Birmingham Airport - Stimulating Revival

The role of Birmingham Airport in rebalancing economic growth
Birmingham Airport has been a key component of the Midlands’ economy for over 70 years, providing critical connectivity to the global economy. The decision to establish the airport was taken by Birmingham City Council in 1928, with the current site at Elmdon identified in 1933. Since the first flights in 1939, Birmingham Airport has grown from strength-to-strength, to become the Midlands’ gateway to the world. Such was the foresight of the City fathers and their successors, that Birmingham Airport is equipped to serve a more national role, if called to do so.

Originally known as ‘Elmdon Airport’, it was officially opened by HRH The Duchess of Kent on 8th July 1939 and was owned and operated by Birmingham City Council until the outbreak of the Second World War. While civil aviation ceased, following requisition by the Air Ministry, it was not only used as an Elementary Flying School and by the Fleet Air Arm, it was a national logistics hub for the RAF taking delivery, testing and servicing strategic aircraft.

Re-opening for civil use in July 1946, the Airport returned to the responsibility of the City of Birmingham in 1960, and in April 1974, ownership passed to the West Midlands Metropolitan County Council (which incorporated the seven municipalities of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton). Following dissolution of the County Council, ownership passed to the West Midlands District Joint Airport Committee (comprising the seven municipalities). The Airports Act 1986 required the largest municipal airports to become Public Airport Companies and in 1987 Birmingham International Airport plc was created, with ownership retained by the seven Councils. In 1995, as part of an effort to strengthen capital resources, the original shareholders relinquished part of their equity, with Air Rianta and the Macquarie Airports Group amongst the first new shareholders. Subsequent sales have resulted in the current equity structure, with the metropolitan councils retaining 49%, the Ontario Teachers’ Pension Plan and Australia’s Victorian Funds Management Corporation 48.25% and the Employee Share Trust 2.75%.

By 1949, scheduled services began to Paris and subsequently to Zurich, Düsseldorf, Palma, Amsterdam and Barcelona. Construction of a new Airport terminal commenced in 1981, opening with an initial capacity for 3 million people. By 1991, increased demand led to the opening of the second terminal – the Eurohub, the first terminal in the world to combine domestic and international passengers. By the year 2000, the Airport was handling more than 7.5 million people a year and to handle future growth and global coverage the Airport embarked on a state-of-the-art extension to Terminal One in June 2007.

While around 9 million people currently use Birmingham Airport, the facilities in place are designed to cater for 18 million. With the runway currently being extended as this document goes to print: will provide aircraft with a further 2,500 miles range – and facilitate direct flights to China, and Brazil by early 2014.
Executive Summary

Rebalancing the economy, both sectorally and geographically, to achieve a sustainable growth trajectory, is only likely to be successfully realised over the medium-term. While this will require a range of inputs, from the private, public and voluntary sectors, as well as national and local policy co-ordination, a key factor will be transport and logistics infrastructure.

Developing an effective transport infrastructure can prove extremely costly, economically disruptive and time consuming, unless of course the infrastructure is already in place.

Building a solution to the current capacity constraints at London Heathrow, either a third/fourth runway or a completely new airport facility elsewhere, is likely to extend resolution of the problem to well into the next decade.

Harnessing existing infrastructure, able to immediately accommodate a doubling of passenger numbers to 18 million and long-haul flights to all of the major global growth markets, coupled with existing access to 20% of the national economy, is the alternative solution that Birmingham Airport offers.

The economic catchment area of Birmingham Airport encompasses some 14 million people, providing close to £263 billion of national GVA, and with 15,000 exporters is one of the largest concentrations of exporters nationally. Furthermore, these exporters tend to be manufacturers supplying high-value added products, most notably vehicles, transport machinery and component parts, to both the mature and expanding economies around the world.

Accounting for over 16% of national industrial production, the catchment area export markets remain skewed toward Europe and lag in comparative connectivity to the major global growth markets such as Asia, the Middle East, Africa and the Americas.
Birmingham Airport would provide the stimulus to revive output performance, while simultaneously facilitating a rebalancing of the economy.

There is a general consensus that enhanced aviation connectivity provides the basis for robust growth, although research has tended to focus on the financial services sector: there are a number of studies that suggest greater connectivity can substantially reduce manufacturing costs and considerably boost labour market demand, at both ends of the skills continuum. Expanding the number of flights and passenger throughput at Birmingham could add 31,000 jobs on site and boost catchment area employment by 243,000.

Although growth prospects in the UK and indeed across the EU, remain anaemic at best, output growth in other regions of the world continues to accelerate. Thus access to these markets would stimulate demand for the high-value added products the catchment area produces. Failure to develop this access, or to delay it for a number of years, will enable economic rivals to gain an advantage and stunt UK export performance and its potential, especially when there is a need to access growth markets now – China alone will add 70 new airports by 2015.

Global growth in air passenger travel has averaged 5% per annum for the past 30 years, and this rate of growth is expected to be sustained, with total air passengers expected to exceed 7 billion by 2020 and 12 billion by 2030.
West Midlands Economic Forum
Birmingham Airport - Stimulating Revival
The role of Birmingham Airport in rebalancing economic growth

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Global context

Between 1992 and 2008, global GDP increased from the equivalent of US$24.33 trillion to reach US$61.17 trillion in the immediate pre-crisis period (2007). Notwithstanding subsequent problematic economic performance, the latest IMF data indicates that by year-end 2012, global GDP will reach US$71.90 trillion and exceed US$93.86 trillion by 2017. Whilst in the period since 1992 there has been a shift in the relative importance of regional economies, with the proportionate share of emerging markets, most notably Asia, increasing significantly, those of North America and Europe have continued to expand robustly in nominal terms. Moreover, although much recent attention has focussed on the strong performance of Brazil, Russia, India and especially China, the overall pattern of growth has been more nuanced with a number of other Emerging Market economies, such as Indonesia, Nigeria, Turkey and Mexico amongst others, recording impressive trend growth.

Furthermore, over the past decade, the accession of a range of Central and Eastern European economies into the EU, has provided a further impetus for growth, which despite the current protracted Euro sovereign debt crisis, is likely to provide further growth stimulus over the medium term.

Global Economic Structure (US$ billion)

Source: IMF
Parallel to this rapid growth of global output, there has been a corresponding and equally
dramatic expansion of air passenger traffic. Over the past three decades, growth in global air
travel has averaged 5% per annum and although this masks different regional growth trends,
generally annual growth of air travel in this period has been about twice that of the growth rate
of global GDP. In the past decade however, performance has been more mixed, in part due to
exogenous shocks, such as: the 9/11 impact; the surge in global energy prices; the credit
crunch; the EU debt crisis; as well as the impact of the US and associated global recessions.
Nevertheless, air traffic growth has tended to be greater than that of the overall economy. As a
result, with growth projected at between 4-5% over the next five years, similarly vibrant growth
can be expected for air traffic movements.

Accordingly, if such an average rate of growth were to be sustained, total global passenger
demand could be expected to exceed 7 billion by 2020, and reach close to 12 billion by 2030,
with international movements comprising at least half of the total. The Department of
Transport estimates that the number of passengers travelling through UK airports will reach
500 million in the same period – a tenth of the 2030 forecast figure, compared to a fifth of all
international air passengers presently.
The UK Context

In the fifteen years up to 2008, globalisation trends enabled the UK economy to record comparatively firm rates of economic growth, with the international financial services sector in particular performing strongly. However, following the 2007-2008 global credit crisis, it is apparent that the globalised economy is moving into a new iteration, which will demand new responses from the UK economy. While the City of London will continue to be a key driver of the national economy, other sectors will need to respond to these new trends and structures of demand and supply. The official response has been to promote private sector expansion within the context of a geographic and sectoral rebalancing of the national economy. In 2009, the largest sector was wholesale & retail (11%), with both financial services (including insurance activities) and manufacturing as next most significant, at 10% of total GVA.

UK Economic Sectoral Structure 2009 GVA

Understanding the sectoral and geographic structure of the UK economy, and the dynamism that this creates, is however less straightforward than would initially seem to be the case. The immediate problem is that the data is published three years in arrears and as a result the latest available data is for 2009 - a period when the economic contraction was most pronounced. Regionally it had a particularly severe impact on areas outside London and the South East, and sectorally, the impact on production, most notably manufacturing, was acute. Post 2010, the available business survey data suggests that these sectors have performed strongly. Furthermore, GVA reporting measures tend to over-state the service sector and headquarter operations (where taxes are paid), which are also usually concentrated in London and the South East. More significantly, the financial services sector, again heavily concentrated in London and the South East, uses a methodology for calculating value-added input into the economy that is distinct from all other sectors, namely the Financial Intermediation Service Indirect Methodology (FISIM). Regardless of the accuracy of FISIM, in trying to understand the relative contributions of different parts of the economy, and given the policy shift towards rebalancing the economy, for the purpose of this research, the contribution of the financial services sectors has been excluded from some of the tables. A further complicating factor is that while sub-national public-sector bodies monitor economic developments in London, Scotland, Wales and Northern Ireland, no equivalent institutions exist for the other localities of England.
Even without financial services, it is important to note the strengths of the London and South East regions in terms of their contribution to overall output, some 19% and 15% respectively. Using the Midlands, that is both the East and West Midlands combined, as a proxy for the economic catchment area of Birmingham Airport (see section below), this area provides close to a seventh of overall output in the UK - significantly more than regions outside of the South East.
In terms of the overall structure of production, the contribution of the Midlands is even more pronounced, providing close to a sixth of all output in the sector. The production sector comprises: agriculture; mining & quarrying; manufacturing; electricity & gas; water & waste management; as well as construction. Although, the importance of the Midlands is perhaps understated given that construction was heavily dependent on public sector capital investment. If the overall economy is to be successfully rebalanced, it will be through the expansion of the production sectors. While more recent ONS data is not available, Purchasing Managers’ Indices (PMI) and other business surveys indicate that the East and, in particular, the West Midlands have recorded the firmest growth in the UK.
Although data is not available at a regional or catchment area level, the latest productivity indicator, based on the PMI surveys, indicates that in comparison to the Eurozone and the EU generally the UK, since the recession has recorded the firmest rates of productivity growth. Indeed, although there was some weakening of productivity, the UK in June 2012 recorded the 41st consecutive month of improvement. In contrast, the three largest Euro economies, Germany, France and Italy, recorded some of the steepest drops in productivity growth in the survey history. While the accelerated depreciation of Sterling undoubtedly provided the initial impetus, despite the erosion of exchange rate differentials, the fact that unit output has continued to increase points to the innovative quality of the recent growth sectors, most notably manufacturing. How can this growth be sustained, and what catalytic role can Birmingham Airport play in supporting and maintaining growth?
Aviation, or more accurately direct air access to potential export markets, has been seen as having a positive impact on the expansion of London and its financial service sector over the past 30 years. Direct access to global markets, according to the GLA has been a positive stimulus to London’s development, enabling the capital to sustain itself as a centre of productivity and competitiveness, both domestically and internationally. The commercial impact and role of London Heathrow, the current hub, is reflected by the fact that over a third of its air passengers are calculated to be business travellers, compared to the average of 18% for all UK airports. This has enabled the London-based services sector to become more export-orientated than other comparable sectors across the UK.

Nevertheless, in terms of export of visible goods, London is ranked only third in terms of performance, recording exports of £35.2 billion in 2011, compared to the Midlands where exports reached £37.8 billion, second only to the South East which recorded £42.9 billion in the same period. As stated above, with the global economy continuing to grow, there remains substantial unsatiated international import demand that UK exports could meet. While the authorities are emphasising the role exports can play in economic recovery, and are providing a range of facilities and support to facilitate such expansion, aviation infrastructure constraints, (both physical and regulatory), are undermining potential performance. London Heathrow, the current focus of aviation policy, is already operating at close to, if not at, capacity. Approaching aircraft already encounter stacking of 30-40 minutes, and average taxi-out times are some 20-40% higher than equivalent times at major European airport rivals: Paris-CDG, Amsterdam and Frankfurt. Moreover, given the level of capacity utilisation, Heathrow suffers disproportionately from any disruption, whereas the other main European rivals have available capacity of between 20-30%.

The current intensity of usage at Heathrow ensures that it is unable to effectively respond to the current and anticipated shifts in European and global demand. This compounds the fact that, according to the GLA, while Heathrow retains strong links to North America, Western Europe and India, reflecting traditional economic relations, it has slipped to sixth in European terms of overall destinations served, and this has been at the expense of developing new routes. In the case of accessing the potential of China, to take just one example, Heathrow has no direct links to 12 of the 25 Chinese cities forecast to record the strongest growth in the period up to 2025. Overall the economy as a whole is confronted with vigorous competition from other European economies for foreign direct investment (FDI) and trade. The increasing erosion of international connectivity, is already impacting on economic performance, with the GLA estimating that lack of access to new markets is costing the UK economy £1.2 billion a year as trade goes to better-connected competitors, with the value of missed opportunities over the next decade estimated to be in the region of £14 billion. Already, Germany has secured a third of the total trade between China and the EU, equivalent to £100 billion, while France has had increasing success in attracting Brazilian FDI, equivalent to £500 million in 2009, while the UK attracted close to £1 million in the same period.
With the current constrained credit markets, the loss of potential FDI will limit the ability of the economy to rebalance and allow the expansion of other, non-financial, sectors. Furthermore, the development of the existing or the construction of a new London Airport is unlikely to facilitate this for two reasons: firstly, any substantial increase in capacity is likely to be delayed until the middle of the next decade, while secondly, landing potential investors in the South East puts them in the wrong region. If the authorities wish to further facilitate expansion of financial services then such an infrastructure focus would be justified. However, the explicit intention is to rebalance the economy, with the catchment area, essentially the East and West Midlands, outperforming London in the key sectors targeted for growth (as depicted in the table using location quotients as an indicator of the inherent strengths of each local economy). The location quotient imply a degree of economic clustering, with London strong in financial and professional services, but also the latent potential and current dynamism of the Midlands in production, especially within manufacturing, construction, wholesale & retail, and education. Furthermore, the Midlands is at least as competitive, if not more so, in logistics and

### Comparative Advantage - 2009 Location Quotient

<table>
<thead>
<tr>
<th>Sector</th>
<th>West Midlands Location Quotient</th>
<th>East Midlands Location Quotient</th>
<th>London Location Quotient</th>
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<tr>
<td>Agriculture</td>
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</tr>
<tr>
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<td>Arts</td>
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<tr>
<td>Other services</td>
<td>1.12</td>
<td>0.91</td>
<td>1.08</td>
</tr>
<tr>
<td>Households</td>
<td>0.68</td>
<td>0.99</td>
<td>1.22</td>
</tr>
</tbody>
</table>

Source: ONS
tourism (using accommodation and food as a proxy). The problem of arrival destination, while it may initially appear trivial, but given the inertia of arrival (a stack-delayed long-haul flight, followed by delayed exit from an over-crowded hub and transfer via potentially gridlocked local road or rail infrastructure to a hotel) could inhibit prospective investors or trader missions exploring opportunities available in the regions outside central London. The impact of direct flights to regions from new markets can probably best be seen from the impact of daily direct flights between Newcastle and Dubai, initiated in 2007. North East exports to the Middle East & North Africa (MENA) have risen from just under £40 million in the final quarter of 2006 to exceed £150 million in the closing quarter of 2010 (the last quarter for which data is available). Similar point to point route development, allied to the expansion of regional airports for third country routing, could have a significant impact on sectoral economic development.

Export Impact of Direct Flights: NE -The Gulf

Source: HMRC
The Economic Catchment Area of Birmingham Airport

To understand what role Birmingham Airport can play, it is obviously necessary to comprehend and define the economic catchment area. There are various ways to define the catchment area, although it is immediately apparent that the area is larger than simply the West Midlands, and indeed encompasses an area greater than the West and East Midlands together. Taking into account rail access would bring in a large part of north London, given that the scheduled travel time between London Euston and Birmingham International station is currently 70 minutes and could conceivably be reduced to 59 minutes within the existing infrastructure framework. This compares favourably to the travel time from London Euston to London Heathrow of just under 70 minutes. However, while this is an achievable transport solution, given comparable travel times from many London Boroughs to Heathrow (or for that matter Stansted and Gatwick) and the more extended check-in times due to capacity constraints there, such a detailed study is beyond the scope of this report. Therefore, given the structure of data available from the ONS, the most effective definition of the economic catchment area is 100 minutes safe road travel and/or the nearest airport.\(^1\)

**Birmingham Airport**

![Map of the Economic Catchment Area](image)

Source: Forrest Research and The AA.

Furthermore, it is important to note that the economic catchment area is defined in terms of economic relations, potential as well as actual, not in terms of previously or currently existing political or administrative boundaries, and indeed crosses the NUTS level statistical areas utilised by the ONS. Accordingly, the catchment area's geographic coverage brings it into close proximity to other airports, such as Manchester, East Midlands and Stansted, but this is because the methodological approach adopted allows for some overlap in what could be seen as the respective potential airport catchment zones, enabling competition between these airports for potential customers.
The catchment area economy of Birmingham Airport encompasses considerable diversity, in terms of population density, relative deprivation, prosperity, access to infrastructure, educational attainment, employment, productivity, produce and products. As a result, in the decades up until 2007, some sectors expanded robustly, namely finance, legal, accounting services, real estate and retail (mirroring the national economy); whilst others contracted, most notably manufacturing industries, producing pockets of long-term structural unemployment. In part, this was a result of policy and investment decisions reflecting a post-industrial consensus. Since the financial crisis commenced in 2007, the economy at national and local levels, has struggled to recover and growth has been anaemic at best. Sectors that had provided impetus for the past three decades have under-performed, suggesting the achievement of more robust trend growth will require increased output in other sectors, most notably manufacturing. Indeed, the export-orientated manufacturing industries of the catchment area have been performing comparatively vigorously, primarily, but not exclusively, the result of the rapid and extended depreciation of Sterling.

Midlands Output Performance

This continued resilience of manufacturing is reflected in the PMI, which indicates that output in the catchment area (using the East and West Midlands PMIs as proxies) through the second half of last year and into this one, was firmer than that of the UK overall. Indeed, since the second quarter of 2010, output growth has exceeded that of the UK, in marked contrast to the period prior when the catchment area significantly under performed. PMI data up to March 2012, particularly that of the West Midlands continued to emphasise acceleration in local growth prospects, although the appreciation of Sterling in more recent months has undermined this. The pace of expansion was supported by increased incoming new orders. Furthermore, private sector business activity in the catchment area continued to grow, extending the current period of expansion to almost three years, and was the strongest across all UK regions. Nevertheless, the lack of effective access to working capital continues to be reported as a major constraint to successfully tapping this latent potential, as is the erosion of skilled labour during the recession. Supplier delivery times indicate potential connectivity bottlenecks.
Since 1997, the Midlands have consistently provided an average of over a sixth of non-financial services GVA produced in the UK, which given the statistical bias toward London & the South East as noted above, suggests the real output contribution is probably understated.

Parallel to the unfolding financial crises, there has been significant, perhaps trend-changing, interruptions to global supply chains (based on just-in-time management processes), due to unanticipated but regular natural disasters (such as volcanic eruptions and tsunamis), as well as concerns over transportation costs as a result of inflated oil prices and extended delivery times. This has contributed to manufacturing conglomerates re-focussing on proximity and sustainability of supply, to their main production units, rather than simply on the price competitiveness of assemblage. The repatriation of manufacturing is already evident in the catchment area, and accordingly a more nuanced approach in terms of sub-national and sectoral economic management is now required. Successful rebalancing of the economy will require an innovative approach to sustaining the successful sectors, whilst at the same time facilitating the expansion of sectors that have underperformed over the past three decades.
The latest data available for 2009, records that the largest sectors are societal (21%), logistics (20%), production (18%) and business services (11%). It has been calculated that output, as measured by GVA per head, has failed to keep pace with national output levels since the mid-1970s, and in real terms has probably contracted. Indeed, growth in workplace-based GVA per head was lowest in the country over last decade. This is exemplified by the steady erosion of the catchment area’s contribution to overall manufacturing in England, falling from close to a quarter of total GVA in 1997 to a fifth in 2009.
The manufacturing structure largely comprises small-scale precision-based component manufacturers coupled with traditional craft-based industries feeding into globally-ranked prestige producers including Aston Martin, Bentley, JLR, Rolls-Royce, Toyota and JCB (to name just the car and vehicle clusters). This structure is not dissimilar from that which has provided the basis for sustained vibrant expansion in parts of Germany, Northern Italy and Catalonia. Hosting one of the largest concentrations of manufacturing units in the EU, the region has significant potential to enable the overall economy to be restored to growth. The strength of this potential is most amply demonstrated by the contribution of manufacturing since 1997, to the wider economy, which up until the depreciation of Sterling (which has probably inflated asset values) continually outstripped the contribution of finance and insurance, and from London, financial services in particular.
Currently, the economic catchment area comprises 14 million inhabitants, providing the equivalent to 21% of GDP and up to 22% of national gross disposable income. Indeed, the catchment area economy ranks close to London in comparative output performance in nominal GVA terms. Given the evidence provided by the GLA on the catalytic impact of aviation connectivity on London, making it more externally orientated, it could then be realistically contended that the expansion of Birmingham Airport would have a similar profound impact. This can be seen to have the potential to transform not only the production and logistics sector but also the extensive legal, accountancy and business services sectors.

Comparative Output Performance 2009 (GVA £ million)

Source: ONS
Given the comparative advantage in non-financial services, the potential for growth is therefore quite substantial. The London region, including financial services, provides close to 22% of national GVA, with the South East approximately 15%, compared to the catchment area which provides the equivalent of 21% of national GVA. While there are obviously a number of factors constraining output performance, limited air connectivity would seem to be one such significant factor.

**Comparative Output Contribution**

![Pie chart showing comparative output contribution by region](source: ONS)

While the level of business travel is a key factor to unlock latent economic potential, the relative and comparative affluence of the catchment area should not be discounted in analysing the impact of increasing global connectivity. Taking into account Gross Disposable Household Income for 2010, the catchment area has one of the highest regional levels of gross disposable income, equivalent to 22% of total national gross disposable income. Given the tendency for higher net-worth individuals to take more international vacations and breaks, then the latent demand within the catchment area, coupled with demand currently met by airports encountering capacity constraints, provides further commercial justification to underpin the case for developing Birmingham Airport.
While increasing the aviation connectivity of the catchment area will open the economy to new potential markets and new sources of demand, the increased access will also open up new sources of supply to the possible disadvantage of existing domestic suppliers. The international competitiveness of the catchment area, and its capacity to respond to new forms of competition, will obviously be crucial in determining whether the opportunities, made available by increased connectivity from the development of Birmingham Airport, can be successfully realised. This is not to say that the catchment area economy is somehow insulated from global market trends, but that the current access does not permit it to fully realise the global opportunities available.

A key indicator of the competitiveness of an economy, national or regional, is the number of companies involved in international trade. The catchment area (using data from the East and West Midlands) performs strongly when compared to the other UK regions, including both London and the South East. Indeed, with 12,396 exporting companies, there are almost as many exporters in the catchment area as there are in London (13,380) and the South East (12,951). This obviously excludes intra- and inter-region component suppliers to large manufacturing exporters and further research would probably demonstrate the competitiveness of these suppliers within global supply chains. Given that the structure of the London and South East economies are skewed toward the services sector and the predominance of headquarter operations, the Midlands is likely to be predominant in terms of manufactures exports. The catchment area has the largest number of exporting companies to the EU (3,799), an area of relatively high-value import demand, compared to London (2,376) and the South East (3,381). The catchment area compares less favourably in terms of the number of companies exporting to non-EU destinations (some 11,710), although not significantly so, to that of London (12,860) and the South East (12,404).
Thus, the catchment area is one of the regions most open to international trade, in terms of overall trade, EU import sourcing and non-EU-sourcing. As a result, greater aviation connectivity seems unlikely to undermine catchment area economic performance, and can in all likelihood be expected to enhance the prevailing trends.

While the number of companies engaging in international trade gives an indication of the dynamism of the catchment area economy, the structure of visible exports gives an indication of the sophistication of the local economy. Over 92% of exports of the catchment area comprise manufactures (chemicals, manufactured goods, machinery & transport and miscellaneous manufactures by SITC type), compared to the UK as a whole where the equivalent SITC exports are equal to 77% of the total, which even compares favourably to that of Germany, where manufactures are 88% of exports.
The capacity to export can be seen as indicative of the ability to add-value in the production process – although not in the case of primary commodity exporters. With machinery and transport alone providing almost two-thirds of catchment area exports, the export structure reflects an economy with a significant capacity to add-value. The innovative nature of the economy is further emphasised by the structure of imports, which for the catchment area is more diversified than the export structure. While it is difficult to calculate the actual level of trade between a sub-national region and the global economy, given the potential leakage to other regions, or indeed the final region at which the export point is recorded, the catchment area recorded a trade surplus in 2011, with imports equal to 45% of exports. More significantly, the manufactures trade surplus was £5.4 billion in 2011, with manufactured imports some 42% of manufactures exports.
In terms of export markets, the catchment area destinations reflect traditional trade ties, however the fact that Europe is the destination of half of all exports, demonstrates the capacity to penetrate markets where demand for high-value added goods is strong. Similarly, some 16% of exports are to North America, another market where demand is driven by quality considerations as well as cost and utility. Although Asia (including Oceania) is the destination of close to a sixth of catchment area exports, given that this area is responsible for a third of global GDP, it can be assumed that there is still significant potential for growth. At a little over a sixth, exports to other global regions is modest and does not reflect the nature of the catchment area’s export products and their competitiveness against other comparative products exported by other economies.
In terms of imports, the EU remains the principal source of goods, reflecting the impact of the single market as well as that of geography and input demand. Given the problems of accurately assessing the source of final exports, disaggregating the ultimate origin of inputs is also problematic. Nevertheless, increased air freight capacity (both in the belly-hold or dedicated freight flights), would provide some price competition for importers.

**Catchment Area Imports by Origin (£ million)**

While it is apparent that the catchment area economy is competitive in global terms, identifying the inputs that sustain this competitiveness is more of an art form than a process of scientific analysis and deduction. Access to markets, both in terms of identifying potential sales and actual new market sales are critical, hence the crucial role of connectivity, via internet, land, sea and aviation. Qualitatively, the potential impact can be deduced. In terms of the catchment area, geography limits the ability to improve sea accessibility, although enhancing the land transport connectivity to ports would assist. Improving the land transport infrastructure, through a step change transformation, such as HS2 or deepening motorway capacity, can only be affected over the course of a number of years, or even decades. In terms of the catchment area, a step change in the quality of aviation links can be achieved relatively quickly, with a minimal infrastructure cost – at 40% operational capacity, doubling utilisation is a function of securing increased flights. Further, programmed growth can be realised via phased infrastructure development.

Quantifying the economic impact is however much more problematic, particularly the indirect consequences. As an approximate guide, it is calculated that for every extra 1,000 passengers annually, one FTE direct airside employment opportunity is created. Accordingly, if Birmingham Airport were able to move to 80% capacity utilisation, then demand for 9,000 FTE positions would be created. The impact of increased direct employment, has elsewhere been translated into increased indirect employment demand in the non-airside airport zone and associated ancillary sectors by the ratio of 1:2-3. Therefore assuming FTE job creation of 1:2.5, then some 22,500 indirect jobs can be forecast to be created in the first phase of development of the airport. Without analysing the valued-added creation potential that these jobs could potentially generate, and the additional demand within the catchment area that this would create, some 31,500 jobs could conceivably be created in the first year, and sustained into the medium-term.
While the potential level of job creation within the confines of the airport operations is considerable, as a proportion of the overall catchment area labour force of 4.9 million the impact is less than 1%. Determining the impact of improved connectivity on job demand across the economy is more difficult. Clearly some sectors, such as arts, leisure, tourism, hotels and restaurants, will benefit from an increased number of arrivals and prolonged stays. In the services sector, while the catchment area financial services are not especially orientated toward international markets (although with the notable exception of trade finance), legal, accountancy and business services have been expanding their international footprint in recent years, often developing their London operations. Reduced transportation costs, coupled with the greater access, should act as a comparable stimulus to that provided by the expansion of the equivalent sectors in London and the South East. Educational institutions, already proficient in capturing overseas students, can also be identified as early beneficiaries. While design, engineering and architectural consultancies will also conceivably benefit, the labour impact on the industrial, manufacturing and agricultural sectors may be more muted in the initial period. However, with the latest available data suggesting that manufacturing is operating at close to capacity, increased demand should be translated into job creation. Increasingly, manufacturers are recognising that as much revenue can be generated from continuous servicing of finished exports as there can be from the actual sale of the finished product. As a result, the relationship between exporters and international consumers is being subtly transformed, and thus the connectivity requirements are likely to become more intense and frequent, with access to export destinations vital to a successful servicing and marketing strategy. With no real economic data available, the impact can only be assessed in nominal terms. Nevertheless, the structure of the catchment area labour market (using data from the East and West Midlands), is indicative of the potential for growth if greater global connectivity is achieved. Given the evidence available from the GLA, both the service and societal sectors would benefit from reduced business travel costs, if greater international connections were made available from regional airports. Moreover, given the capacity constraints, if the UK is to access new markets via new routes, then at least in the short-to-medium-term there seems few realistic options immediately available. The logistics sector (comprising transport, distribution, wholesale and retailing), in which the catchment area has geographic as well as labour market comparative advantages, would also benefit from development of the local aviation infrastructure, especially if there was a commitment to increase freight through flow. It is worth noting that in the period from 1996 until the end of the first quarter of this year, the employment in the services grew by 29%, in the logistics sector by 9% and in the societal sector by 31%. Since the onset of the crisis, services employment has fallen by -1.3%, while logistics increased by 1.7% and societal by 4.5%. While nationally there is an attempt to rebalance the economy away from these sectors, within the catchment area the role of these sectors is subtly different from the national economy, in that there is a more direct interaction and relationship with the real economy. Therefore both services and logistics can be expected to grow, although within sub-sectors there will undoubtedly be some reallocation of resources. While there is likely to be further retrenchment in the public sector, the role and functions, such as arts, leisure, education, health and social welfare services may shift in emphasis to the private as opposed to public sector, these functions will not disappear. Indeed, with enhanced connectivity, various sub-sectors, such as tourism, universities, arts (especially Stratford), and leisure services (such as the Belfry and Premiership), can be seen to benefit from such stimulus. The job multiplier impact of increased connectivity on these sectors is however
difficult to quantify, in part this is because it is difficult to disaggregate new employment opportunities created from those transferred from other regions.

Assuming that the airport will play a key role in rebalancing the economy back toward manufacturing, then some employment pick-up can be forecast. In June 1998, manufacturing employment peaked at 1.44 million, falling to below 1 million at the end of 2011. It has since recovered to 1.03 million by May this year, although the recent downturn in manufacturing output is likely to contribute to fresh labour shedding. Nevertheless, assuming the catalytic impact of the enhancement of the airports capabilities is modest on overall labour demand, some 243,000 FTE could conceivably be generated by December 2015. This is based on assuming the impact on the productive sector is 0.05% per annum, a similar growth attributed to increased connectivity in the logistics sector, a more modest growth in the services sector (0.03%), and subdued rate in the societal sector (0.01%).
Comparative Performance of Birmingham Airport within the global framework

Aviation infrastructures vary considerably across the globe, and have evolved as a result of a variety of factors, including geography, cultural, history, political, military, fiscal, economic and more recently commercial. Despite this diversity, a common core objective is apparent in all aviation structures – namely the ability to collect, assemble and transport passengers and freight from domestic locations to distant locations, both domestic and international, as quickly, efficiently and cost-effectively as possible. Given the real costs of business travel, both in economic and commercial terms, the optimum achieved by the most successful aviation structures is to achieve a balance between the time passengers and freight spend on the ground (including to and from the airport) and actual flight time. Efficiency being measured in terms of the time getting from A to C, from origin to final destination, with B being the time spent on the ground, and in the air – the shorter B the more efficient. The greater the efficiency, the more positive impact on cost effectiveness for individual travellers, both business and tourist, and at an aggregate level, contributing to improved export competitiveness of the overall economy, simply by reducing transaction and marketing costs. Flight delays alone in the USA, according to recent studies are estimated to cost the economy the equivalent of US$33 billion annually (2). While the reduction in transit to and from an airport obviously reduces resource costs. Indeed, the reduction in ground travel time has been reported as a particularly sensitive issue for business travellers, with a key aspect being confidence in ground travel times and the perceived safety margin to enable successful emplanement. Cost savings can be achieved firstly by reducing the perceived safety margin, and secondly by actual reductions in ground travel times (3).

<table>
<thead>
<tr>
<th>Expected travel time</th>
<th>Safety Margin</th>
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</thead>
<tbody>
<tr>
<td>Departure time</td>
<td>Preferred Arrival time</td>
</tr>
<tr>
<td>from origin</td>
<td></td>
</tr>
<tr>
<td>Expected Arrival time</td>
<td></td>
</tr>
</tbody>
</table>

Furthermore, as the number of actual flights grow, there will eventually emerge airspace capacity constraints as specific and designated airspaces can only manage a finite number of flights and runways can only safely and effectively handle a finite number of landings and take-offs – a factor determined not just by the number of runways but by the available airspace. Simply increasing the airspace parameters is unlikely to solve such an issue, but likely to contribute to increased stacking, as already evident for the London periphery airports.

Generally in the literature it is assumed that improvements in transport and communications infrastructure are reflected positively in economic growth, although there is a comparatively limited amount of research into the impact of aviation infrastructure and of aviation policy parameters. Some studies estimate that a doubling of airport infrastructure capital in a particular US state contributes to a reduction in manufacturing costs equivalent to 10% (4), providing a significant accrual of international competitiveness. Whilst other studies suggest that employment in a catchment area increases by 1% for every 10% of passenger emplanement growth (5).

Analysis of the global range of aviation structures is beyond the scope of this research, and what is perhaps more relevant to this study is to examine the North Sea airspace region that Birmingham Airports operates within. Examining air connectivity between this North Sea aviation region and a range of indicative growth markets (IGM, see 6), it is apparent that there is some relationship between increasing flights and/or destinations and the performance of
exporters. Some of the data is impacted by other factors (such as tourism in the instance of Turkey and Mexico, where destinations seem skewed toward holiday resorts rather than business centres) or the trade relationship is distorted by the supply of energy (as is the case with Russia).

Copenhagen and Amsterdam are by some considerable margin the principal airports for their respective countries, with over 125,000 and 210,000 outward flights respectively from each, representing 78% and 92% of all flights nationally. Given the population of Denmark is 5.6 million and that of the Netherlands 16.7 million, comparable to the West Midlands and the catchment area respectively, more than one principal international access point would probably not be economically viable. Furthermore given the Schengen arrangements, the respective catchment areas are probably greater than the national populations. Nevertheless, there does appear to be a relationship between the number of destinations served to a specific export market as well as the growth of flights to the market. In the case of both Denmark and the Netherlands, exports are heavily skewed toward the EU and Europe generally. In the case of Denmark four of the five top exports markets are in the EU, with only the USA a significant market outside – these top five comprise over half of all exports. In contrast, the IGM comprise just over 8% of export destinations, with mainland China providing about half of demand. While exports as a proportion of GDP have rise from 24% in 1996 to 29% in 2011, this has been largely due to increased exports to Europe, and with limited air connectivity to IGM not supporting export growth. With no direct flights in recent years to Mexico, Indonesia or Nigeria, and flights to Turkey skewed toward holiday destinations, export growth has been constrained. While the Netherlands has seen exports as a proportion of GDP rise from 47% in 1996 to 67% in 2011, this has again been to European markets, with the top five export markets (all EU) comprising 62% of total exports and over a quarter to Germany, perhaps reflecting a maquiladora relationship with German industry. In contrast, the IGM account for less than 6% of export demand, despite the backdrop of an imperial history in one of the key growth markets.
With the exception of Turkey, a key Dutch tourist destination, air connectivity to the IGM has been limited and growth of export penetration has been constrained.

In the case of France and Germany, with populations of 63.1 million and 81.8 million respectively, compared to the UK with 62.6 million, the policy responses provide credible insights for the debate in the UK. With 6 airports providing over 50,000 outbound flights annually, Germany is regularly cited as an appropriate solution that Britain could seek to emulate. Of these airports, those between 50,000 and 100,000 outbound flights per annum, provide over a fifth of all flights; those between 100,000 and 200,000 flights close to a third; and the main hub providing almost 250,000 outbound flights, equivalent to a quarter of national flights.

While exports were equivalent to just of over 20% of GDP in 1996, by 2011 this proportion had doubled to 41%, and while the EU remains the most important market (the top five are all EU providing 36% of demand), the IGM comprise almost 14% of demand. Air connectivity appears to have been a significant factor supporting this growth, with over 5 originating airports flying to 7 destinations in mainland China and exports to China, in value terms rising from US$26 billion in 2004 to reach US$71 billion in 2011. This was a period when flights to China increased from just over 2000 to close to 5000. This impact is also reflected in Germany’s economic relations with other IGM, with increasing flights and increasing diversity of destination appearing to stimulate export demand. In France, while there are 4 airports providing over 50,000 outbound flights per annum, providing close to 65% of total national supply, exports as a proportion of GDP increased from 18% in 1996 to 25% in 2011. While IGM export demand was 10% and although the top five export markets were all EU, they provided less than half of total export demand. In contrast to Germany, the air connectivity of France in terms of number of origins and destinations as well as growth of flights is more constrained.

In the UK, four airports have over 50,000 flights per annum, providing 50% of total supply. In marked contrast to Germany, however close to 45% of all flights are provided by London periphery airports and some 60% of all passenger movements. In further contrast to Germany, exports as a proportion of GDP fell from 21% in 1996 to 20% in 2011. While the different economic strategies pursued in Germany and Britain, not least during the period the under-valued exchange rate in Germany and the over-valued currency in Britain, had decisive impact, the lack of development of new routes and increased flights from Britain to the IGM appears to have also been a factor. Spare capacity in Germany appears to have enabled the aviation sector there to develop flexible response mechanisms able to deploy different airports to meet new, sometimes transient demands for new routes and support exports. In Britain, the concentration on the London periphery airports, in particular Heathrow has resulted in what seems to be a more rigid structure less able to articulate a British response to shifts in global demand patterns.
Denmark Aviation Overview

<table>
<thead>
<tr>
<th>Airports Structure</th>
<th>&gt;100-&lt;10,000</th>
<th>&gt;10,000-&lt;30,000</th>
<th>&gt;30,000-&lt;50,000</th>
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<th>&gt;100,000-&lt;200,000</th>
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<tr>
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<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Flight Concentration</td>
<td>11.66%</td>
<td>9.53%</td>
<td>-</td>
<td>-</td>
<td>77.72%</td>
<td></td>
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</table>

**Denmark Flight Destinations**

Source: SRS

**Denmark Export Destinations**

Source: DOTS

**Denmark Flights Annual Change**

Source: SRS

**Denmark Exports Annual Change**

Source: DOTS

<table>
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<tr>
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<tbody>
<tr>
<td>Real GDP growth</td>
<td>2.84</td>
<td>0.71</td>
<td>3.40</td>
<td>1.58</td>
<td>-0.78</td>
<td>-5.83</td>
<td>1.30</td>
<td>1.05</td>
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<td>GDP per capita (US$)</td>
<td>35,124</td>
<td>30,000</td>
<td>50,554</td>
<td>57,171</td>
<td>62,800</td>
<td>56,449</td>
<td>56,369</td>
<td>59,928</td>
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<td>Exports (as % of GDP)</td>
<td>27.91</td>
<td>31.82</td>
<td>33.42</td>
<td>32.74</td>
<td>33.75</td>
<td>29.85</td>
<td>31.02</td>
<td>33.83</td>
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<tr>
<td>Imports (as % of GDP)</td>
<td>24.40</td>
<td>27.50</td>
<td>31.02</td>
<td>31.25</td>
<td>31.74</td>
<td>26.33</td>
<td>27.16</td>
<td>29.34</td>
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<tr>
<td>Diversity of Export destination (2011)</td>
<td>Germany 16.96%, Sweden 13.23%, UK 9.91%, Norway 5.74%, USA 5.22%</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Top 5 Concentration 51.36%</td>
</tr>
<tr>
<td>Exports to Indicative Growth Markets (2011)</td>
<td>China 4.02%, Brazil 0.72%, Russia 1.82%, India 0.49%, Mexico 0.12%, Indonesia 0.10%, Turkey 0.63%, Nigeria 0.11%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IGM Penetration 8.22%</td>
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<tr>
<td>Diversity of Import source (2011)</td>
<td>Germany 20.85%, Sweden 13.55%, Netherlands 7.21%, China 6.43%, UK 6.33%</td>
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<td></td>
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<td></td>
<td>Top 5 Concentration 54.37%</td>
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<tr>
<td>Imports from Indicative Growth Markets (2011)</td>
<td>China 6.43%, Brazil 0.51%, Russia 1.49%, India 0.82%, Mexico 0.15%, Indonesia 0.24%, Turkey 0.92%, Nigeria 0.00%</td>
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<td>IGM Penetration 10.57%</td>
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</table>
The role of Birmingham Airport in rebalancing economic growth

Denmark China Connectivity

Denmark Brazil Connectivity

Denmark Russia Connectivity

Denmark India Connectivity

Denmark Mexico Connectivity

Denmark Indonesia Connectivity

Denmark Turkey Connectivity

Denmark Nigeria Connectivity
France Aviation Overview

<table>
<thead>
<tr>
<th>Airports Structure</th>
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<th>&gt;30,000-&lt;50,000</th>
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<td>2</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Flight Concentration</td>
<td>13.64%</td>
<td>9.7%</td>
<td>12.02%</td>
<td>15.64%</td>
<td>16.36%</td>
<td>32.94%</td>
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<tr>
<td>Real GDP growth</td>
<td>3.06</td>
<td>1.79</td>
<td>2.66</td>
<td>2.23</td>
<td>-0.20</td>
<td>-2.63</td>
<td>1.38</td>
<td>1.72</td>
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<tr>
<td>GDP per capita (US$)</td>
<td>27,114</td>
<td>22,535</td>
<td>36,683</td>
<td>41,746</td>
<td>45,624</td>
<td>42,019</td>
<td>40,809</td>
<td>44,008</td>
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<tr>
<td>Exports (as % of GDP)</td>
<td>18.28</td>
<td>22.22</td>
<td>21.72</td>
<td>21.28</td>
<td>21.42</td>
<td>18.08</td>
<td>20.12</td>
<td>20.96</td>
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<tr>
<td>Imports (as % of GDP)</td>
<td>17.91</td>
<td>22.85</td>
<td>24.19</td>
<td>24.41</td>
<td>25.18</td>
<td>21.28</td>
<td>23.66</td>
<td>25.31</td>
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<td>Diversity of Export destination (2011)</td>
<td>Germany 16.72%, Italy 8.29%, Spain 7.44%, Belgium 7.42%, UK 6.70%</td>
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<td>Exports to Indicative Growth Markets (2011)</td>
<td>China 4.16%, Brazil 0.92%, Russia 1.53%, India 0.67%, Mexico 0.51%, Indonesia 0.22%, Turkey 1.58%, Nigeria 0.38%</td>
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<tr>
<td>Diversity of Import source (2011)</td>
<td>Germany 19.09%, Belgium 11.27%, Italy 7.73%, Netherlands 7.50%, Spain 6.62%</td>
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<td></td>
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<tr>
<td>Imports from Indicative Growth Markets (2011)</td>
<td>China 4.93%, Brazil 0.67%, Russia 2.59%, India 0.76%, Mexico 0.14%, Indonesia 0.25%, Turkey 1.02%, Nigeria 0.84%</td>
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Source: SRS

France Flight Destinations

Source: DOTS

France Export Destinations

Source: SRS

France Flights Annual Change

Source: DOTS

France Exports Annual Change

Source: DOTS
The role of Birmingham Airport in rebalancing economic growth

Flights (out number) 1859 2337 2547 2325 2715 2532 2652 2875 2961

Exports (US$ mln) 6673 7806 10124 12410 13233 11001 14188 18198

Originating Airports 1 1 1 1 1 1 1 1 1

Destination Airports 4 4 4 3 3 3 3 3 4

Flights (out number) 1530 2039 2004 2087 3007 2866 2716 2867 2465

Exports (US$ mln) 2294 2844 3187 4255 5115 3565 4597 5361

Originating Airports 1 1 1 1 1 1 1 1 1

Destination Airports 3 3 3 3 4 4 2 2 3

Flights (out number) 3825 4254 4408 4535 4947 5045 4393 4807 5576

Exports (US$ mln) 4058 4600 5931 7730 10293 7008 7551 8921

Originating Airports 3 3 3 4 5 3 3 3 5

Destination Airports 4 4 4 4 5 5 4 4 4

Flights (out number) 1728 1875 2294 1994 1989 1492 1207 1392 1728

Exports (US$ mln) 1807 2450 3315 4620 4914 3404 3820 3899

Originating Airports 1 1 1 1 1 1 1 1 1

Destination Airports 3 4 6 5 5 5 3 4 5

Flights (out number) 710 870 990 1070 1155 1038 1024 1124 1032

Exports (US$ mln) 1928 2145 2100 2565 3186 1889 2198 2953

Originating Airports 1 1 0 0 0 0 0 0 0

Destination Airports 1 2 2 2 3 3 3 2 2

Flights (out number) 1974 2362 2890 2802 2960 3171 3876 4669 5316

Exports (US$ mln) 5599 5980 6539 7162 8452 6775 8162 9247

Originating Airports 2 2 2 3 4 4 6 7 6

Destination Airports 6 6 6 5 7 6 6 10 10

France China Connectivity

France Brazil Connectivity

France Russia Connectivity

France India Connectivity

France Mexico Connectivity

France Indonesia Connectivity

France Turkey Connectivity

France Nigeria Connectivity
German Aviation Overview

### Airports Structure

<table>
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<tr>
<th>Number by outward flights</th>
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<td></td>
<td>22</td>
<td>5</td>
<td>1</td>
<td>3</td>
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### Flight Concentration

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<tr>
<th></th>
<th>7.06%</th>
<th>10.63%</th>
<th>4.41%</th>
<th>21.23%</th>
<th>31.36%</th>
<th>25.29%</th>
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### German Flight Destinations

Source: SRS

### German Export Destinations

Source: DOTS

### Economic Impact

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<tr>
<td>1996</td>
<td>0.83</td>
<td>29,767</td>
<td>21.50</td>
<td>18.82</td>
<td>France 10.15%, Netherlands 6.93%, UK 6.55%, Italy 6.21%, Austria 5.77%</td>
<td>China 5.65%, Brazil 0.99%, Russia 3.09%, India 1.04%, Mexico 0.74%, Indonesia 0.20%, Turkey 1.99%, Nigeria 0.11%</td>
<td>China 7.28%, Brazil 0.74%, Russia 4.20%, India 0.72%, Mexico 0.41%, Indonesia 0.37%, Turkey 1.77%, Nigeria 0.38%</td>
<td>Top 5 Concentration 35.61%</td>
<td>IGM Penetration 13.81%</td>
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<tr>
<td>2001</td>
<td>1.64</td>
<td>22,863</td>
<td>30.35</td>
<td>25.81</td>
<td>Asia 13.97%, France 7.98%, China 7.28%, Belgium 6.45%, Italy 5.44%</td>
<td>Top 5 Concentration 40.65%</td>
<td>Top 5 Concentration 40.65%</td>
<td>IGM Penetration 15.26%</td>
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</table>
The role of Birmingham Airport in rebalancing economic growth

German China Connectivity

German Brazil Connectivity

German Russia Connectivity

German India Connectivity

German Mexico Connectivity

German Indonesia Connectivity

German Turkey Connectivity

German Nigeria Connectivity
Netherlands Aviation Overview

<table>
<thead>
<tr>
<th>Airports Structure</th>
<th>&gt;100-&lt;10,000</th>
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<tr>
<td>Number by flight</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Flights out</td>
<td>3.69%</td>
<td>4.56%</td>
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<td>-</td>
<td>-</td>
<td>91.75%</td>
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</table>

Netherlands Flight Destinations

Source: SRS

Netherlands Export Destinations

Source: DOTS

Netherlands Flights Annual Change

Source: SRS

Netherlands Exports Annual Change

Source: DOTS

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</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>3.41</td>
<td>1.93</td>
<td>3.39</td>
<td>3.92</td>
<td>1.80</td>
<td>-3.48</td>
<td>1.63</td>
<td>1.27</td>
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<tr>
<td>GDP per capita (US$)</td>
<td>26,922</td>
<td>24,991</td>
<td>41,998</td>
<td>47,839</td>
<td>53,199</td>
<td>48,151</td>
<td>46,989</td>
<td>50,355</td>
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<tr>
<td>Exports (as % of GDP)</td>
<td>47.22</td>
<td>53.9</td>
<td>58.91</td>
<td>60.84</td>
<td>61.88</td>
<td>54.26</td>
<td>63.07</td>
<td>67.00</td>
</tr>
<tr>
<td>Imports (as % of GDP)</td>
<td>43.20</td>
<td>48.76</td>
<td>52.85</td>
<td>53.73</td>
<td>56.58</td>
<td>48.03</td>
<td>56.36</td>
<td>60.39</td>
</tr>
<tr>
<td>Diversity of Export</td>
<td>Germany 26.24%, Belgium 14.13%, France 9.34%, UK 7.68%, Italy 4.82%</td>
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<tr>
<td>destination (2011)</td>
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<tr>
<td>Exports to Indicative</td>
<td>China 1.68%, Brazil 0.49%, Russia 1.48%, India 0.38%, Mexico 0.35%, Indonesia 0.11%, Turkey 1.05%, Nigeria 0.40%</td>
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<td>Growth Markets (2011)</td>
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<tr>
<td>IGM Penetration</td>
<td>Top 5 Concentration 62.20%</td>
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<tr>
<td>Diversity of Import</td>
<td>Germany 14.54%, China 12.80%, Belgium 8.65%, UK 6.11%, Russia 5.97%</td>
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<tr>
<td>Source (2011)</td>
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<tr>
<td>IGM Penetration</td>
<td>Top 5 Concentration 47.15%</td>
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<tr>
<td>Imports from Indicative</td>
<td>China 12.80%, Brazil 2.07%, Russia 5.97%, India 0.91%, Mexico 0.42%, Indonesia 0.59%, Turkey 0.55%, Nigeria 0.85%</td>
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<tr>
<td>Growth Markets (2011)</td>
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</table>
The role of Birmingham Airport in rebalancing economic growth
UK Aviation Overview

### Airports Structure

<table>
<thead>
<tr>
<th>Structure</th>
<th>&lt;10,000</th>
<th>&lt;30,000</th>
<th>&lt;50,000</th>
<th>&lt;100,000</th>
<th>&lt;200,000</th>
<th>&gt;200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number by outward flights</td>
<td>40</td>
<td>12</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flight Concentration</td>
<td>9%</td>
<td>23%</td>
<td>19%</td>
<td>14%</td>
<td>12%</td>
<td>24%</td>
</tr>
</tbody>
</table>

### Airport Flights by Outward Destinations

- 1996: 40 flights
- 2001: 12 flights
- 2006: 5 flights
- 2007: 2 flights
- 2008: 1 flight
- 2009: 1 flight
- 2010: 0 flights
- 2011: 0 flights

### UK Export Destinations

- Source: DOTS

### UK Flight Destinations

- Source: SRS

### UK Flights Annual Change

- Source: SRS

### UK Exports Annual Change

- Source: DOTS

### Economic Impact

|------|-----------------|---------------------|----------------------|----------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------------------|----------------|
The role of Birmingham Airport in rebalancing economic growth

UK China Connectivity

UK Brazil Connectivity

UK Russia Connectivity

UK India Connectivity

UK Mexico Connectivity

UK Indonesia Connectivity

UK Turkey Connectivity

UK Nigeria Connectivity
1. The Catchment area is defined as the following NUTS-level 3 areas: Halton & Warrington, Cheshire CC, Derby, East Derbyshire, South & West Derbyshire, Nottingham, North Nottinghamshire, South Nottinghamshire, Leicester, Leicestershire CC & Rutland, Northamptonshire, Lincolnshire, Herefordshire County, Worcestershire, Warwickshire, Telford & Wrekin, Shropshire CC, Stoke-on-Trent, Staffordshire CC, Birmingham, Solihull, Coventry, Dudley & Sandwell, Walsall & Wolverhampton, Peterborough, Cambridgeshire CC, Milton Keynes, Buckinghamshire CC, Oxfordshire, Gloucestershire, Conwy & Denbighshire, Monmouthshire & Newport, Flintshire & Wrexham and Powys.


6. Indicative Growth Markets (ranked in GDP size order) – China, Brazil, Russia, India, Mexico, Indonesia, Turkey and Nigeria.

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The role of Birmingham Airport in rebalancing economic growth

Runway extension / Birmingham Airport capability by 2014

- Current routes
- Future routes

Map showing current and future routes from Birmingham to various cities around the world, including Ashkhabad, Dubai, Delhi, Islamabad, Amritsar, Beijing, Tokyo, Shanghai, Hong Kong, Bangkok, Singapore, Colombo, Johannesburg, Toronto, New York, Atlanta, Orlando, Cancun, Houston, Los Angeles, Vancouver.
The West Midlands Economic Forum

The West Midlands Economic Forum is a neutral, independent forum bringing together representatives of the public, private and voluntary sectors to evaluate real trends in the local economy.

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