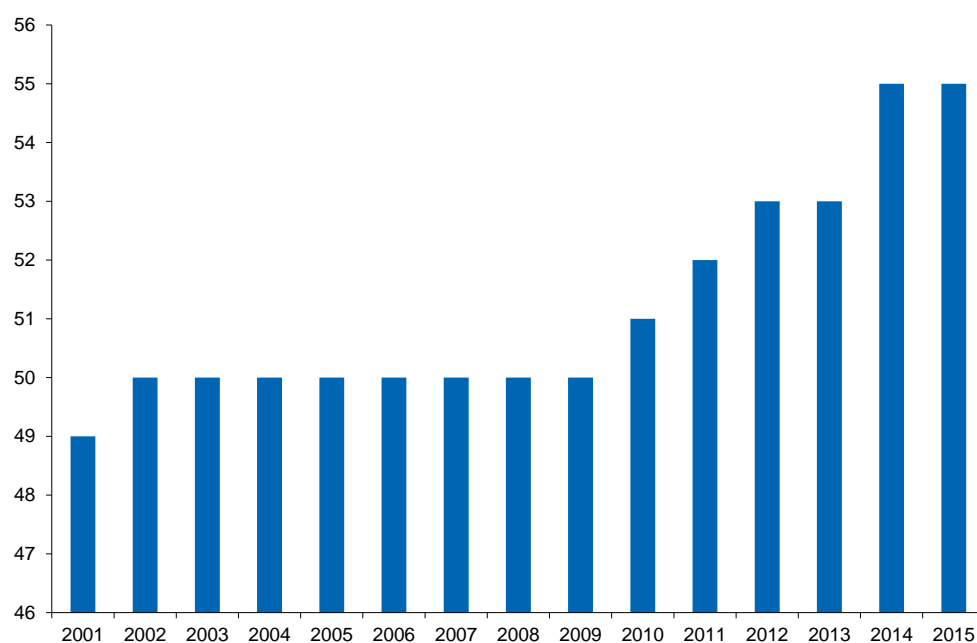
<sup>104</sup> Civil Aviation Authority (2014), 'Appendix G: Evidence and analysis on indicators of market power', CAP 1134, para. G115.

<sup>105</sup> Gatwick Airport Limited (2011), 'The CAA's competition assessment: An initial submission from Gatwick Airport', November.

<sup>106</sup> As of October 2015, data provided by Gatwick.

<sup>107</sup> Competition Commission (2009), op cit.



**Figure 5.13 Peak hour runway capacity (ATMs/hour)**

Source: Oxera analysis based on data provided by GAL.

The improvement in runway capacity during peak hours has allowed Gatwick to reduce aircraft taxi times by 20% and increase overall on-time departure to 85%. This is an example of an innovative approach to infrastructure delivery, which the CC predicted would develop under separate ownership.

Gatwick is also trying to make the most efficient use of its capacity. For summer 2016, improvements were made to reduce airfield congestion. The airport's previous practice was to allow scheduling within 15-minute segments. This allowed multiple flights to be booked at the same departure time. The new practice reduces the scheduling interval to five minutes, which will effectively spread out scheduled departures and reduce the number of overlapping departures.<sup>108</sup>

Furthermore, GAL was able to improve peak runway capacity and passenger numbers at the same time as improving service quality, as exemplified by the service quality data in section 5.5. This has been accomplished in a variety of ways, including working closely with air traffic control and airlines. In addition, GAL made investments, such as the North Terminal extension and South Terminal security, to ensure that the additional passengers could be processed through the airport without any reduction in the level of service quality.

Gatwick is not improving its capacity at the expense of punctuality and passenger service, measured by on-time departure (OTD) performance. Although Gatwick's punctuality has been below that of other UK airports, it has recently implemented plans to improve the aspects of OTD that it can control. For instance, Gatwick is working with ground handlers and airlines on joint projects to improve OTD performance.<sup>109</sup> Gatwick has also included on-time departure performance as part of the annual incentive compensation plan for 2015/16—rewarding employees based on the achievement of specified business-related performance measures.

<sup>108</sup> Gatwick (2015), 'Summer 2016 capacity declaration and utilisation at Gatwick'.

<sup>109</sup> Gatwick (2015), 'Airline punctuality at Gatwick', October.

Gatwick is also optimising capacity through its operational resilience plan. After heavy snow in early 2010, Gatwick's new management team undertook a review of all aspects of their response to adverse weather and their capability to respond. This review resulted in GAL being able to respond better to the snow in November/December 2010, although further investment in snow-clearing assets was also made as a result of the heavy snowfall. The CAA noted that the timely way in which Gatwick responded to the threat of significant snowfall in December 2010 was an encouraging sign that separate ownership had led to positive changes in GAL's behaviour.<sup>110</sup>

In addition, in the McMillan report to the Board of GAL on the disruption at Gatwick Airport on Christmas Eve 2013, it was noted that the airport's investment in flood prevention since the change of ownership had significant benefits in preventing further damage. However, the actual flooding was significantly more severe than expectations which informed the modelling work. Therefore, a number of recommendations were also made to ensure that the contingency planning arrangements reached the level achieved in the snow plans and related to passenger welfare issues.<sup>111</sup>

### 5.6.8 Capacity expansion

The CC expected that the break-up would lead to faster delivery of additional capacity, including lobbying government for runway capacity expansion. In line with the CMA's terms of reference, we do not evaluate the recommendations of the Airports Commission or consider the government's upcoming decision on airport capacity expansion. However, this section assesses how the recent discussions about airport capacity in the South East might have been affected by the CC's market investigation remedies.<sup>112</sup>

In late 2012, the government commissioned the independent Airports Commission to find an effective and deliverable solution for the South East airports capacity constraints. In July 2015, the Airports Commission published its final report.<sup>113</sup>

The Airports Commission process resulted in numerous submissions and extensive lobbying from Heathrow and Gatwick (and, at the initial phase, from other potential capacity providers including Stansted and the Thames Estuary airport proposal) with detailed analysis of the direct costs, benefits, and the wider impacts of the proposals. These submissions covered all aspects of the business case for new runway capacity—including the environmental impact (air quality, biodiversity, noise), the economic impact, costs, efficiency, risk, and surface access requirements of each proposal.

There had been a substantial amount of technical assessment and analysis by the Department for Transport and information provided by BAA as part of the 2003 Air Transport White Paper—for example, there were traffic forecasts produced and analysis of the environmental impact (e.g. air quality and noise).<sup>114</sup> However, this process did not produce competing propositions from airports based on which comparisons could be made. Nor did the process lead to the same level of engagement from airports or such informed and motivated

<sup>110</sup> Competition Commission (2011), BAA Market Investigation: Consideration of possible material changes of circumstances, 19 July, para 58.

<sup>111</sup> McMillan, D. (2014), 'Disruption at Gatwick Airport: Christmas Eve 2013', 26 February.

<sup>112</sup> Competition and Markets Authority (2015), 'BAA Airports – Evaluation of the Competition Commission's 2009 Market Investigation Remedies'.

<sup>113</sup> Airports Commission (2015), 'Airports Commission: Final Report', July.

<sup>114</sup> See, for example: Department for Transport (2003), 'Air Passenger Growth and Airport Capacity: A Technical Discussion Paper', April; Department for Transport (2003), 'Air Quality Assessments Supporting the Government's White Paper "The Future of Air Transport"', December.

challenge from policymakers, locally affected communities and other stakeholders.<sup>115</sup> The Airports Commission process has led to a significant improvement in the quality of the debate about the best location for new capacity and greater engagement in the relevant economic, environmental and social issues.

We consider that, under common ownership, the incentives for BAA to put forward competing runway capacity options at different airports would have been much weaker, and it is unlikely that there would have been a similar level of engagement or analysis in the airport capacity debate.

Gatwick and Heathrow are not the only South East airports trying to increase capacity, as discussed in Box 5.3 below.

### Box 5.3 Capacity expansion at South East airports

- London City Airport has applied for new infrastructure and passenger facilities as part of the City Airport Development Programme (CAPD) to accommodate an additional 120,000 flights a year.<sup>1</sup> (This expansion has been refused by the Mayor of London; City Airport has appealed this decision.)
- Luton Airport's expansion plan was approved in July 2014. The expansion would provide Luton with up to 45,000 additional flights a year, corresponding to 6m additional passengers.<sup>2</sup>
- Stansted Airport's owner (MAG) is advocating for a new runway in the next decade when it reaches 35m passengers per year.<sup>3</sup>
- In March 2012, Southend Airport's new terminal building and runway extension were completed. The airport used to operate flights to only one destination, but in April 2012 easyJet started operating flights to Spain. Southend airport is aiming for 2m passengers annually.<sup>4</sup>

Sources: <sup>1</sup> See London City Airport, 'Corporate Information. Airport Master Plan', <http://www.londoncityairport.com/aboutandcorporate/page/airportmasterplan>. Last accessed 6 January 2016. <sup>2</sup> BBC News (2014), 'London Luton Airport expansion plan gets final approval', 2 July, <http://www.bbc.co.uk/news/uk-england-beds-bucks-herts-28139175>. Last accessed 6 January 2016. <sup>3</sup> Topham, G. (2015), 'Stansted airport owner urges government to increase flight limit', *The Guardian*, 3 December, <http://www.theguardian.com/business/2015/dec/03/stansted-airport-government-increase-flight-limit>. Last accessed 6 January 2016. <sup>4</sup> Topham, G. (2012), 'London Southend airport: flying under the radar (and to the left of the pier)', *The Guardian*, 4 March, [http://www.theguardian.com/world/2012/mar/04/london-southend-airport?CMP=tw\\_tfd](http://www.theguardian.com/world/2012/mar/04/london-southend-airport?CMP=tw_tfd). Last accessed 6 January 2016.

## 5.7 Conclusion

In the 2011 consideration of material change of circumstances, the CC noted that Gatwick's conduct since its sale highlights the scope for competition, even where an airport faces capacity constraints.<sup>116</sup> This was only two years after the break-up and before Stansted was sold, and we consider that Gatwick's conduct since then has highlighted more clearly the competition between airports that exists, and the benefits that this can bring for airlines and passengers.

The CC decided to break-up BAA based on the assumption that airport performance and behaviour would change after the break-up in the areas of price; capacity delivery and lobbying for capacity development; innovation; and service quality. As shown above, there is tangible evidence to show that the

<sup>115</sup> Department for Transport (2003), 'The Future of Air Transport', December.

<sup>116</sup> Competition Commission (2011), 'BAA market investigation : Consideration of possible material changes of circumstances', July

outcomes at Gatwick are consistent with the CC's expectations as set out in the market investigation. Since the break-up of BAA, GAL has adopted a clear vision and strategy to provide a better airport for passengers and airlines. It has become more responsive to customer needs, improved operating and capital efficiency, and adopted a greater focus on service quality and innovation.

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## 6 Costs

The previous sections have considered whether the outcomes that can be observed in the market as a result of the CC's remedies are consistent with what the CC expected at the time of the 2009 investigation. As part of assessing the outcomes, it is also important to understand whether there are costs that should be included in the overall evaluation of the CC's remedies.

At the time of the market investigation, BAA argued that there would be three main costs of the divestment: i) costs of separation; ii) economies of scale; and iii) miscellaneous unquantified benefits of common ownership, mainly relating to planning and capacity expansion.

This section considers these and other potential costs.

### 6.1 Separation costs

In the 2009 investigation, BAA suggested that there were four categories of costs associated with separation:

- IT implementation charges;
- pension costs;
- design costs;
- general costs.

The CC undertook an assessment of these costs and determined that the maximum likely cost of separation based on BAA's submission was £28m. This was made up of costs to design separate IT systems for each airport, costs of IT system replication and other costs.

GAL's accounts indicate that in addition to staff costs, discussed below, Gatwick incurred £2.1m costs in the year ended 31 March 2010 associated with the separation of the company from BAA. In GAL's accounts for 2010/11, Gatwick noted that 'during the year, the Company continued the separation of its information technology ("IT") environment from BAA, the last remaining of the transitional services provided by BAA post-sale. The separation is expected to be completed during the year ending 31 March 2012.' GAL's 2011/12 accounts confirm that the Company completed the final separation of its IT from BAA.<sup>117</sup>

### 6.2 Economies of scale

As part of its investigation, the CC considered the economies of scale that resulted from BAA's common ownership of airports. BAA suggested that there were economies of scale of approximately £100m per year due to a number of factors including OPEX, retail, CAPEX, supply chain, and group functions. However, airlines considered that there would not be a loss of synergies as a result of divestment, and that it could actually reduce some duplication of management costs.

The CC concluded that it was 'unlikely that there will be significant relevant customer benefits arising from economies of scale',<sup>118</sup> and estimated that at most these would be £29m. The CC noted that BAA's arguments were at least partly dependent on the divested airports being stand-alone entities, and that the

<sup>117</sup> GAL 'Director's Report and Financial Statements for the year ended 31 March 2012'.

<sup>118</sup> Competition Commission (2009), para. 60.

arguments would be weakened if the airports were purchased by investors with a portfolio of airport operations. Indeed, Stansted and Gatwick were subsequently bought by investors (MAG and GIP) that own other airports, such that there may be offsetting gains with regard to scale and other synergies.

We would expect any loss of economies of scale resulting from the break-up to be reflected in the OPEX efficiency analysis presented in section 5—i.e. we would expect the loss of economies of scale to put upward pressure on unit operating costs. Gatwick has noted that there were some practical implications in setting up capacity for the airport in terms of management, legal and regulatory functions, including recruiting staff and forming new teams. It also set up a Board of Directors and introduced Board reporting and other relevant governance processes. However, it notes that it did not experience significant operational issues arising from separation.

GAL's accounts note that wages and salaries increased in 2010/11 due to greater staff numbers as the Company continued to separate from BAA and develop the stand-alone capacity to perform functions that had previously been undertaken centrally by BAA.

An additional £7.8m was incurred on contract and agency costs associated with separation, and other costs of £0.2m were incurred as part of the separation from BAA in the 15 months ended 31 March 2010. GAL noted that the majority of these relate to employees required to perform one-off activities in roles that will not continue in the Company. No such costs were incurred in 2011/12.<sup>119</sup>

Consequently, we do not consider that the loss of economies of scale has created significant costs, and none beyond those that would be captured in the analysis in section 5.

### **6.3 Miscellaneous unquantified benefits of common ownership**

#### **6.3.1 Access to capital markets at cost effective rates**

BAA also argued in the course of the market investigation that common ownership provided it with the necessary scale to allow it to access capital markets at cost-effective rates.<sup>120</sup>

There does not appear to be strong evidence to support such an argument. Gatwick and Stansted were purchased by two large companies that are equally likely to be able to access capital markets as BAA. Indeed, Gatwick was able to complete a £750m refinancing in April 2014 (including a bond issuance worth £350m) and currently holds a BBB+ credit rating, which is better than that held by BAA at the time its rating was withdrawn.<sup>121</sup> We are not aware of any evidence to suggest that Heathrow, Gatwick or Stansted airports have had difficulty in accessing capital markets in recent years, nor that the cost of raising capital has been significantly affected by the break-up.

Table 6.1 presents information on the value of and yields on bonds issued by Gatwick since 2009.

**Table 6.1 Gatwick's bond issuance since 2009**

Currency	Issuance date	Coupon	Value (€m)
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<sup>119</sup> GAL 'Report and Financial Statements for the year ended 31 March 2011'; GAL 'Directors' Report and Financial Statements for the year ended 31 March 2012'.

<sup>120</sup> Competition Commission (2009), p. 239, para. 10.101.

<sup>121</sup> Gatwick Airport Limited (2014), 'Gatwick Airport Limited—Investor Presentation', March, p. 24.

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Gatwick Funding Ltd	GBP	Feb 2011	6.125	711.8
Gatwick Funding Ltd	GBP	Feb 2011	6.5	711.8
Gatwick Funding Ltd	GBP	Jan 2012	5.25	726.4
Gatwick Funding Ltd	GBP	Jan 2012	5.75	726.4
Gatwick Funding Ltd	GBP	March 2014	4.625	417.7

Source: Dealogic.

### 6.3.2 Planning and capacity expansion

There may have been additional costs from having competing runway proposals, for example, from each of Gatwick and Heathrow, as part of the Airport Commission's process. However, these costs are likely to have been significantly outweighed by the benefits of competing proposals, as set out in Section 5.

## 6.4 Summary

Overall, we do not consider that there have been significant costs associated with separation and that the costs are likely to be lower than those predicted by the CC and BAA as part of the 2009 investigation. Indeed, GAL has noted that 'the cost increases associated with the separation from BAA have been lower than the intra-group charges previously incurred from BAA.'<sup>122</sup>

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<sup>122</sup> GAL 'Report and Financial Statements for the year ended 31 March 2011'; GAL 'Directors' Report and Financial Statements for the year ended 31 March 2012'.

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## 7 Conclusion

This report has reviewed the CC's expectations of the benefits that would arise as a result of the break-up of BAA, and considered whether, and if so to what extent, these benefits have transpired as a result of the remedies implemented.

The evidence presented suggests that there have been significant benefits of the break-up for both passengers and airlines, which are unlikely to have arisen in the absence of separate ownership of Heathrow, Gatwick and Stansted. For instance, in the absence of the break-up it is unlikely that there would have been significant changes in regulatory approaches at Gatwick and Stansted for the most recent control period. The increase in flexibility for Gatwick to form tailored agreements with airlines has in turn led to many benefits, including improved service quality and faster agreement on CAPEX.

While in some cases it is fairly straightforward to predict what would have happened in the absence of the break-up, in others this can be more difficult. This is particularly the case given the external factors that may affect outcomes of interest, including the financial crisis, changes in airline business models, or other external changes (e.g. new security regulations). However, a comparison of Gatwick's performance and actions before and after the break-up provides evidence that the break-up led to an increase in competition and that this encouraged significant improvements in Gatwick's performance in a number of areas, which is unlikely to have arisen, or arisen to the same extent, in the absence of the break-up.

The evidence against each of the CC's expected impacts is summarised below.

**Table 7.1 Summary of evidence against CC's expectations**

<b>CC expectations</b>	<b>Actual outcome</b>
Greater degree of passenger substitution	There have been no significant changes in the proportion of passengers coming from within/outside the catchment areas of GAL, HAL or STAL since the break-up  There has been an increase in the extent of overlaps of destinations between the airports which provides passengers with greater choice between airports. There has also been an increase in passenger substitution on the routes where the airports overlap in terms of routes offered
Increased competition for airlines	There has been an increase in efforts to attract new airlines and retain existing airlines at Gatwick Airport. This is exhibited through the greater effort placed on airline relations and route development, and through the bilateral contracts developed with airlines
Faster delivery of capacity and lobbying for capacity enhancements	There has been extensive lobbying for capacity enhancements as a result of the competing propositions put forward to the Airports Commission, and a great deal of engagement in the debate on economic, environmental and social issues. While this has specifically been at HAL and GAL (the two airports short-listed by the Airports Commission), other London airports are also seeking to expand their capacity
Improved capacity delivery	Despite the capacity constraints, GAL has made significant improvements with its existing infrastructure. Peak movements per hour have increased from 50 to 55. It has also made procedural and process improvements, in terms of scheduling and on-time departure
Price competition	GAL re-structured its tariffs after the break-up to ensure more efficient use of its infrastructure. It has also introduced a long-haul incentive scheme, and charges have increased at a lower rate since the break-up compared with before the break-up



CC expectations	Actual outcome
Improved service quality	GAL has exceeded the regulatory targets on 92% of the service quality indicators since the break-up, compared with 71% before. It has also improved its performance in areas where there is no direct regulatory reward, and has done so at a time of increasing passenger traffic
Innovation	GAL has innovated in a number of different areas since the break-up in order to improve the passenger and airline experience. This includes the development of Gatwick Connects, so as to be able to better compete with Heathrow for transfer traffic, and improvements in security procedures
Increased efficiency	GAL has reduced its operating and total costs since the break-up, and by more than European comparator airports. It has also delivered more CAPEX, and delivered it more efficiently, and ensured that the CAPEX was targeted to airline requirements
Change in regulatory regime	The increase in competition in the market since the break-up is one of the key factors that has led to a change in regulatory regime for Gatwick and the de-regulation of Stansted. The new contractual relationships have enabled more tailored relationships between the airport and airlines, including for example joint marketing initiatives, focused service quality arrangements and airline-specific infrastructure changes
Lower regulatory costs and better regulatory outcomes	The commitments regime has delivered better passenger outcomes than would have arisen under a RAB-based regime. It also reduces some of the distortions that were present with RAB-based regulation and means that resources previously dedicated to complying with regulatory requirements are now more effectively used to engage with the airlines.

Source: Oxera analysis.

Overall, the evidence indicates that there have been significant changes in the market and in GAL's performance since the break-up, which have delivered benefits for passengers and airlines.

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