Birmingham Airport’s role in a balanced British economy

An initial examination of the macroeconomic potential of Birmingham Airport with extended long-haul capabilities

Andrew Evans
Richard Holt
Rachel Lund
Mark Pragnell

30 April 2013

020 7808 4059
commissioned projects@capitaleconomics.com

Capital Economics Ltd
150 Buckingham Palace Road, London SW1W 9TR
Registered in England, Registration No. 2484735. VAT No. GB 713 8940 25.

Executive summary

Capital Economics has been commissioned by Birmingham Airport to explore from a macroeconomic perspective the case for expanded long-haul passenger air capacity at the airport.

The economies of the world are becoming ever more inter-connected, as labour, capital and goods and services flow more freely across international borders. This globalisation continues despite recessions. What's more, the locus of global economic growth is moving steadily away from Western Europe. The United Kingdom needs to be connected to the fast growing long-haul destinations.

We have examined the case for additional long-haul passenger capacity at Birmingham Airport by analysing the catchment areas of potential long-haul airports. Our analysis shows that demand for long-haul air travel is strong and growing in Birmingham Airport's catchment area, which covers not only the Midlands, but also large parts of Wales and the South West. Without Birmingham, the remaining airports have to serve catchments that may be stretched. With Birmingham, long-haul capacity is more evenly distributed across the country and catchment areas served by each airport are more balanced. Long-haul airports at Heathrow, Birmingham and Manchester could serve and support growth in economies of their sizeable catchment areas.

Currently, the Birmingham Airport catchment area is the second largest market for both long-haul leisure and business travel. However, without the required airport capacity, 63 per cent of these trips are made through one of London's overly congested airports. The economy that Birmingham Airport is best placed to serve for long-haul is important to the growth and prosperity of UK plc. It contains around a quarter of all Britain's businesses and employees. The nature of its economy also makes air connectivity, particularly to long-haul destinations, crucial for its future success. It is specialised in high value manufacturing sectors which are likely to have larger and more distant networks of customers, suppliers and intermediaries.

With the London airports and Manchester, Birmingham provides balance and capacity to long-haul provision, which will be essential to UK plc

The Birmingham Airport catchment area:

- is an economy with nearly eight million economically active residents, over ½ million businesses and 6½ million employees
- is the destination for a quarter of all foreign direct investment that comes into Britain
- exports £55 billion of goods each year

Pressures on air capacity in the United Kingdom will continue to grow. Birmingham Airport can help to quickly ease congestion at the airports in the South East. Currently, 7½ million people within Heathrow's catchment area can also reach Birmingham Airport in two hours or less. Britain's population is forecast to grow by 8.75 million by 2032, with Birmingham Airport seeing the largest increase of any long-haul airport catchment area. Equally, we expect economic growth in the airport's catchment to exceed that of the national average. Birmingham Airport is well placed to handle the additional demand for air travel that this will bring, and its connectivity will be even better when HS2 is completed. By 2032, Birmingham will be the most convenient long-haul airport for nineteen million people.

20 million more long-haul trips in the United Kingdom by 2030

Currently, Birmingham would be the most convenient long-haul airport for 15½ million people

Birmingham Airport has a population of 35 million within two hours travel time of it, which is the largest market of any airport with long-haul capacity

The economy of Birmingham Airport's catchment area contains nearly eight million economically active residents, over ½ million businesses and 6½ million employees

A long-haul Birmingham Airport is the most convenient for not only the Midlands, but also much of Wales and the South West, taking pressure off London airports

Contents

Introduction

Airports Commission

Discussion Paper 02:
Aviation Connectivity and the Economy

March 2013

An independent commission appointed by Government

This report has been commissioned by Birmingham Airport from Capital Economics in order to better understand the macroeconomic context for any development of the airport to enable it to meet future demand for longer-haul travel.

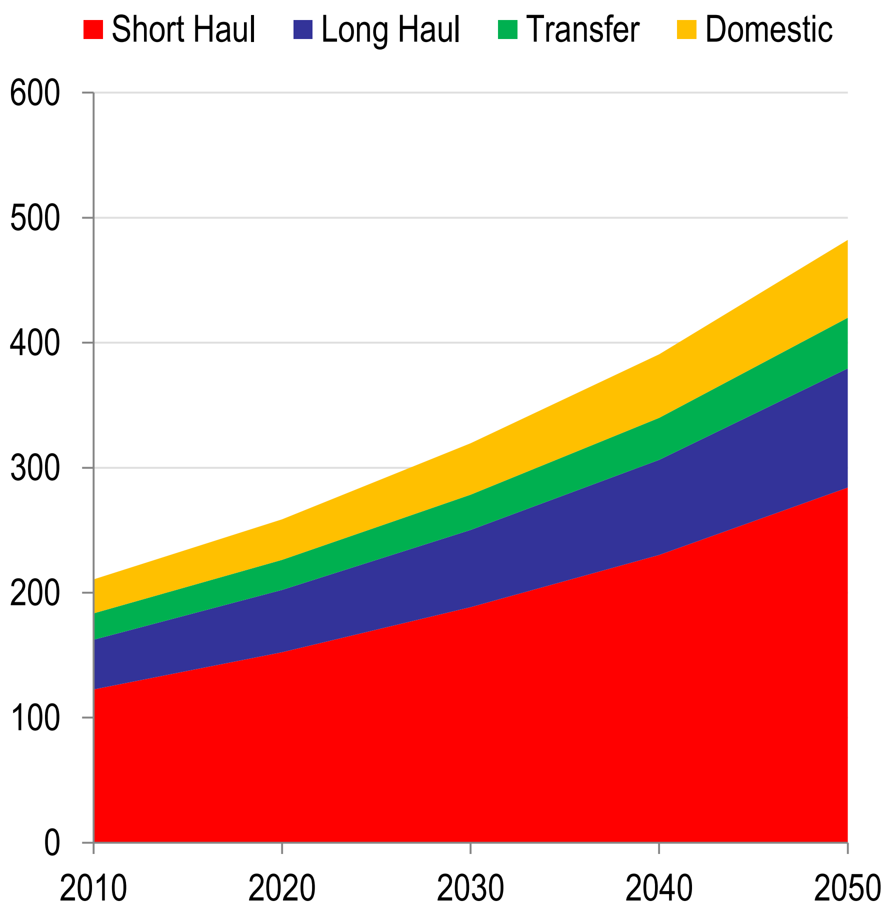
This report forms part of the preparatory work by Birmingham Airport for their submission to the Airports Commission.

The Airports Commission is seeking evidence to better understand the ways in which aviation connectivity contributes to the United Kingdom's economic growth, the extent to which additional capacity is needed and how capacity constraints may be impeding aviation connectivity for domestic firms and residents.

First, we look at the role of long-haul air capacity in the future prosperity of the United Kingdom. Second, we analyse the size and geographical distribution of the catchment areas for potential long-haul hubs. Third, we consider the nature of the economy in Birmingham Airport's catchment, and the importance of long-haul air connectivity in sustaining it. Fourth, we assess the impact of future growth and infrastructure improvements on demand for air travel in Birmingham Airport's catchment.

The long haul to economic growth

The challenge of airport capacity



Forecasts for passenger demand (millions passengers)

Source: DfT

The context for this report, and the Airports Commission itself, is limited spare capacity at British airports, and especially at those in the south east of England.

London's major airports are already operating at levels that are filling both runways and terminals. Even in 2011, with weak domestic and global economies, Heathrow had spare room for equivalent to less than one per cent of its traffic. Considering all twelve airports in and around London, the available capacity could accommodate passenger growth of less than a third – much of which from short-haul only facilities.

Demand, on the other hand, looks set to rise.

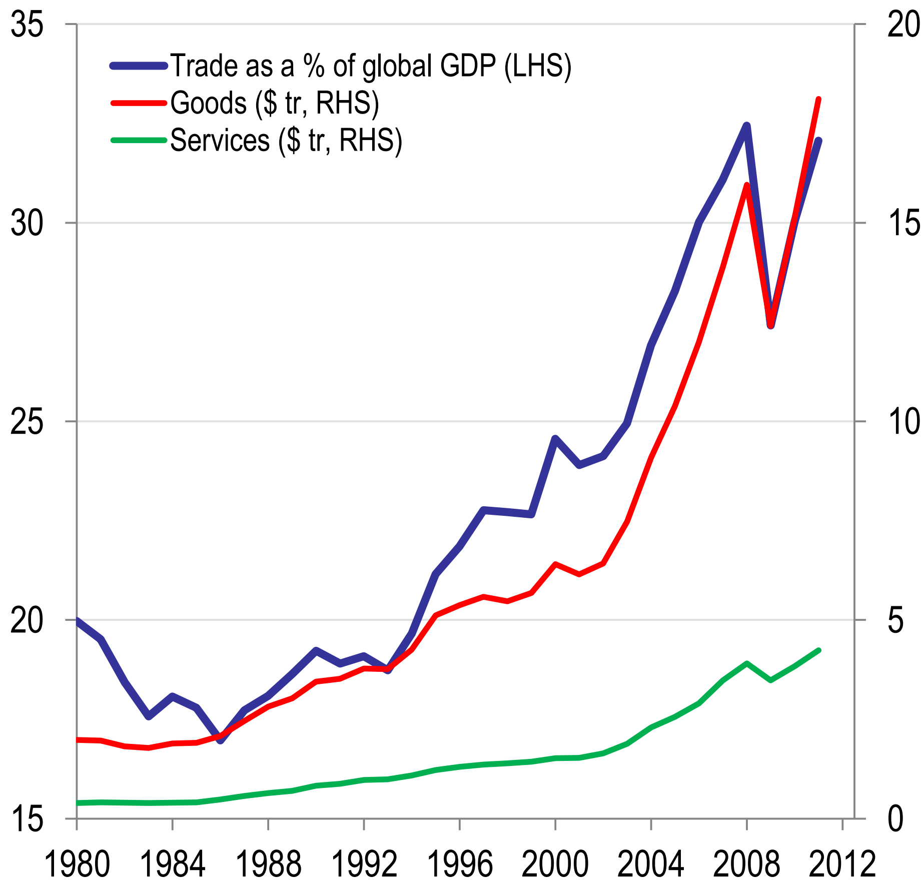
The latest DfT forecasts suggest that total passenger demand will more than double to 480 million passengers per annum in 2050. The projected pace of growth in long-haul demand is even greater, increasing from 40 million in 2010 to 95 million by 2050. Even in the shorter term, demand for long haul flights is expected to increase by 22 million passengers per year by 2030.

To meet growing passenger demand it is clear that extra capacity is required, not just over the long term, but also to deal with a sharp increase demand over the next decade or two.

Sources: DfT and Parsons Brinckerhoff for SELEP

The challenge will be to deliver airport capacity that will allow British businesses to prosper in an ever more globalised economy

Global economic growth as the context



Measures of world trade in goods and services

Source: Capital Economics

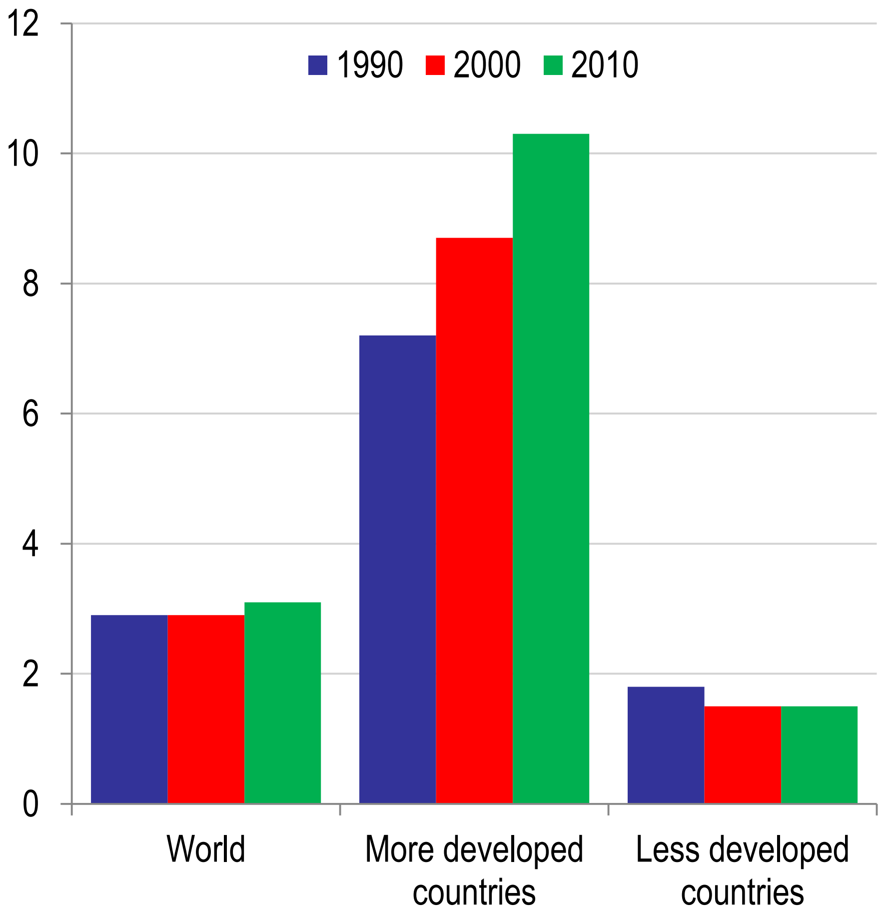
Globalisation, or the economic interdependence of nation states, continues apace – despite the recent recessions in many major 'Western' economies and sharply slowed growth in emerging markets.

Over the past two decades trade has increased as a share of global gross domestic product from twenty per cent to over 30 per cent. This has been driven by trade in goods although trade in services is also on an upward trajectory.

Furthermore, both labour and capital mobility continue to grow. Over the past twenty years the proportion of foreign workers in developed countries has increased decade by decade. Likewise, capital also now flows more freely around the globe. Global external liabilities, a measure of the scale of cross-border lending and borrowing of internationally active banks, have risen from just over $1 trillion in 1980 to over $25 trillion in 2011.

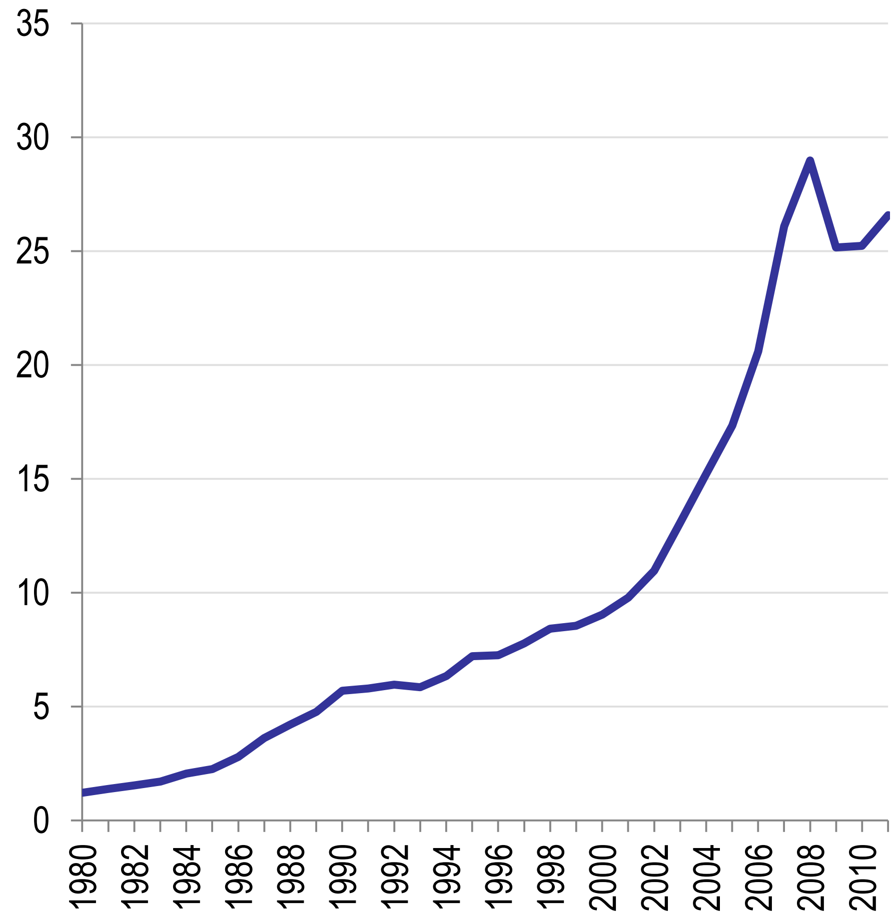
As international borders decrease in significance, and economies become more interconnected, demand for air travels grows. Future prosperity in the United Kingdom will depend on the ability of businesses across the country to reach global markets.

Despite recessions in the Western world, cross-border trade in goods and services remains on a steep upward trend .....



International migrants as a percentage of the population

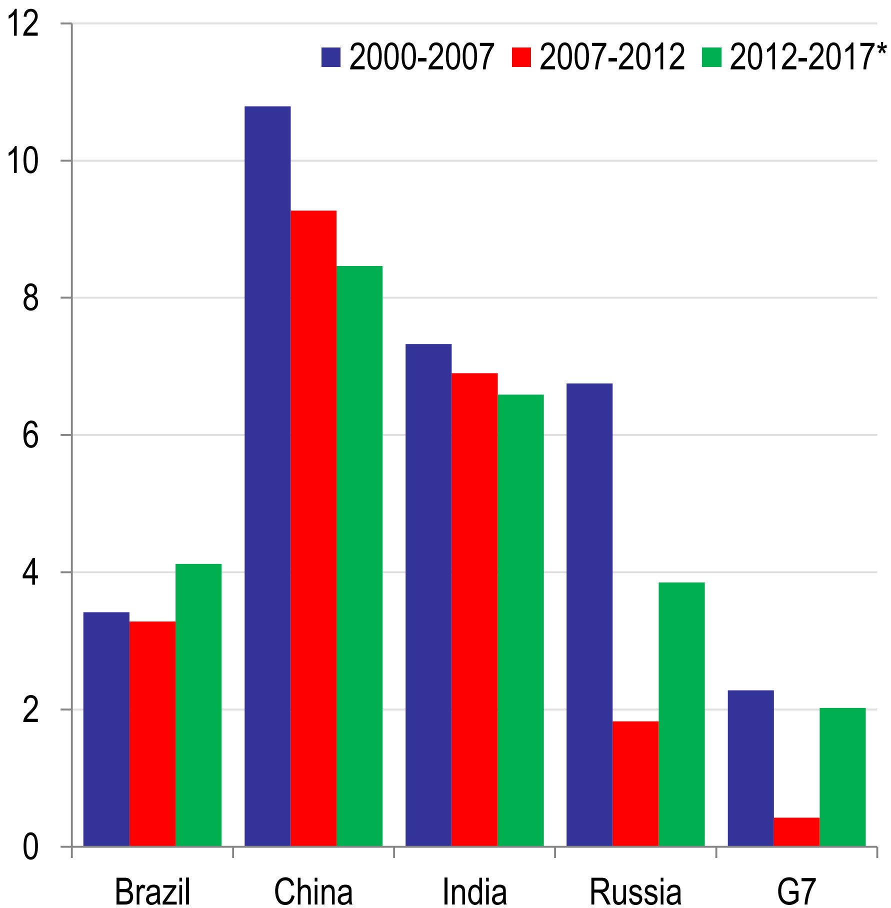
Source: United Nations



Global external liabilities ($ trillion)

Source: Bank for International Settlements

..... while both labour and capital are increasingly mobile internationally



Average annual GDP growth rates (%)

Source: IMF, World Economic Outlook. * IMF forecast

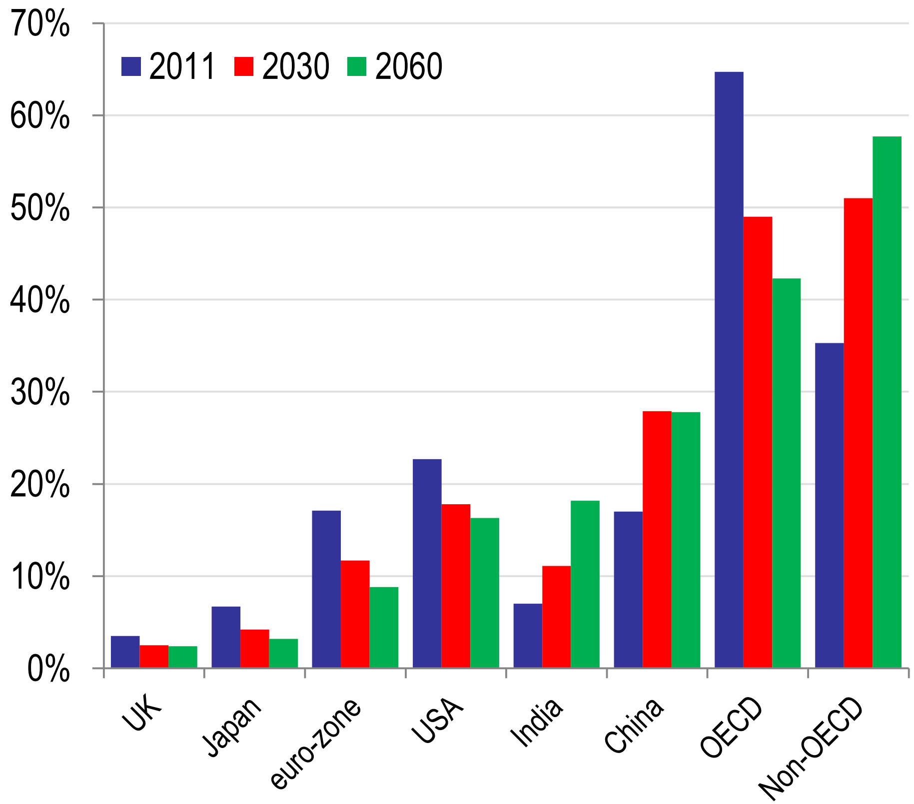
Growth is no longer concentrated in the Western world. Emerging markets, particularly Asian countries, have been outpacing the developed world for some time. And the recent recession has only served to compound the trend.

Many countries in the West with large debts likely face several more years of disappointing growth as they deleverage. Meanwhile the emerging markets, that have by and large escaped the worst of the crisis, will continue their catch-up to the developed world.

What's more, the anticipated future growth in the Asia-Pacific region, South America and, eventually, Africa ensures the trend of growth moving further afield from Europe and North America is set to continue for decades.

As growth shifts to emerging economies, air travel becomes ever more important to enable businesses to tap into the growing markets.

But the shape of international growth is changing with the BRIC economies in the driving seat and the G7 in the slow lane



Shifts share of world GDP to 2060, 2005

Source: OECD Economic Policy Papers No.3 Note: GDP on purchasing power parity basis

By 2060 the world will be almost four times wealthier than it is now, according to long term projections for growth.

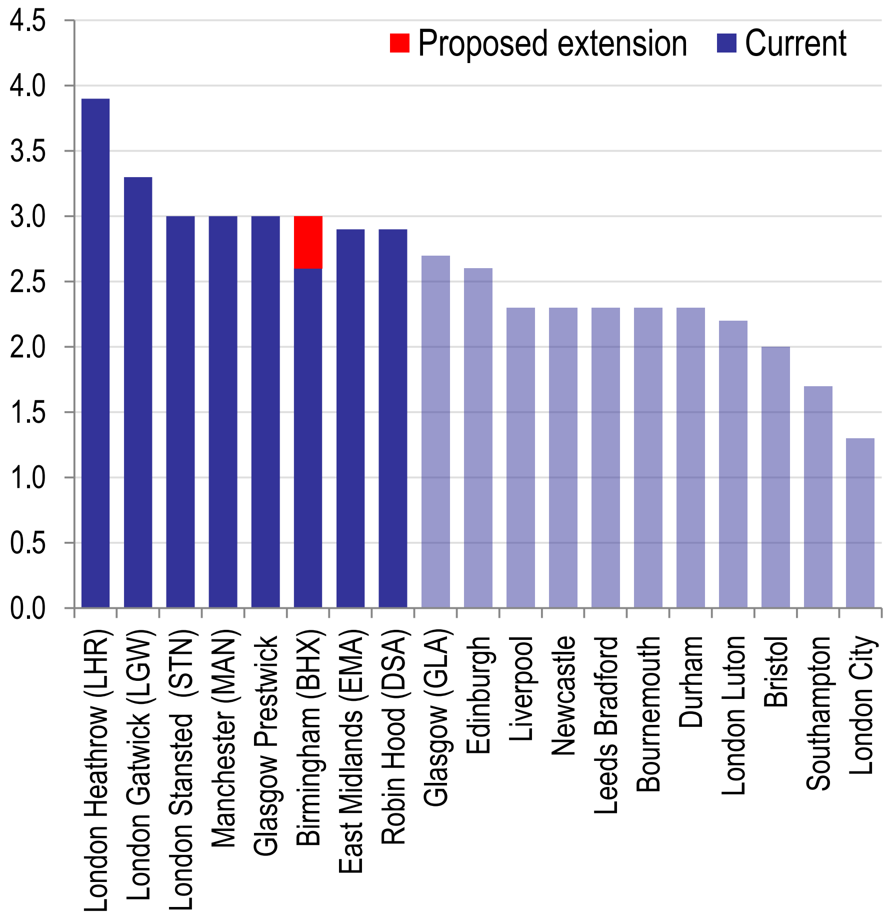
However, by 2030, more of the world's gross domestic product will come from outside the long established economies of the Organisation for Economic Cooperation and Development (OECD) than in it, and China will have surpassed the United States as the biggest economy. The United Kingdom and euro-zone will have a smaller stake in the world economy than they do now.

Citizens of the emerging markets will be much richer by 2030. China's gross domestic product per capita is set to triple in the next eighteen years, although households in the United Kingdom, Europe and the United States will still be richer on a per capita basis through to 2060.

With over 75 per cent of long-haul traffic concentrated in the South East airports, it is harder for businesses in other areas of the country to benefit from the fastest growing economies.

The locus of global economic growth is getting steadily further away from Western Europe and Britain, and into long-haul territory

Airports ready for the long-haul



Runway length of British airports (km)

Source: Liaison Group of UK Airport Consultative Committees

These trends in global economics point towards an increasing need for long-haul air capacity, if the United Kingdom is to remain connected and relevant for international business.

To operate a comprehensive long-haul service requires a runway length of around, and preferably in excess of, three kilometres. Currently there are seven airports in Great Britain with a runway of 2.9 kilometres or longer, and we have considered all of these as potential facilities for servicing long distance travel demand.

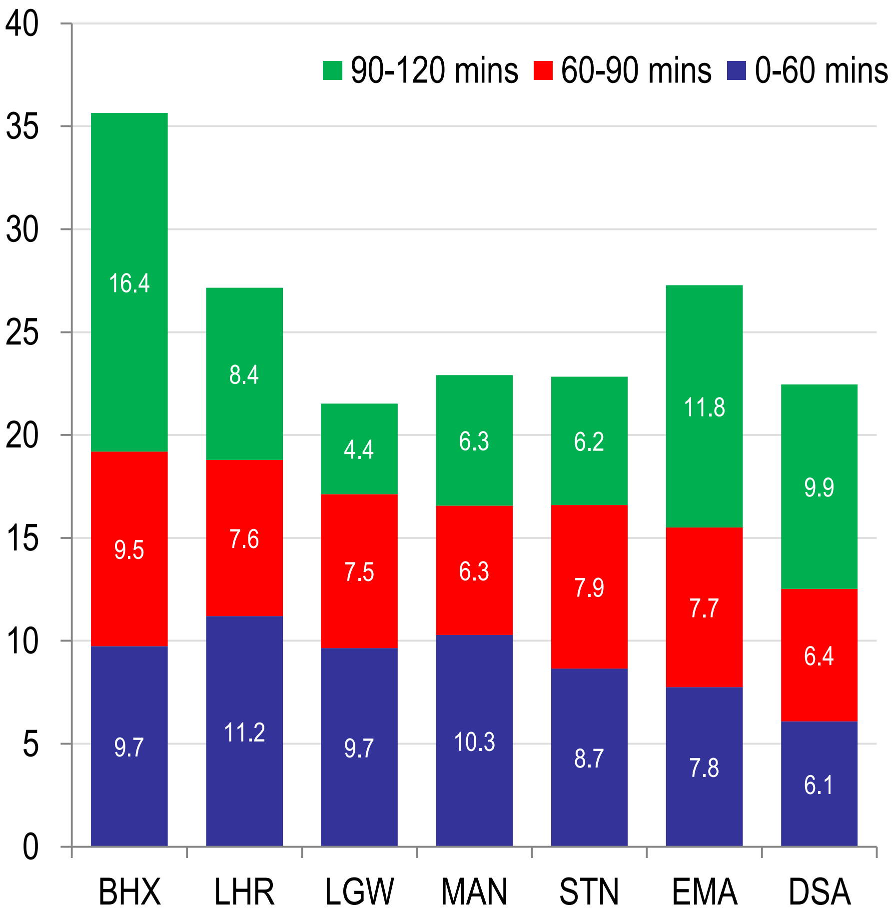
At present, Birmingham's runway is 2.6 kilometres. Work has begun to extend the runway to over three kilometres, giving the airport the capability to serve internationally significant long-haul markets.

Note: Only one Scottish airport, Glasgow Prestwick, has a runway of 2.9 km length or more. However, in subsequent analysis, and to be cautious, we have assumed that Glasgow Airport does as well in order to reflect possible improvements there and offset poor connectivity to Glasgow Prestwick.

Runway lengths stop the majority of British airports serving long-haul destinations in the fastest growing economies

Markets served by potential long-haul airports

Airport catchments by travel time



Current population catchments by fastest mode (millions)

Source: Capital Economics analysis of ONS and SDG data.

When considering the market served by an airport, the catchment area covered can be specified differently for different services. For short-haul (especially domestic and European) routes and discretionary travel, airlines often consider the catchment of an airport as the population within a given time to travel to/from the airport.

For journeys where access times to the airport are the most critical, Heathrow has the biggest market. Considering the one hour catchment, Heathrow has the largest catchment at just 11.2 million, while Manchester (10.3 million), Birmingham (9.7 million) and Gatwick (9.7 million) are not far behind.

For a 90 minute travel time, Birmingham Airport has the biggest catchment, picking up almost twenty million people, marginally more than Heathrow.

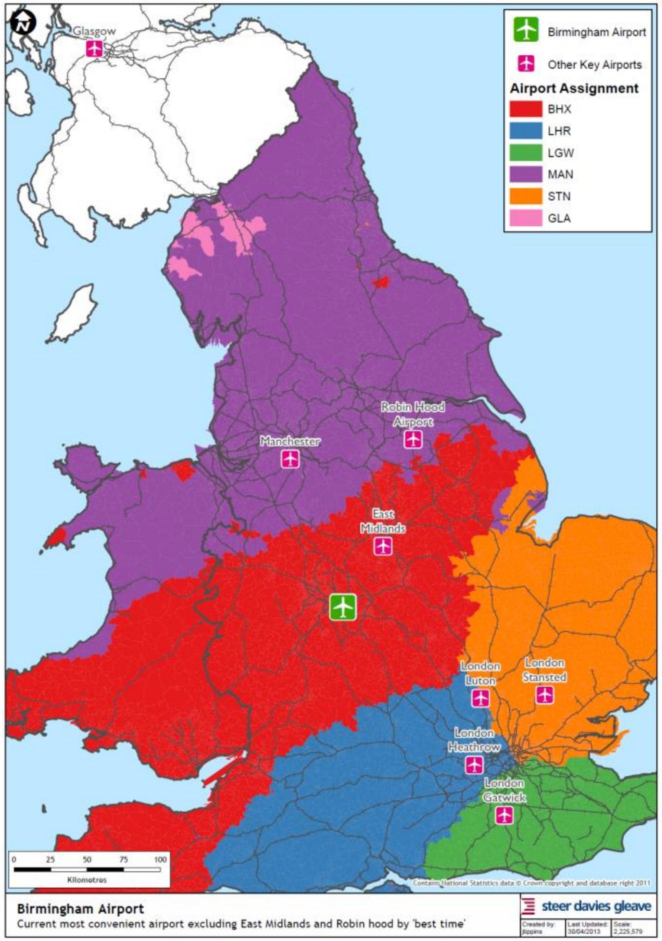
Birmingham Airport captures over 35 million people within two hours, significantly more than any other airport. This is not surprising given its central location in the country.

Birmingham is well located to fulfil demand for long-haul travel, with over half the population of England and Wales able to reach the airport in under two hours.

Note: 1. Birmingham Airport commissioned SDG to analyse present and future surface access journey times which have been used to inform this report. Travel times used are the fastest mode between road and rail from data provided by SDG. The journey time data does not include Scotland and, although Glasgow's catchment does pick up some of northern England, it is not relevant to our analysis and therefore we have not presented results for Glasgow. 2. The analysis in this section focuses on current catchments without future improvements in infrastructure such as HS2.

Birmingham has a population of 35 million within two hours travel time, which is the largest catchment of any long-haul airport

Airport catchments by convenience



Current most convenient airport by best time

Source: Capital Economics' analysis of SDG data

In this section we define and analyse the long-haul airports' catchment areas in a way which allows us to better understand the characteristics of the communities and businesses they are best placed to serve for long-haul travel.

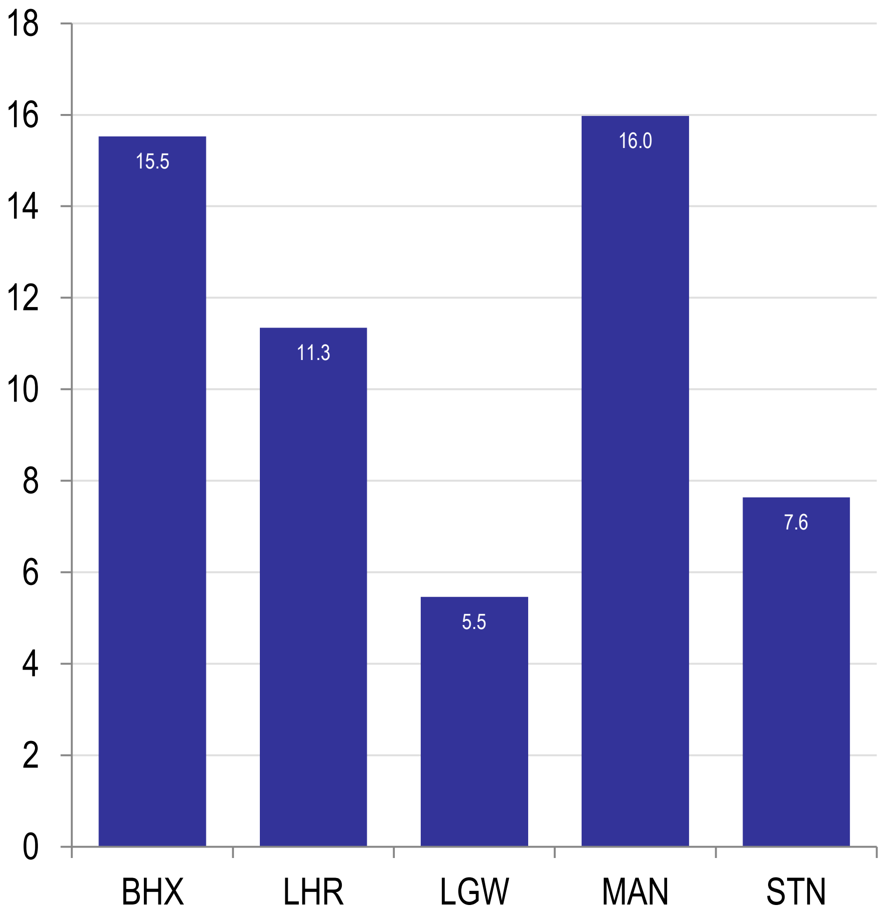
For long distance travel, passengers need to travel to one of the airports providing long-haul services, regardless of travel times. We have therefore used a measure which allocates people to their 'most convenient' airport. That is, the airport which is closest to them in terms of travel time using either rail or road.

The analysis in this report will focus on the six airports with potential for long-haul services with catchments defined as the number of people for which it is the most convenient airport (excluding East Midlands and Robin Hood). Analysis of catchment areas including EMA and DSA is included in the appendix.

The map illustrates the catchments calculated on current journey time data for the five English airports.

Birmingham Airport is not only the most convenient for those in the Midlands. It is also more convenient for large parts of Wales and the south west of England.

With Birmingham Airport, the catchments for long-haul travel are fairly evenly distributed across the country



Population catchment by most convenient airport (millions)

Source: Capital Economics analysis of ONS and SDG data

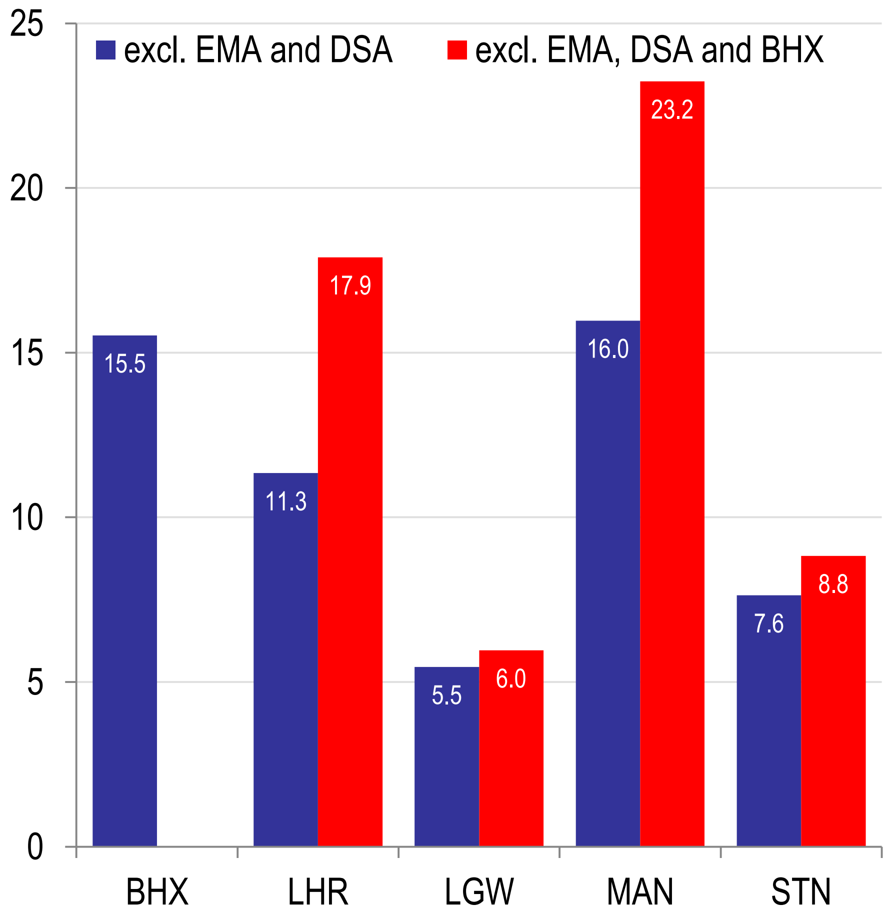
Currently, Birmingham is the most convenient long-haul airport for 15.5 million people, covering large parts of the Midlands, Wales and the south West of England.

Manchester and Heathrow also have large catchments on this basis, at 16.0 and 11.3 million respectively.

Although Birmingham and Manchester airports have similar and large catchments, bigger than any other airport, with their current facilities and routes offered, they account for only 4.7 and 16.5 per cent of United Kingdom long-haul traffic.

If Birmingham and Manchester were viable options for long-haul destinations, they would both have considerable catchments, and could relieve pressure on airports in the South East.

Birmingham is currently the fastest long-haul airport to get to for almost 16 million people



Population catchment by most convenient airport (millions)

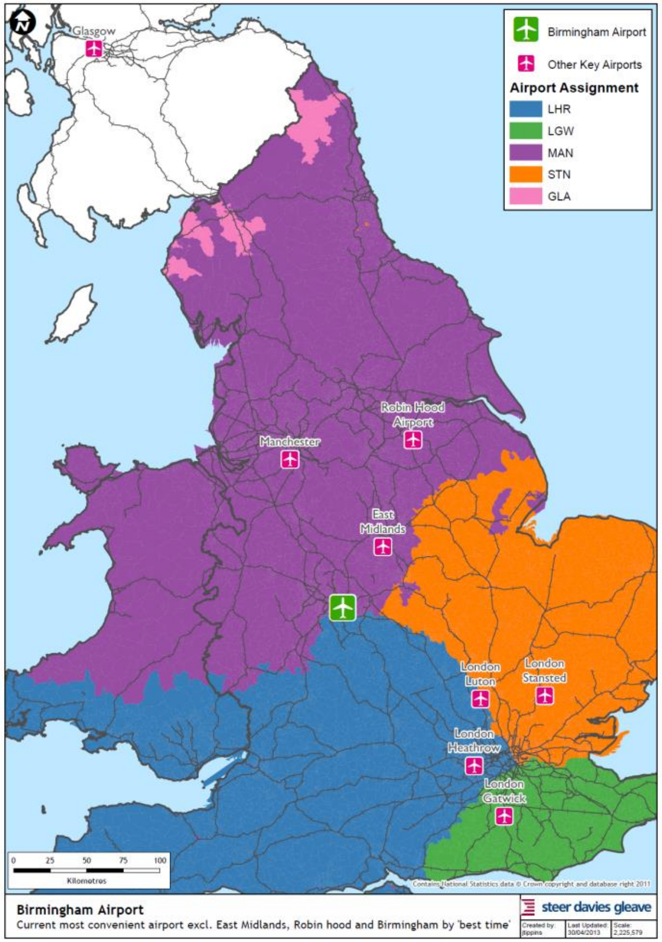
Source: Capital Economics analysis of ONS and SDG data

Birmingham is currently the closest of the airports with long-haul potential for over fifteen million people. Without it, Manchester is the closest airport for 23.3 million people and Heathrow is closest for 17.9 million.

However, given the limited long-haul services that currently operate from Manchester and Birmingham, Heathrow and Gatwick have to serve large parts of their catchments, while some demand is likely to be lost altogether because of a lack of local capacity.

If Birmingham does not extend its runway, pressure to service large and growing catchments will increase on the other long-haul airports, particularly Heathrow and Manchester.

Without Birmingham, Heathrow and Manchester will be left serving unsustainable catchments



Current most convenient airport by best time (excl. BHX)

Without Birmingham Airport as a long-haul facility, the catchment areas of the English airports may be unbalanced and unsustainable.

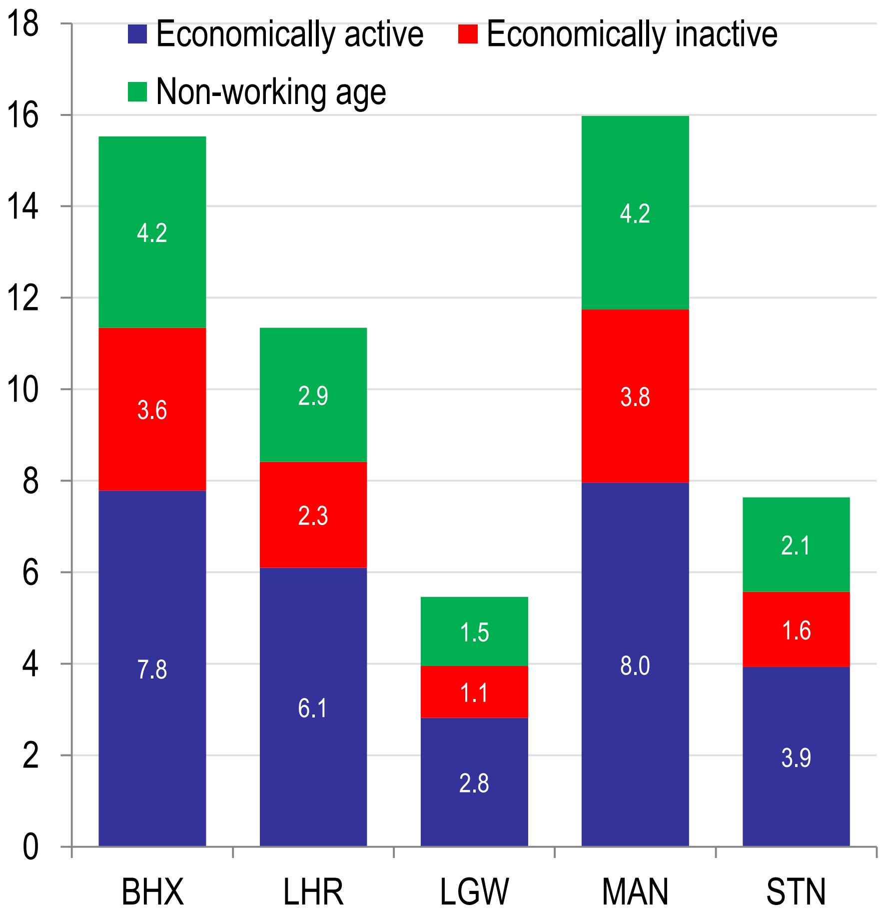
Manchester is the most convenient long haul airport for people living in areas as far afield as Mid Wales and up to the Scottish border. Meanwhile, Heathrow is most convenient for the majority of the home counties, the South West region and much of the Midlands.

Birmingham Airport provides a balance to the distribution of long-haul airports in Britain. As well as easing passenger demand pressure on other airports, it would reduce the need for some people to make extremely long surface journeys in order to take long-haul flights.

Without Birmingham, Manchester's catchment would extend from Mid Wales to the Scottish border

The potential of Birmingham as a long-haul airport today

Leisure and personal travel market



Population with airport as most convenient (millions)

Source: Capital Economics analysis of ONS and SDG data

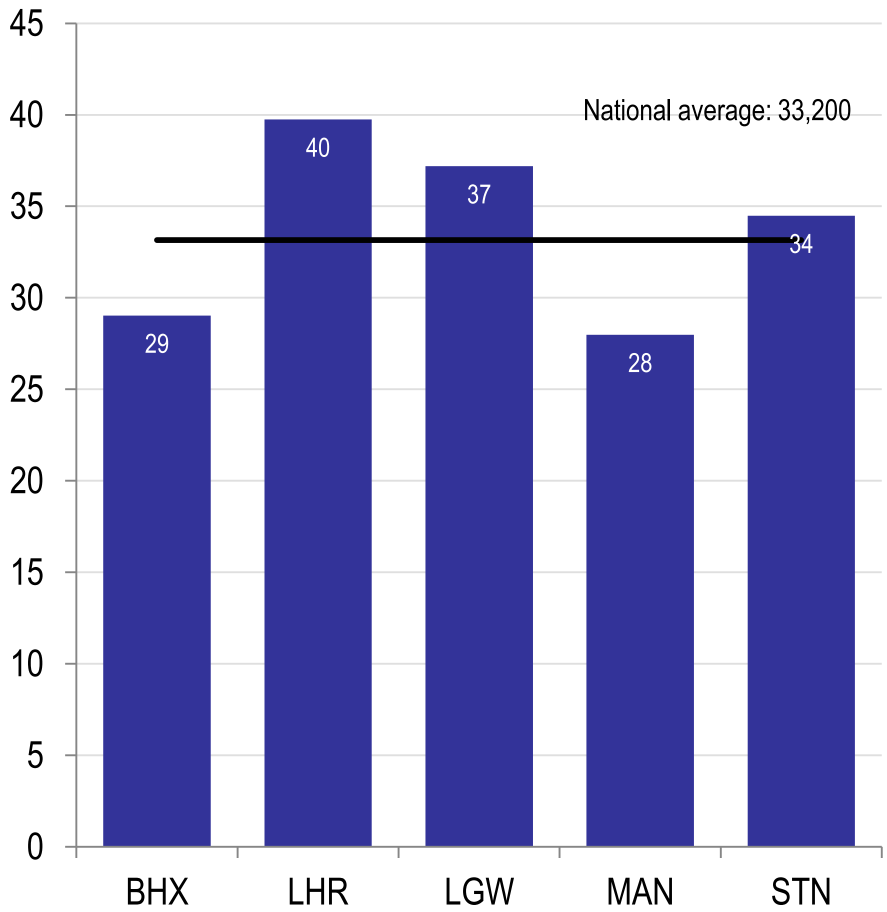
This section considers the market for leisure and personal travel, which comprises 78 per cent of the total aviation market and 80 of long-haul travel demand.

Of the fifteen million or so people in Birmingham Airport's catchment area, almost eight million are economically active residents, helping to drive demand for leisure travel.

Manchester has around eight million economically active while Heathrow has a little over six million. Both Gatwick and Stansted are considerably smaller at 2.8 and 3.9 million respectively.

Containing 27 per cent of Britain's economically active population, Birmingham's catchment area will generate significant demand for leisure and personal travel.

Birmingham is currently the fastest long-haul airport to get to for almost eight million people in the economically active population



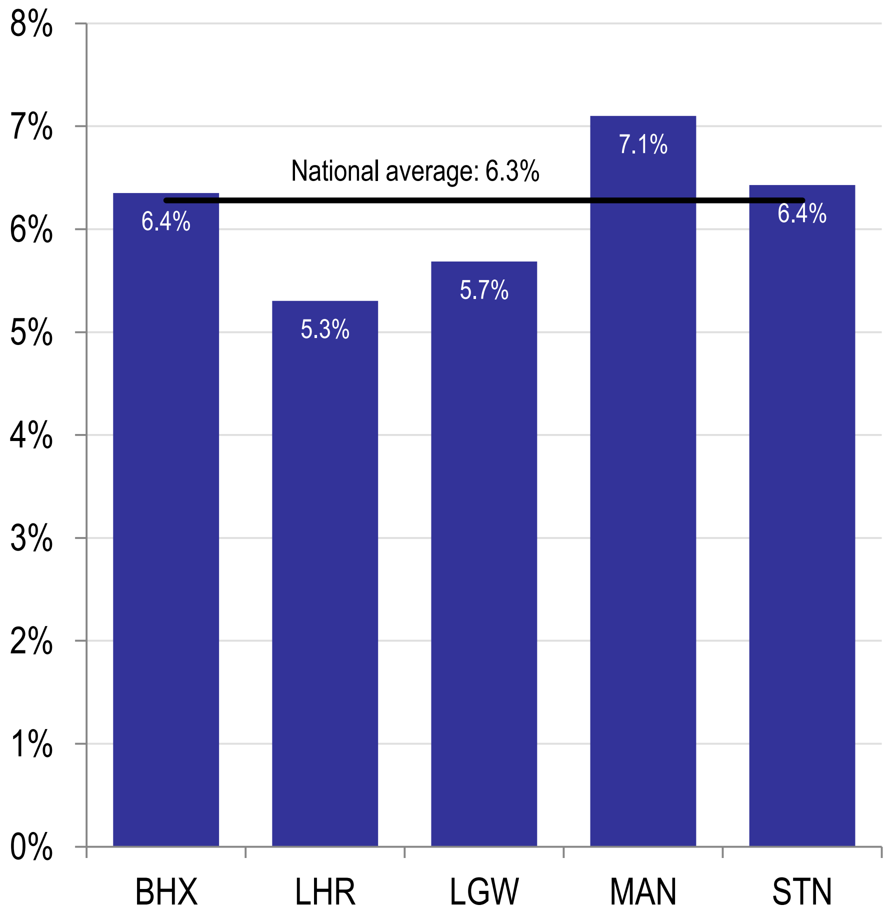
Average earnings by airport catchment (£ thousands)

Source: Capital Economics analysis of ONS and SDG data

The south east of England, and especially London, has the highest concentration of the highest earning jobs and higher average rates than other parts of the country. Therefore, unsurprisingly, the average earnings of the residents in Birmingham's catchment falls below the incomes of those in the London airports' catchment areas.

However, as Birmingham Airport's catchment area is a less mature market, it means that it is likely to have a higher income elasticity of demand. That is, an increase in incomes will have a proportionately greater effect on the demand for air travel than it would in the south east of England.

Income levels in the Birmingham Airport catchment don't match those in the South East ....



Unemployment rate by airport catchment

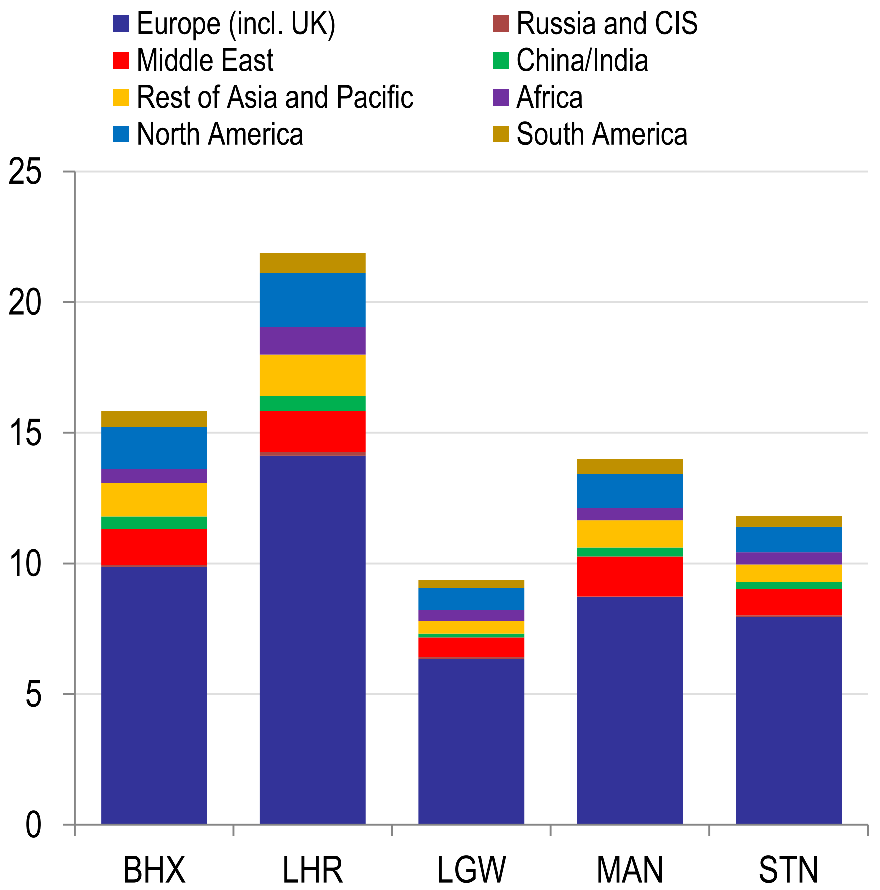
Source: Capital Economics analysis of ONS and SDG data

Similarly, the south east of England is the most prosperous part of the country with the lowest rates of unemployment, which is reflected in the data for catchment areas of Heathrow and Gatwick.

At 6.4 per cent, the unemployment rate in the Birmingham Airport catchment area is just above the national average.

Birmingham's catchment area still faces economic challenges but improvements in economic activity rates will release additional demand for air travel.

.... and the rate of unemployment is slightly above the national average

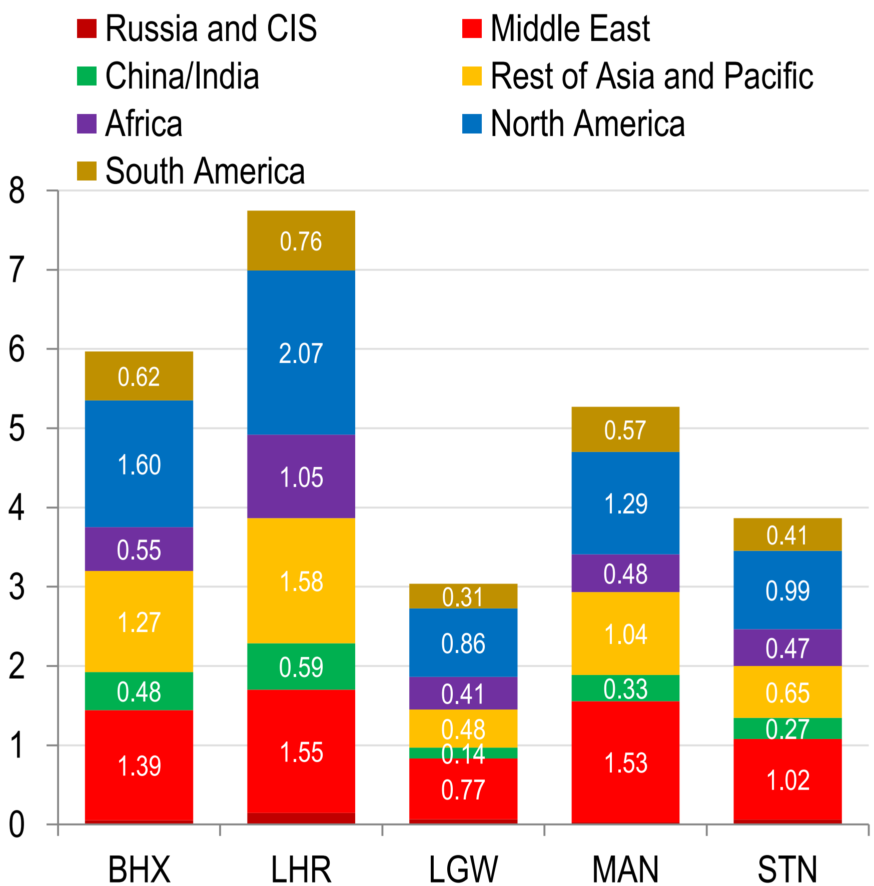


Leisure trips by air by Britons by catchment , 2011 (million)

Source: Capital Economics' analysis of CAA (provided by Birmingham Airport) and SDG data

Current demand for leisure travel in the Birmingham catchment area is second only to Heathrow. In 2011, over fifteen million leisure trips were made by people living in the area for which Birmingham is the most convenient airport.

Nevertheless, over fifteen million air trips were made by residents of the Birmingham catchment area in 2011 – second only to Heathrow



Non-Europe leisure trips by Britons, 2011 (million)

Source: Capital Economics analysis of CAA data and SDG data

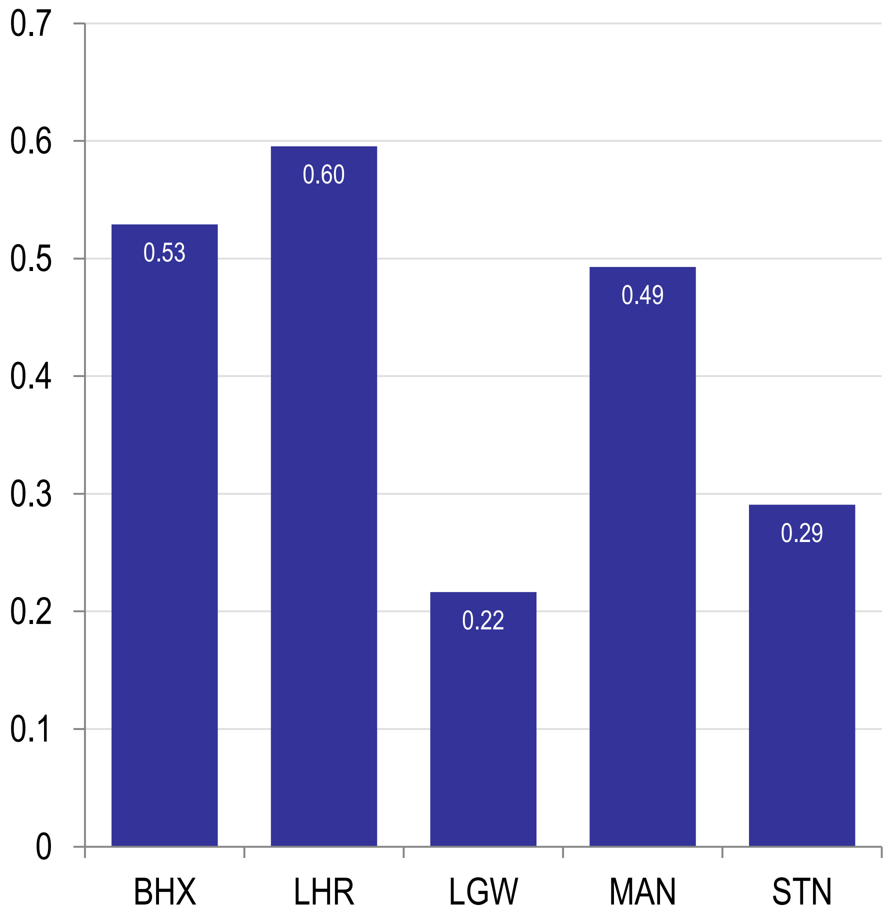
Focussing on leisure travel to long-haul destinations reveals that those who live within Birmingham Airport's catchment area make more long distance trips than in any other airport's catchment area aside from Heathrow. There were 6.0 million long-haul trips made by residents in the Birmingham Airport catchment area in 2011, second to the Heathrow catchment with 7.7 million.

There were under four million long-haul leisure trips from the Manchester catchment and under three million by residents for which Gatwick or Stansted were the most convenient airports.

Birmingham's catchment is the second largest market for long-haul personal and leisure travel, but residents currently have to travel to a more distant airport to make these trips. Providing direct connections to long-haul destinations from their most convenient airport will aid growth in the catchment area's economy.

Large numbers of trips from the Birmingham catchment to long-haul destinations. Again, only second to Heathrow

Business travel



Active businesses by airport catchment, 2011 (millions)

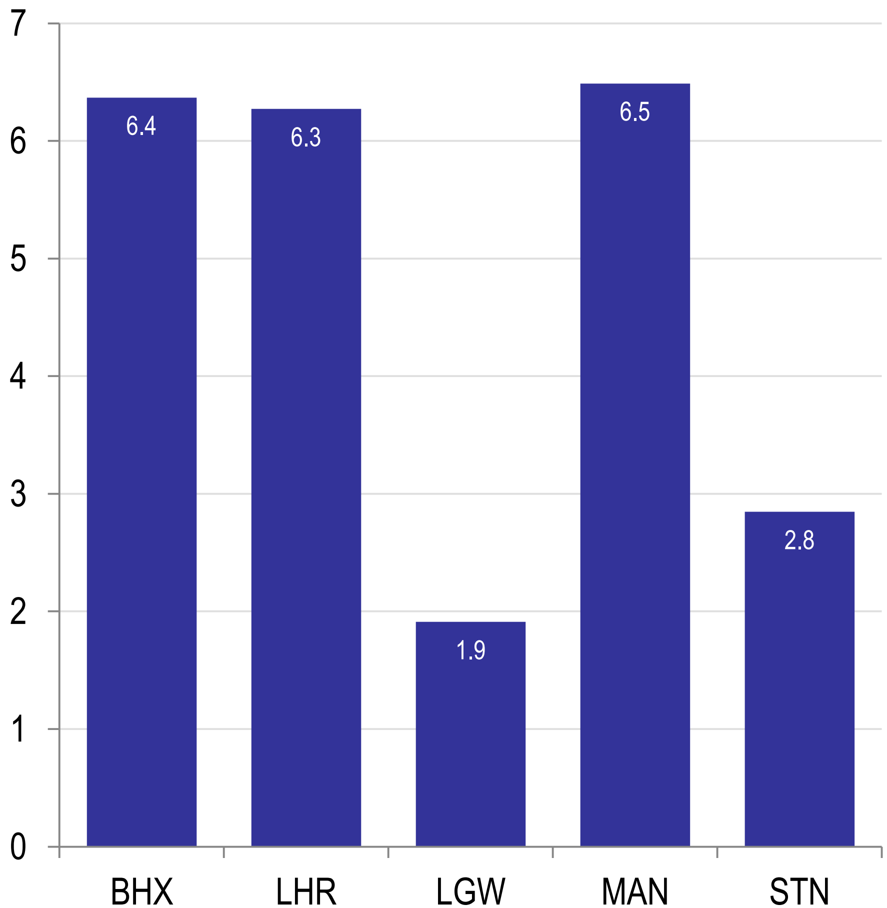
Source: Capital Economics analysis of ONS and SDG data

This section considers some of the drivers of demand for business travel, which currently accounts for 22 per cent of total passenger demand and twenty per cent of long-haul passenger demand.

Over 0.5 million businesses are located in Birmingham's catchment area, compared to almost 0.6 million in Heathrow's and a little under 0.5 million in Manchester's.

Birmingham Airport's catchment contains a significant proportion of the country's potential demand for business air travel.

Over ½ million businesses are located within the Birmingham catchment



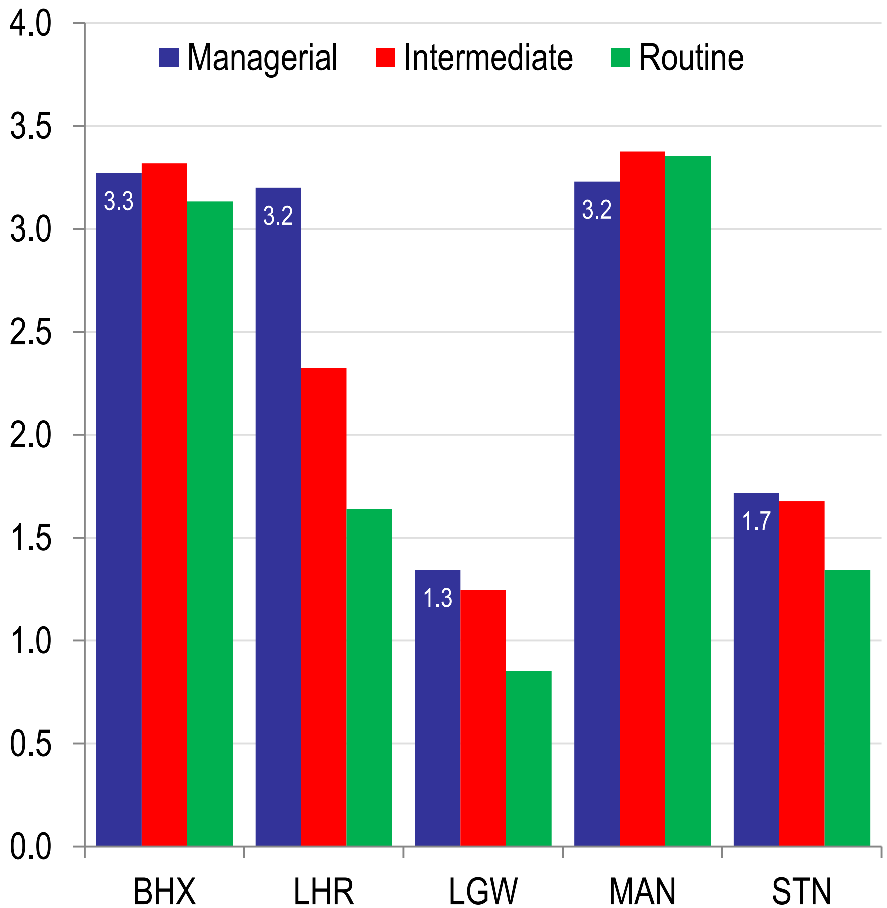
Employees (workplace-based) by catchment, 2011 (millions)

Source: Capital Economics analysis of ONS and SDG data

The businesses in Birmingham's catchment employ 6.4 million workers. That equates to over 25 per cent of Britain's entire workforce.

Around one quarter of all businesses and employees currently have Birmingham as their closest long-haul airport, but are unable to use it for long distance business trips.

.... with 6½ million employees working in the catchment



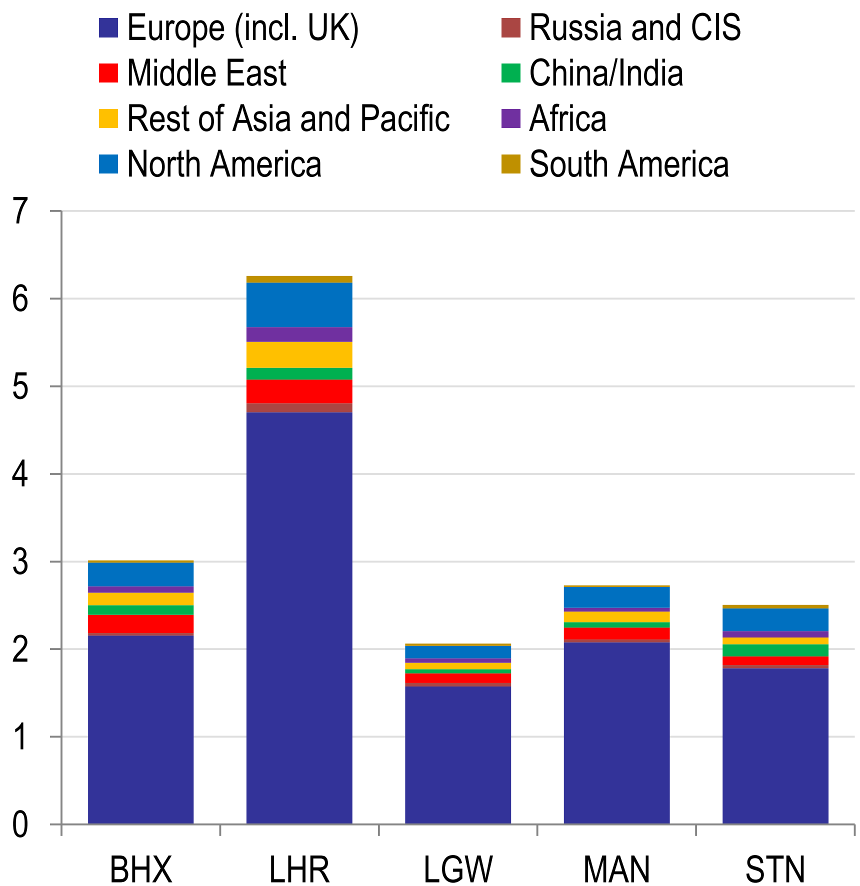
Occupation (residence-based) by catchment, 2011 (millions)

Source: Capital Economics analysis of ONS and SDG data

There are more residents in Birmingham Airport's catchment area holding managerial positions than in any other long-haul airport's catchment. Managerial level employees are more likely to travel for business by air than 'intermediate' or 'routine' occupations.

Birmingham Airport could provide the closest long-haul service for over 25 per cent of Britain's managerial workers, who are more likely to travel for business than any other group.

Birmingham is the fastest option for more managers than any other long-haul airport

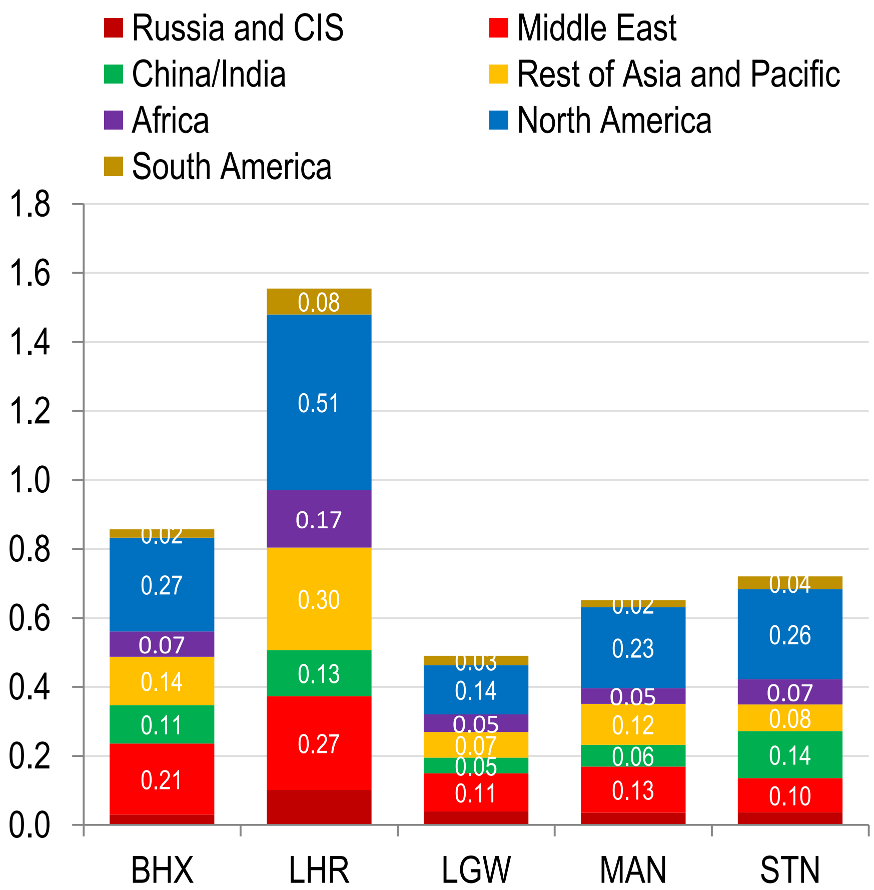


Business trips by air by Britons by catchment, 2011 (million)

Source: Capital Economics analysis of CAA data and SDG data

The business demography of Birmingham Airport's catchment area has translated into demand for business travel. CAA data on business travel by British residents show that 3.0 million trips were made in 2011.

Over three million business trips made from the Birmingham catchment in 2011 – second only to Heathrow



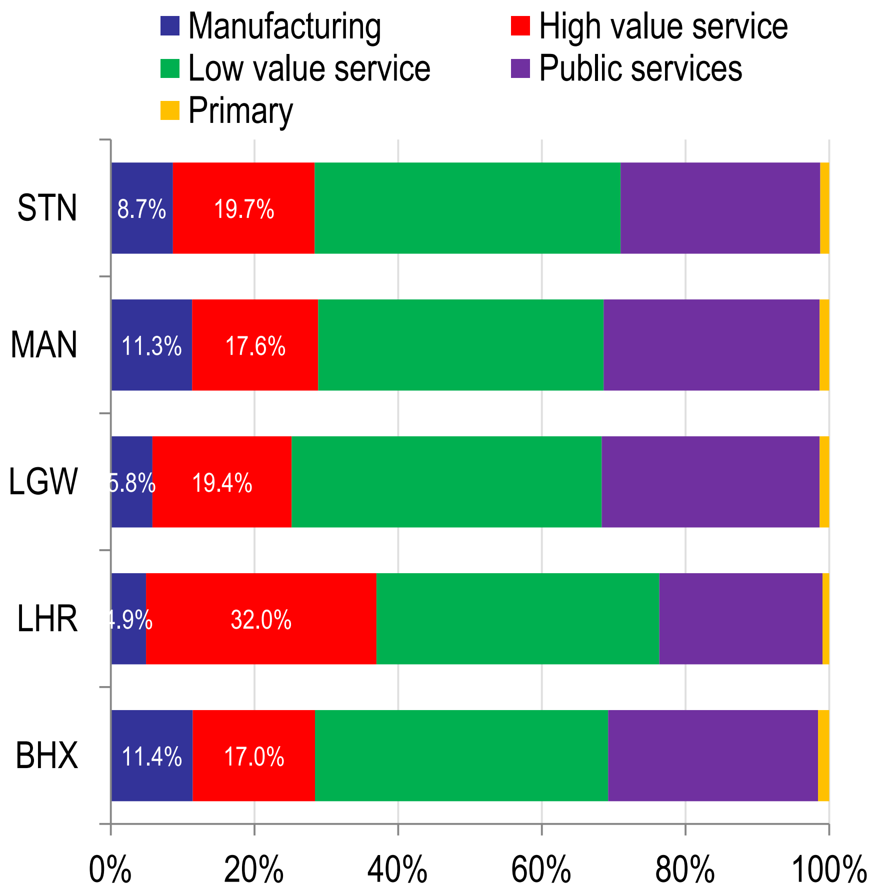
Selected business trips by air by catchment, 2011 (million)

Source: Capital Economics analysis of CAA data and SDG data

Birmingham Airport's catchment area provides the second biggest demand for business travel to long-haul destinations after Heathrow. Notably, in 2011, there was strong demand for the emerging markets in Asia (including China and India) and the Middle East.

After Heathrow's, the Birmingham catchment is the largest long-haul business market in Britain

Business mix



Employees (workplace-based) by sector by catchment, 2011

Source: Capital Economics analysis of ONS and SDG data

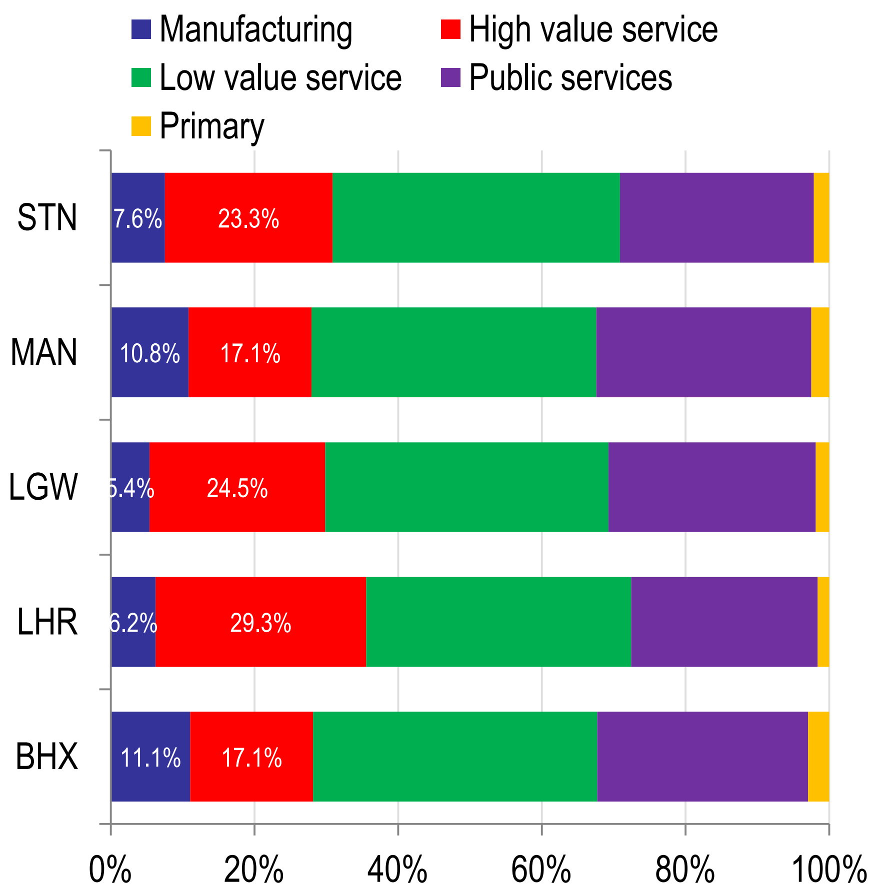
This section examines the mix of businesses to be found in the catchment areas of potential long-haul airports.

Birmingham Airport's catchment area has the largest share of manufacturing activity out of any of the airports examined. Manchester has a similar share of manufacturing business, while Heathrow is heavily concentrated on high value services.

Manufacturers often operate in a complex supply chain where, not only do they have to travel to meet their customers and sell their goods, but they also have to keep in contact with suppliers, distributors and research, testing and development facilities across the world. As the pattern of global economic development shifts, these are increasingly beyond Europe and into the long-haul destinations.

Long-haul air connectivity is increasingly important for manufacturing businesses and Birmingham Airport's catchment is the most manufacturing specialised economy in Great Britain.

Birmingham's catchment is the most manufacturing intensive of all the long-haul airports



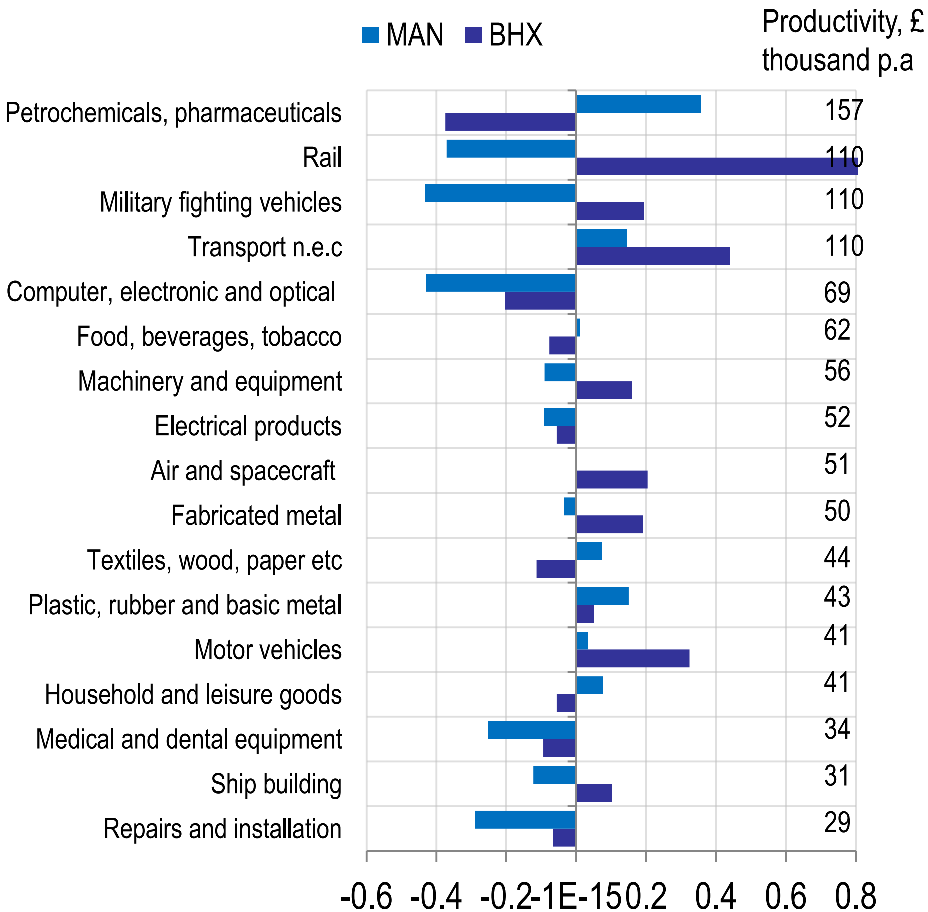
Employees (residence-based) by sector by catchment, 2011

Source: Capital Economics analysis of ONS and SDG data

The business mix of Birmingham Airport's catchment on a residence basis, that is the industry of workers by their home location, is similar in structure to the workplace based measure.

The most notable difference is that Stansted and Gatwick pick up more high value service workers, representing the large numbers of people who live in London's hinterland and commute into high value jobs in the City.

...and its business mix is broadly the same on a workplace and residence basis



Location quotient of manufacturing sub-sectors, 2011

Source: Capital Economics analysis of ONS and SDG data

Although both Birmingham and Manchester have catchment areas which are focussed on manufacturing, the nature of the industries there varies.

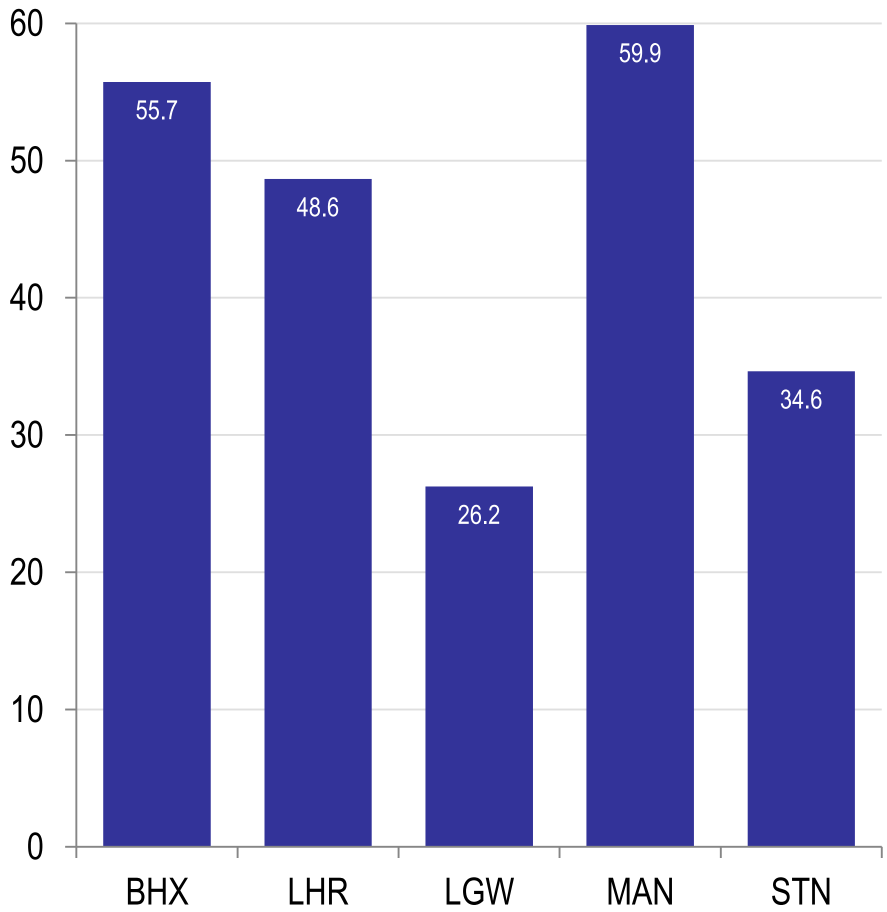
Birmingham Airport's catchment area specialises in a range transport related sectors, as well as fabricated metal products and machinery and equipment. Almost all of these sectors are above the national average in terms of productivity, measured as annual gross value added per worker, which is £46,000. In particular, the manufacture of rail and military vehicles is more than double average United Kingdom productivity. The motor vehicle industry is another significant sector for the Birmingham catchment area, as is aerospace, which is largely based around Bristol.

The make up of the manufacturing sector in Manchester's catchment is somewhat different. It is specialised in the manufacture of basic products (textiles, paper, plastic, rubber etc) and household and leisure goods, which are on the lower end of the productivity scale. However it does have a significant petrochemicals and pharmaceuticals sector, which has especially high productivity.

Birmingham Airport's catchment area's concentration in high value manufacturing means that it is likely to have larger/more distant networks of customers, suppliers and intermediaries.

Manufacturing in Birmingham catchment is concentrated in high value transport and machinery equipment

Selling abroad



Value of goods exported by catchment, 2011 (£ billion)

Source: Capital Economics analysis of ONS and SDG data

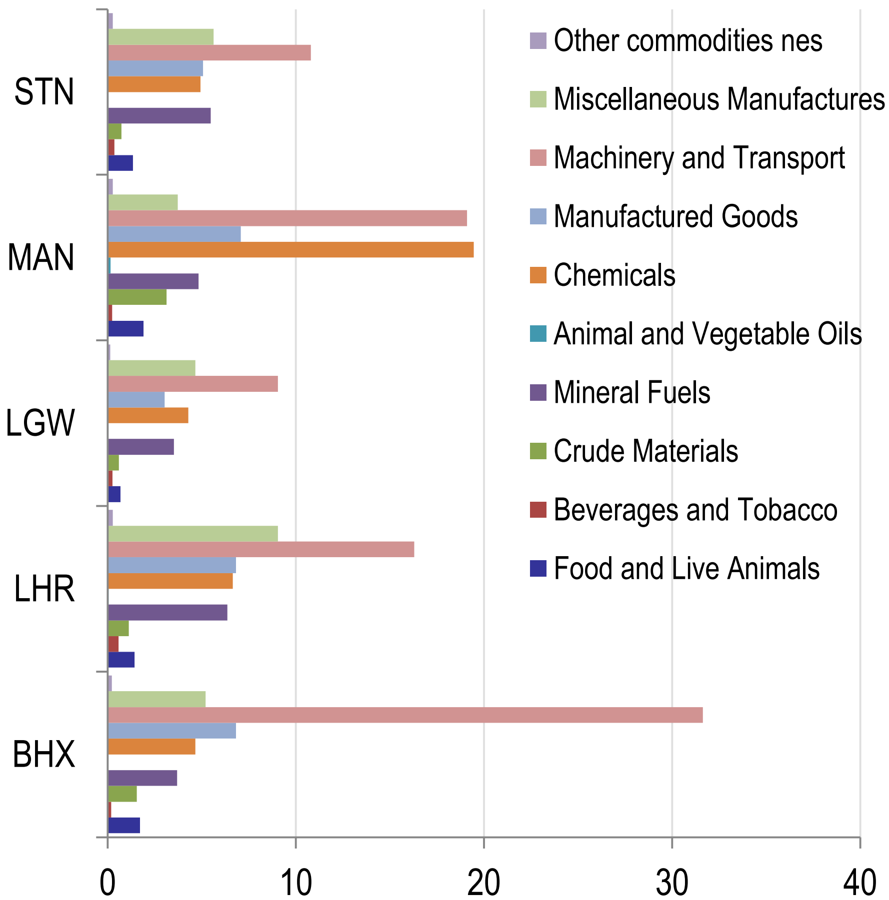
This section focuses on the extent and nature of sales of goods to foreign market.

Given the concentration of manufacturing in both the Birmingham and Manchester airport catchments, reaching foreign markets for their goods is particularly important.

In 2011, around £56 billion of goods were exported by businesses in Birmingham's catchment. Combined, over 40 per cent of the United Kingdom's exported goods came from the areas where the most convenient airport was either Birmingham or Manchester.

International trade pushes up demand for air travel as the integration of global supply chains increases the demand for business trips.

Around £55 billion of goods produced in Birmingham Airport's catchment area are exported

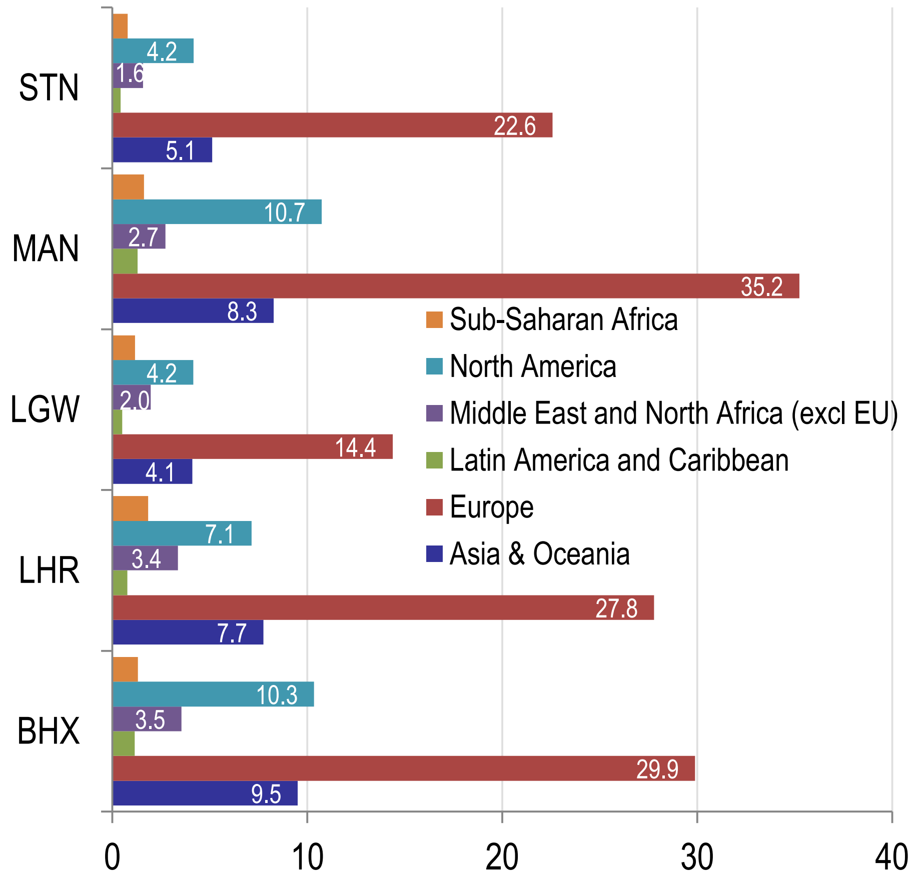


Value of goods exported by catchment, 2011 (£ billion)

Source: Capital Economics analysis of ONS and SDG data

Given its industrial mix, it is no surprise that the bulk of exports from Birmingham Airport's catchment area were machinery and transport goods, accounting for 57 per cent of the area's foreign sales. Manufactured goods was the second largest export and made up a further twelve per cent of the catchment area's exports.

.....of which the majority are machinery and transport related



Value of goods exported by catchment, 2011 (£ billion)

Source: Capital Economics analysis of ONS and SDG data

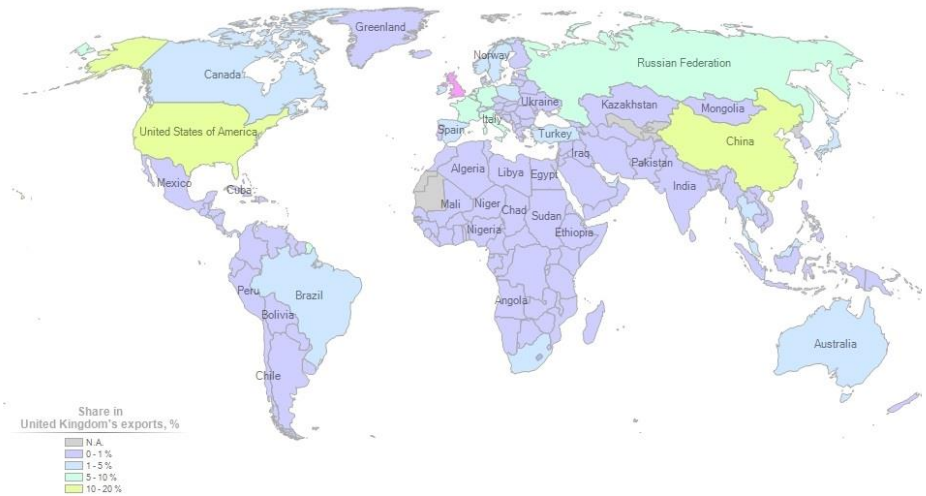
Analysing the export markets for goods produced in the United Kingdom show that Birmingham Airport's catchment area is more orientated towards the world's emerging economies and fastest growing markets.

In 2011, businesses for which Birmingham is the most convenient long-haul airport exported more goods to Asia and the Middle East than any other airport's catchment area.

In comparison, a higher share of exported goods from Manchester's catchment went to Europe and North America.

Birmingham Airport's catchment area's disproportionate links with Asia and the Middle East demonstrates businesses' need for long-haul air connectivity, which currently isn't provided by their closest long-haul airport.

The Birmingham Airport catchment area is the biggest exporter of goods to Asia and the Middle East



The Birmingham Airport catchment area is home to a significant proportion of the United Kingdom's automotive industry. The manufacture of motor vehicles and associated parts is an export intensive business; sending more than half of its output abroad.

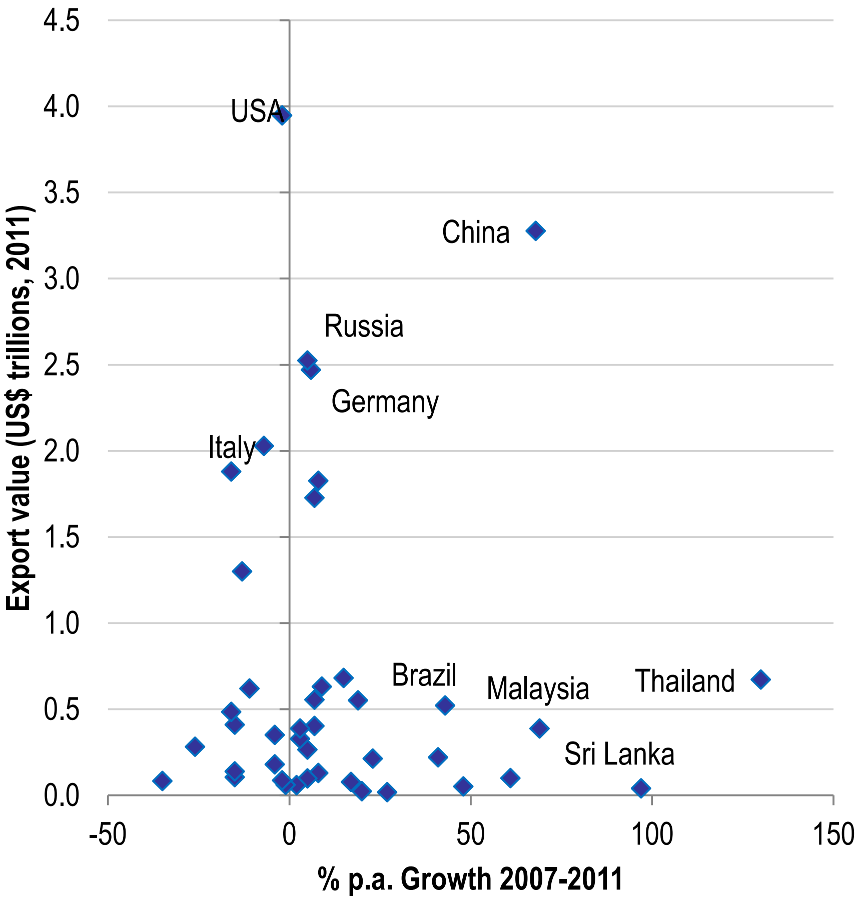
The biggest export markets for cars are the United States, Russia and China, which, when combined, account for more than 30 per cent of the United Kingdom's exports. Brazil, Australia, South Africa, Turkey and Canada are also significant export markets. In all, around 53 per cent of United Kingdom exports of cars are to non-European markets.

Demand for long-haul travel in the Birmingham Airport catchment is driven by the nature of its manufacturing industry.

Destination of completed cars exported, 2011

Source: International Trade Centre

For the car industry, the key export markets are long-haul



Exports of completed cars: market value against growth,
(Countries with less than $80 billion UK imports are excluded)

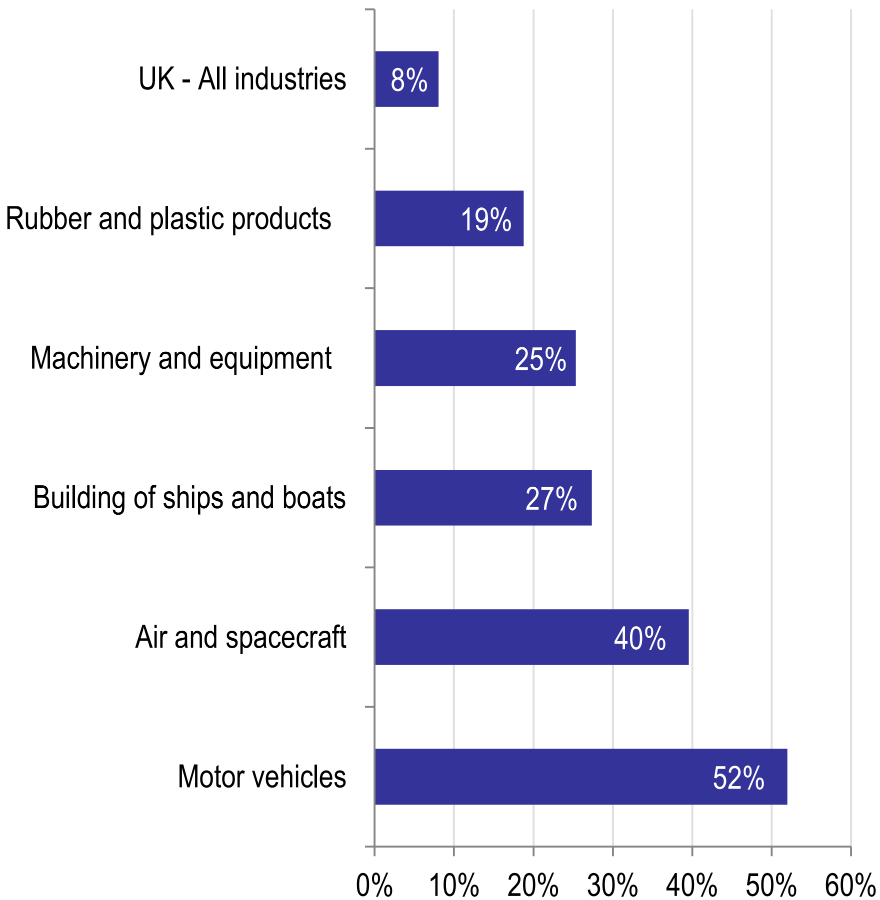
Source: International Finance Centre

The highest growth markets for car exports are in the emerging world. The traditional Western markets for United Kingdom car exports have been growing slowly or shrinking.

On the horizontal axis of the chart, we can see to the right those countries with high rates of growth for imports of United Kingdom manufactured cars. Those countries are largely Asian, although Brazil, Israel, Tanzania and Ghana feature among the fastest growing. Given the projected trends in economic growth, the emerging markets are likely to remain the fastest growing export markets for United Kingdom car manufacturers.

The export markets for cars, one of the specialist industries in the Birmingham Airport catchment, is focussed on emerging markets which are expected to continue to grow quickly. With the required air capacity, car manufacturers will have the conditions to prosper and in turn push up demand for long-haul travel.

... and the highest growth markets are also long-haul



Export share of output, 2010

Source: ONS

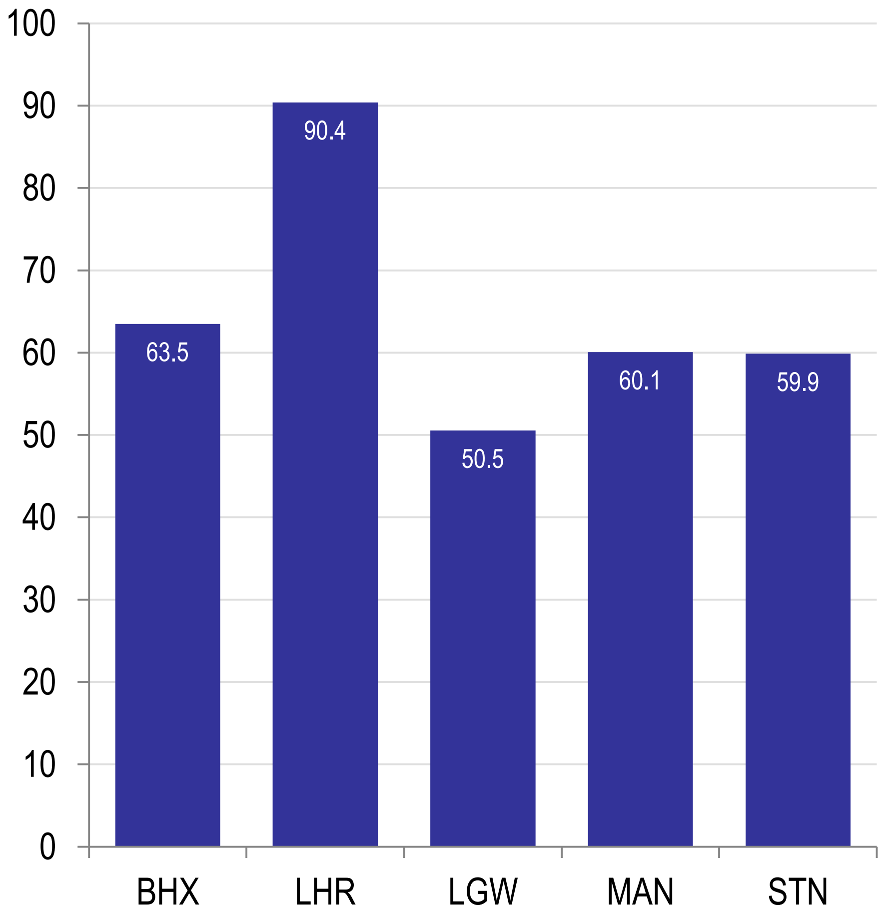
It's not just about car manufacturing, many of the sectors that have significant operations in the Birmingham catchment area are export focussed industries.

The adjacent chart shows the proportion of output that is exported by United Kingdom firms in some of the industries in which the Birmingham catchment area is specialised. Manufacturers of air and space craft and of machinery and equipment export 40 per cent and 25 per cent of their output respectively, compared to a United Kingdom industry average of eight per cent.

Major manufacturing sectors in the Birmingham Airport catchment rely on exports as a large part of their market, suggesting a greater need for convenient air links.

It's not just carmakers; many of the key sectors in the Birmingham catchment are highly intensive exporters

The supply chain



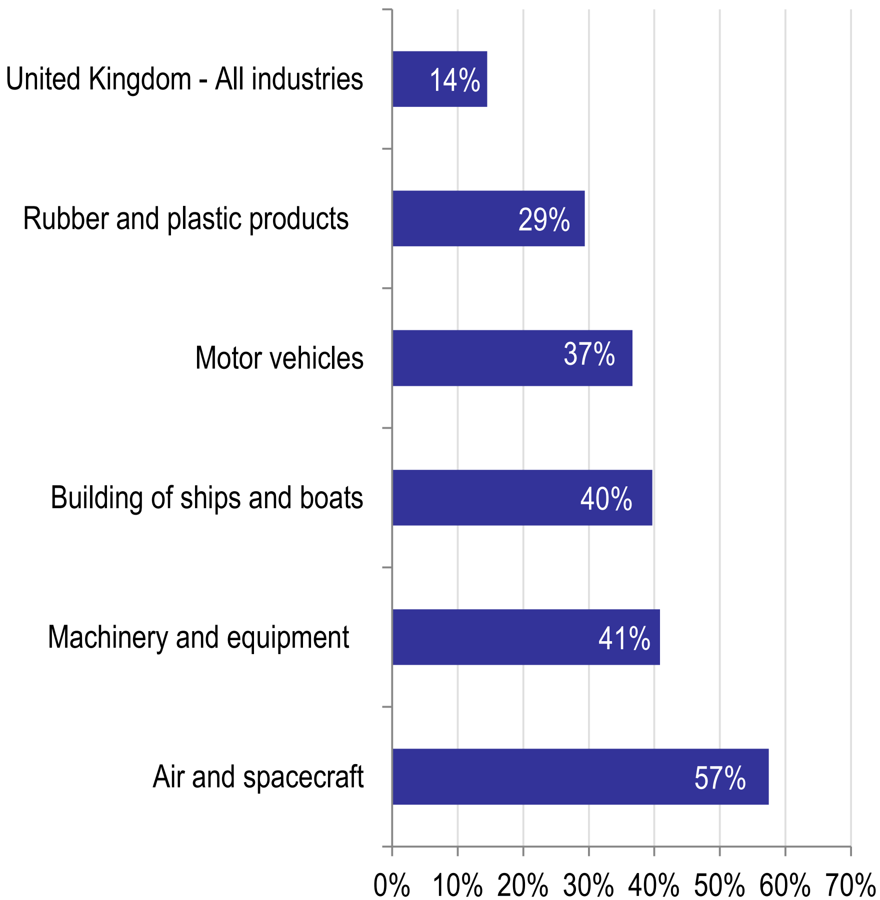
Value of goods imported by catchment, 2011 (£ billion)

Source: Capital Economics analysis of ONS and SDG data

This section looks at the goods that are imported into the United Kingdom and where they come from.

Each year over £60 billion of goods are imported into Birmingham Airport's catchment area, accounting for nearly twenty per cent of total British imports.

Over £60 billion of goods are imported into the Birmingham catchment each year



Import share of output, 2010

Source: ONS

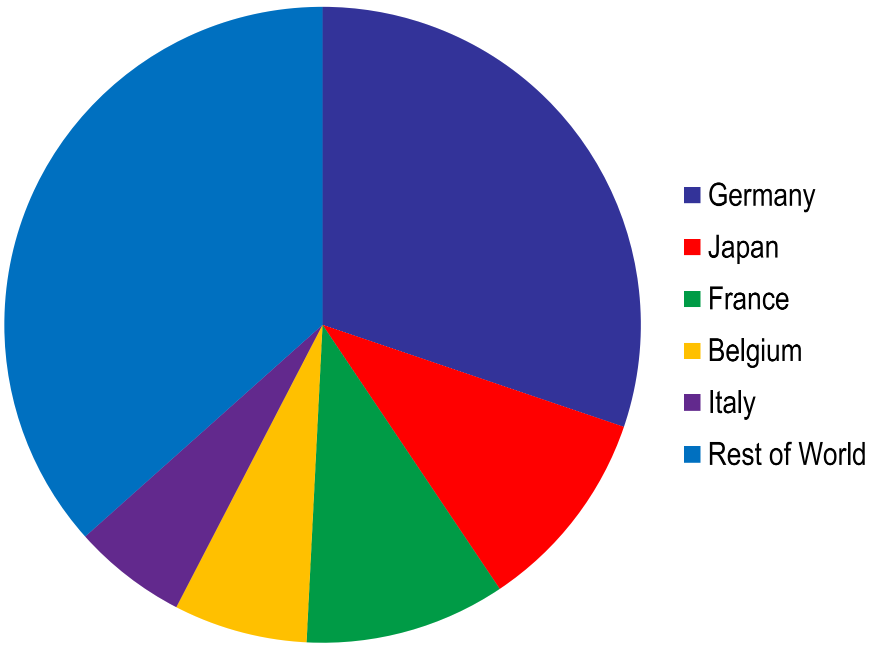
Many of the sectors that have significant operations in the Birmingham catchment area have far more globalized supply chains than the average United Kingdom industry.

For example, manufacturers of air and spacecraft and of machinery and equipment import intermediate goods worth 57 per cent and 41 per cent of output respectively. This compares to the United Kingdom all industry average of fourteen per cent.

Although most of the supplies for the transport industry are sourced in Europe, particularly goods further down the supply chain such as car bodies, there are still significant suppliers from further afield. China and the United States are big suppliers of articles made from iron and steel which are also part of the vehicle manufactures supply chain.

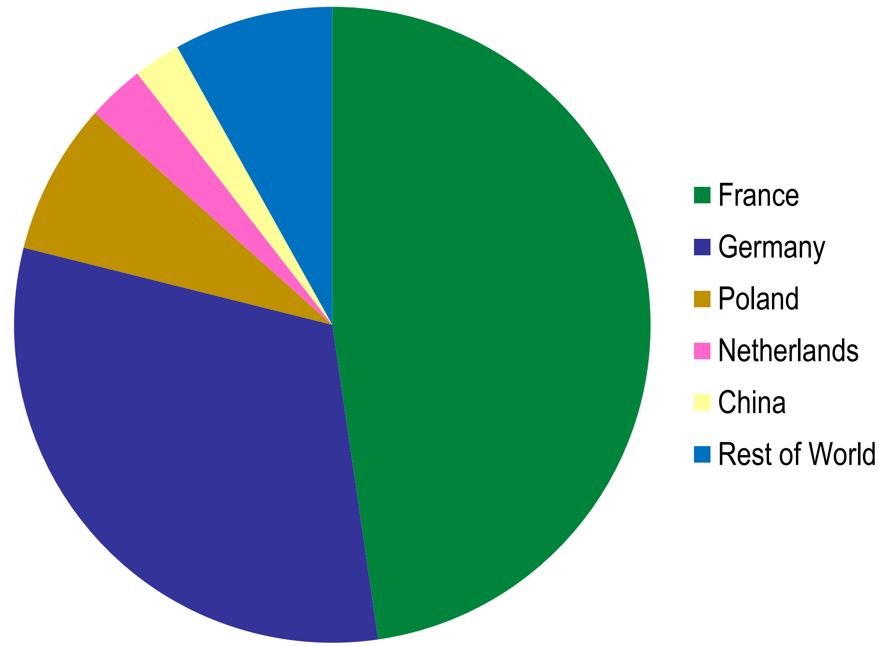
The key sectors in Birmingham Airport's catchment area tend to be more outward looking, sourcing more of their intermediate goods from abroad. These international links drive demand for air travel.

The Birmingham catchment area's key industries have international supply chains



Imports to the United Kingdom of parts and accessories for motor vehicles by origin, 2011

Source: International Trade Centre

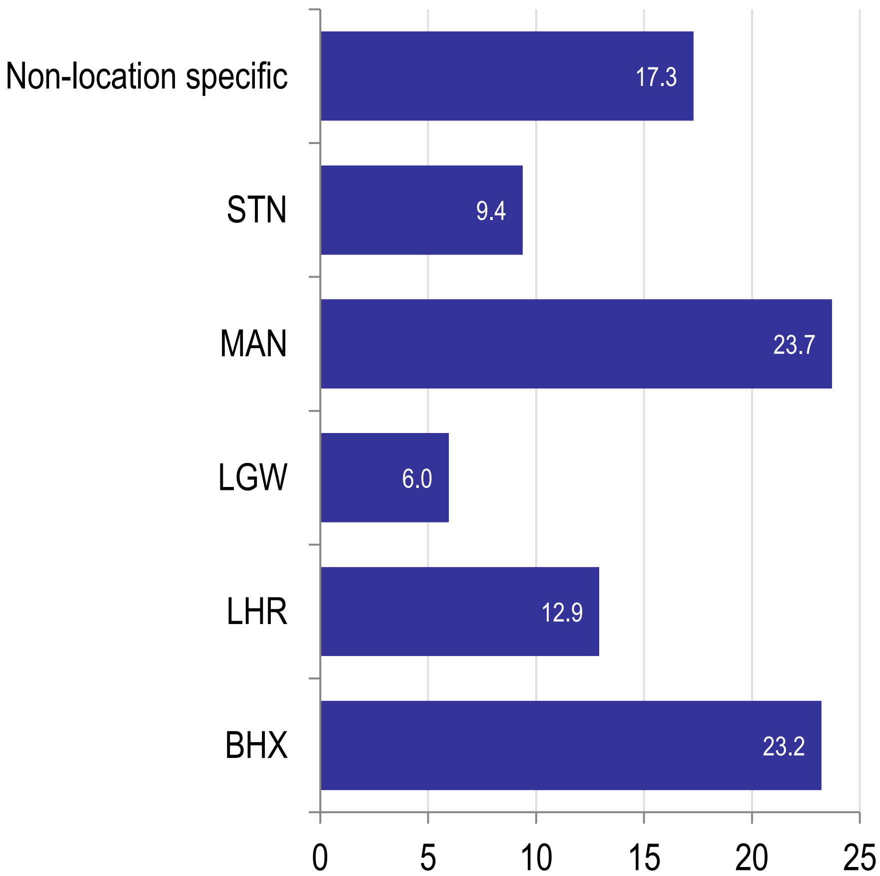


Bodies for motor vehicles imported to the United Kingdom by origin, 2011

International Trade Centre

Suppliers to the car manufacturing industry are largely European, but with some shift in recent years towards Eastern Europe

Investing in Britain



Annual average jobs supported by FDI projects (2005-11) by catchment (thousands)

Source: Capital Economics analysis of ONS and SDG data

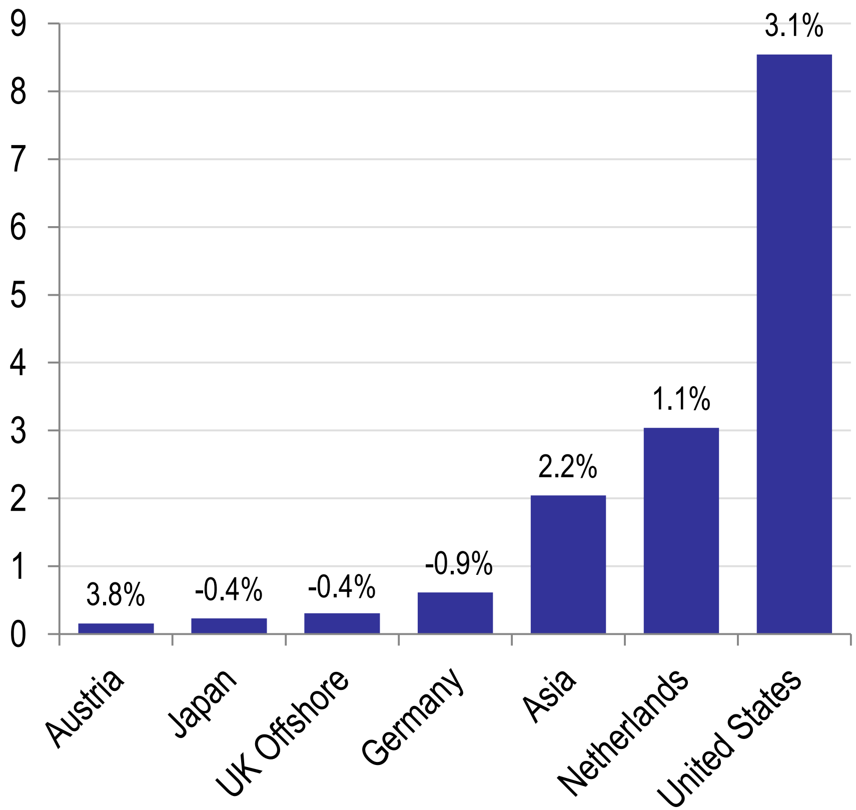
This section considers the destination of foreign direct investment into the United Kingdom.

Attracting inward investment is important for stimulating growth in output and employment in Britain. It will also fuel demand for business travel as foreign investors oversee and manage their projects, and outbound British business people report back to their investors.

Between 2005 and 2011 foreign direct investment supported around 23,000 jobs each year in both the Birmingham and Manchester catchment areas, almost double the level in any single London airport catchment.

Foreign direct investment pushes up demand for business travel between the location of investors and the location of the investment.

FDI is predominantly directed towards Birmingham and Manchester catchments



Net United Kingdom inward foreign direct investment into the transport equipment sector by origin of investment (net international position), 2011 (£ billions) with labels showing total increase over period from 2008 to 2011

Source: ONS

Inward investment into the transport manufacturing sector (automotive, rail, shipping and air and space craft) comes predominantly from long-haul destinations. It is dominated by the United states, responsible for more than half of the stock of inward investment. Although Asia is also significant with fifteen per cent of total inward investment.

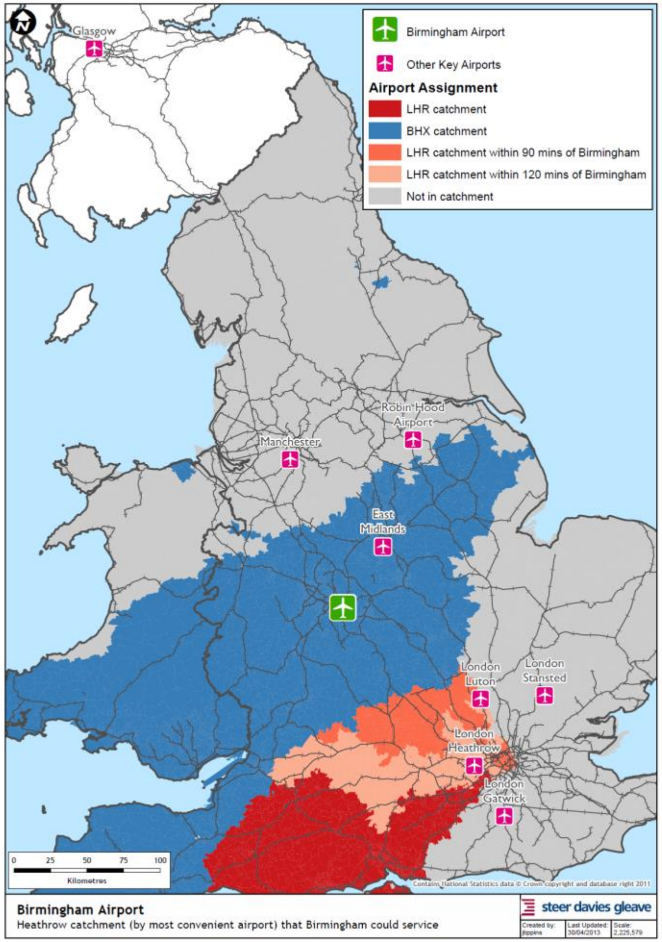
Indeed, several automotive manufacturers in the Birmingham catchment are owned by Asian parents: Jaguar Landrover owned by Tata (India); Aston Martin owned by Investment Dar and Adeem Investments (Kuwait); and MG owned by SAIC (China).

Air connectivity to long-haul destinations will help to ensure that Britain continues to attract foreign direct investment. Birmingham Airport is well placed to provide routes linking investors with the area of Britain already attracting over a quarter of foreign investment.

FDI in Birmingham's key sectors comes from long-haul destinations

The future potential of Birmingham as a long-haul airport

Medium term capacity constraints



Heathrow catchment that could be served by Birmingham

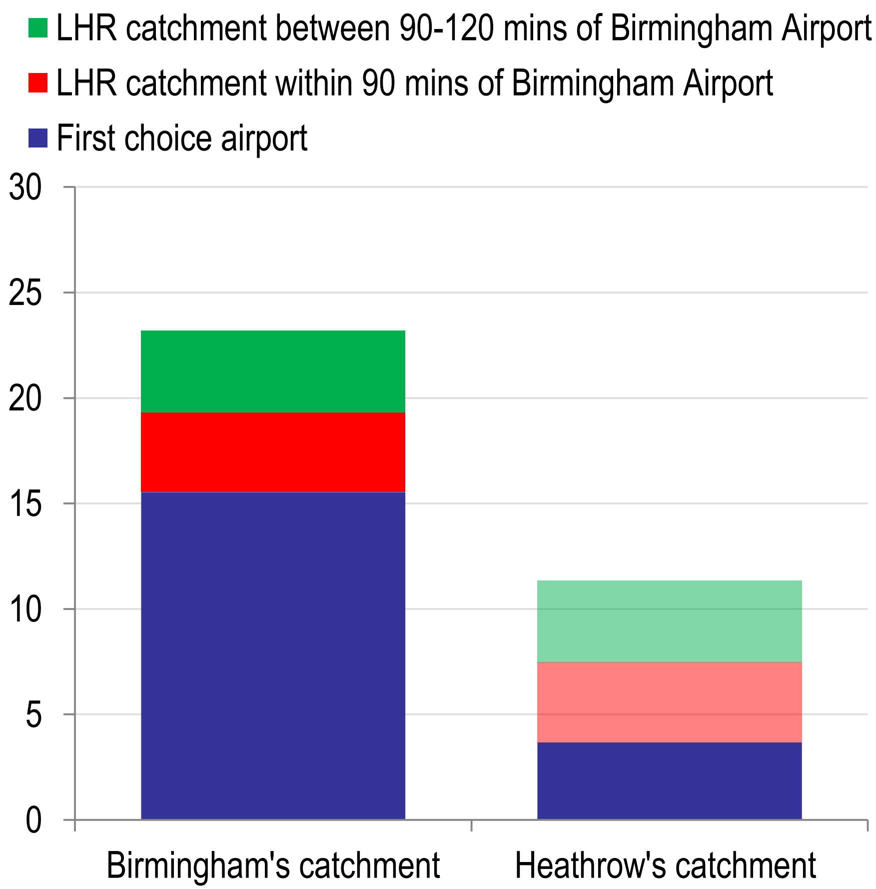
Source: Capital Economics' analysis of ONS and SDG data

Heathrow is already operating at full capacity and discussions are ongoing about new airport capacity in the south east of England. However, even if a new airport is built, it won't be anytime soon.

Birmingham Airport is well placed to help ease congestion at Heathrow.

People living in parts of Oxfordshire that have Heathrow as their most convenient airport can also reach Birmingham Airport within 90 minutes. What's more, areas of West London, the Thames Valley and out towards Bath can also reach Birmingham Airport within a reasonable two hour journey time.

Large parts of West London and the home counties can reach Birmingham Airport within two hours



Population in catchments (millions)

Source: Capital Economics' analysis of SDG data

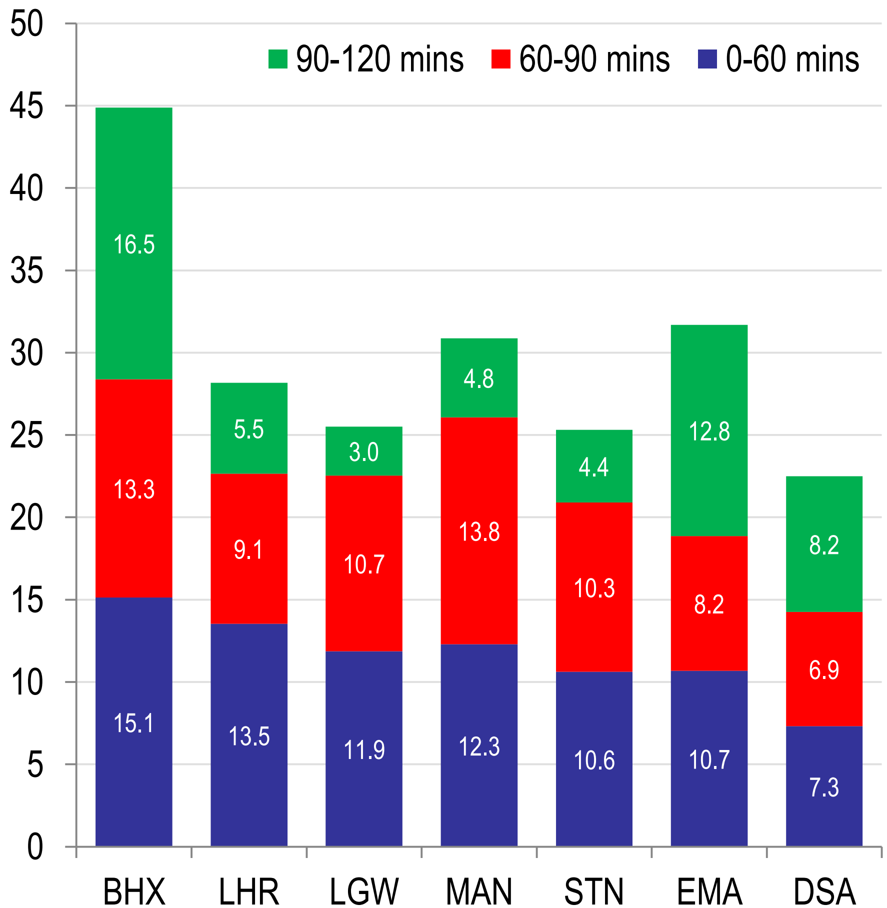
Birmingham Airport is in a position to help relieve congestion at Heathrow. With current infrastructure and transport links, around 7.5 million people within Heathrow's catchment could reach Birmingham Airport within two hours, and nearly four million of these are less than 90 minutes away.

However, Heathrow is currently having to deal with 3.0 million long-haul trips from the Birmingham Airport catchment area because of the lack of services at Birmingham Airport.

Birmingham Airport can quickly help to ease pressure at Heathrow especially on long-haul routes that can't be handled by many of the South East's airports.

7½ million of Heathrow's catchment can reach Birmingham Airport within two hours

The long term: Impact of growth and HS2



Population catchments by fastest mode in 2032

Source: Capital Economics' analysis of ONS and SDG data

The population of the United Kingdom is set to continue to grow, placing further pressures on airport capacity.

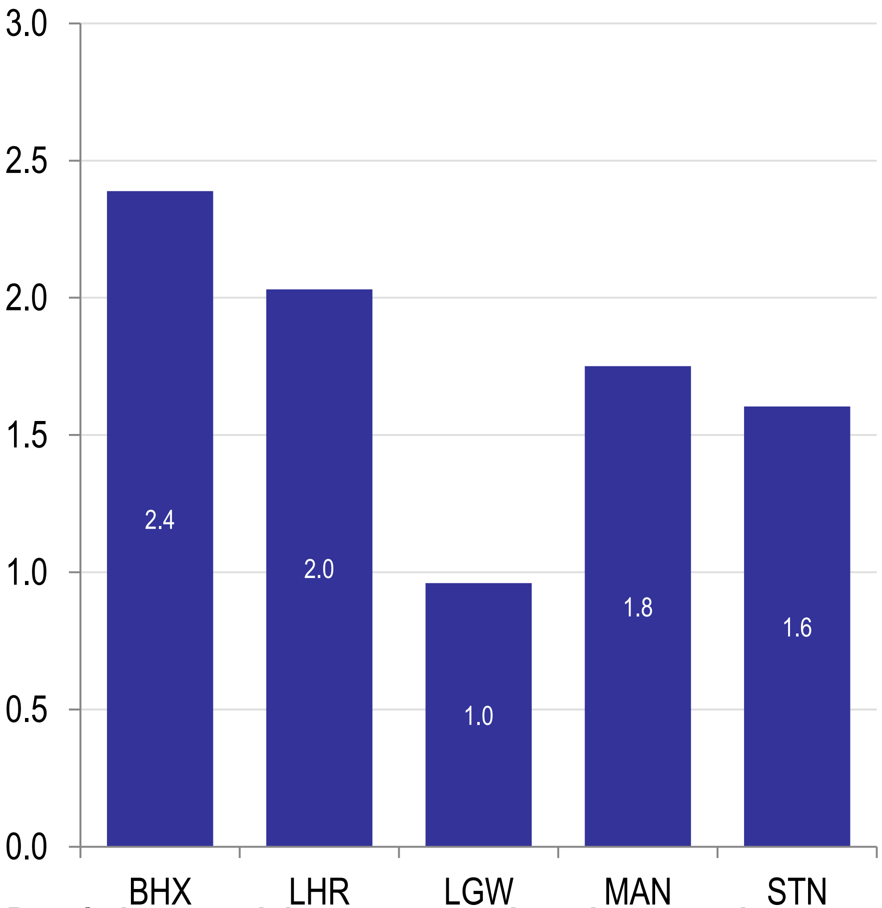
According to the Office for National Statistics, the number of people living in England and Wales is forecast to increase from 55.7 million in 2011 to 64.4 million in 2032.

Meanwhile, the improvements in the rail infrastructure through HS2 will provide quicker journeys to Birmingham, Manchester and London for much of the country.

The size of Birmingham Airport's two hour catchment will increase by more than 25 per cent to 44.9 million by 2032.

Increases in population are set to compound the need for long-haul airport capacity, while the completion of HS2 will further extend the two hour catchment of Birmingham Airport and its viability as a long-haul hub.

Population growth and the introduction of HS2 will increase Birmingham's two hour catchment by almost 10 million by 2032

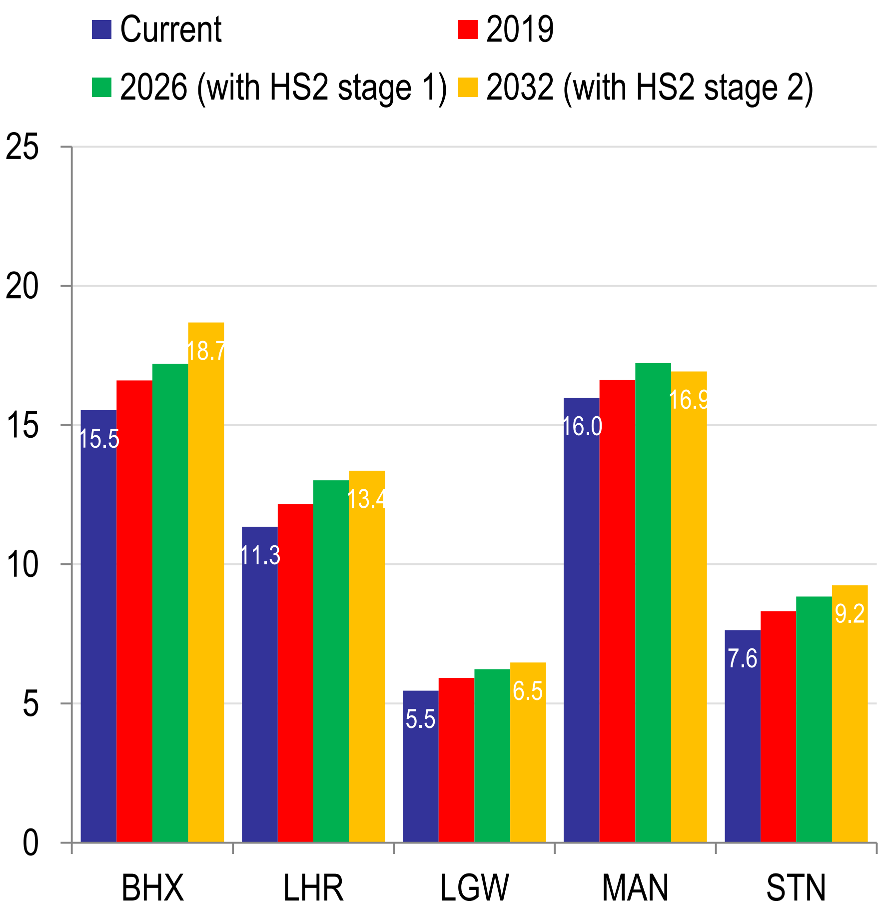


Population growth in most convenient airport catchment between 2011 and 2032 (millions)

Source: Capital Economics' analysis of ONS and SDG data

Considering the 'most convenient airport' catchments, we can see that population growth is set to be greatest in the Birmingham Airport catchment area. By 2032, 2.4 million more people will be living in an area for which Birmingham Airport is the most convenient long-haul airport.

Population growth will be greatest in the Birmingham Airport catchment area



Population with airport as most convenient (millions)

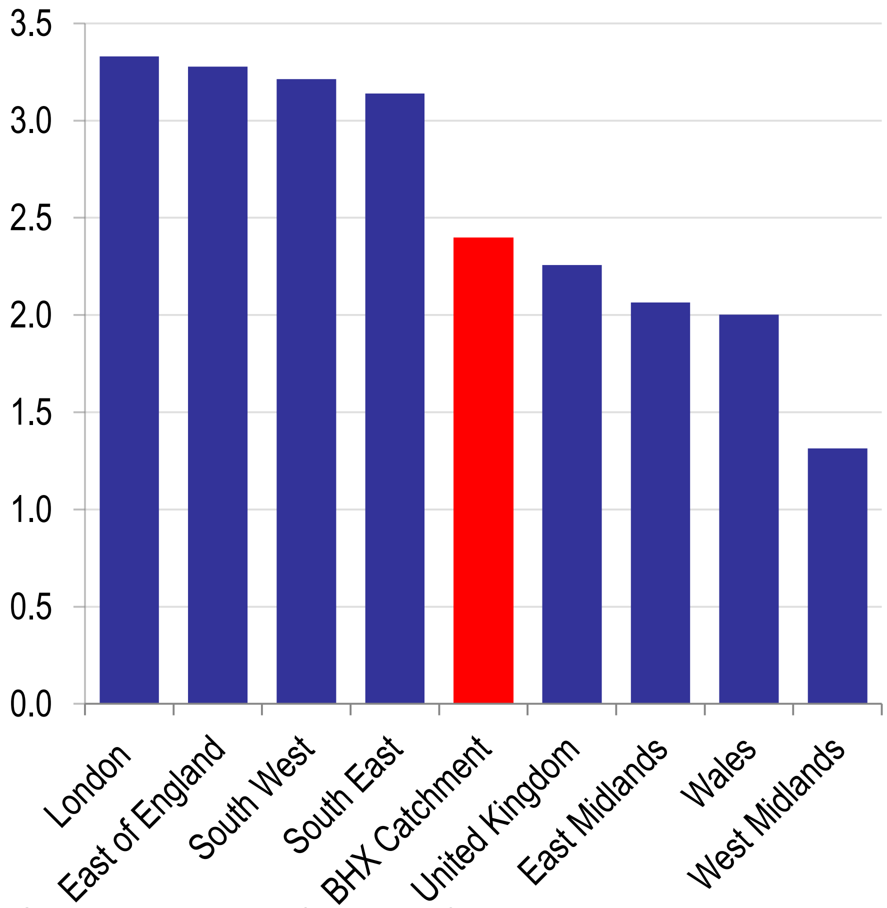
Source: Capital Economics' analysis of ONS and SDG data

Trends in population growth drive the increase in the size of the long-haul airport catchments on the 'most convenient airport' basis. HS2 has a relatively small impact on the distribution of peoples' most convenient airport because, although it reduces travel times, it increases the speeds in both directions.

By 2032, Birmingham Airport will be the most convenient long-haul airport for 18.7 million people.

There is a large and growing market for long-haul travel, which could support Birmingham Airport, as well as Heathrow and Manchester.

Birmingham will be the most convenient airport for 19 million people by 2032, more than any other long-haul airport



Capital Economics forecasts for output growth, average annual growth 2012-2030 (%)

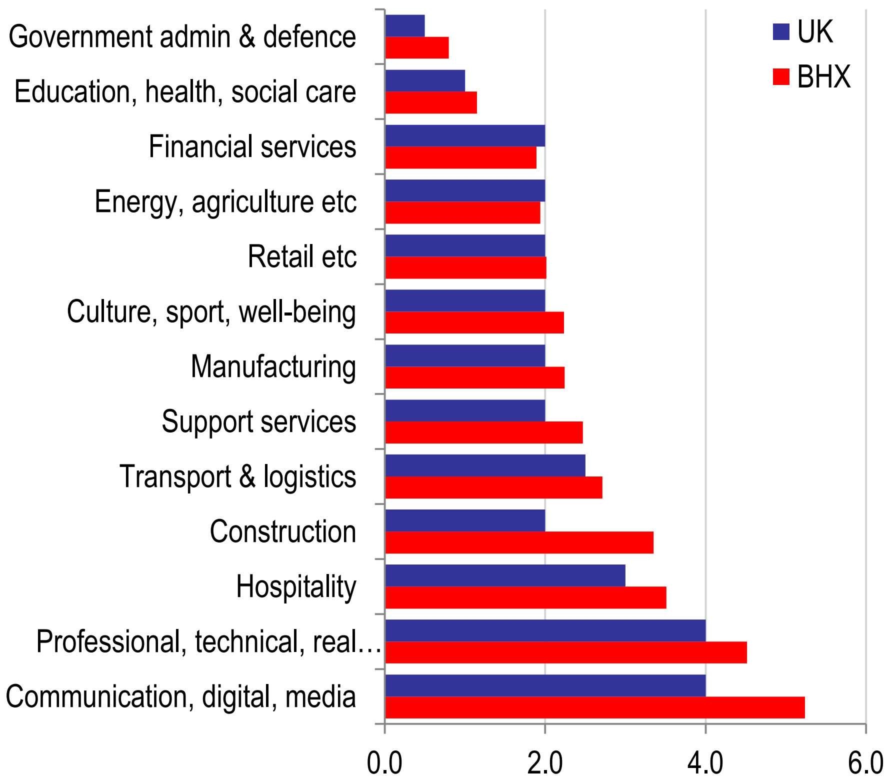
Source: Capital Economics

Our long term forecasts suggest that the economy of the Birmingham catchment area economy will grow at an average rate of 2.4 per cent per annum over the period from 2012 to 2030. This is slightly higher than the United Kingdom average rate of 2.3 per cent per annum.

In the short term, the catchment area's economy will likely remain on a gradual path to recovery, with lower growth than the long term trend for the next couple of years. Beyond that, we forecast that the economy of Birmingham Airport's catchment area will grow at around 2.6 per cent compared to the United Kingdom average of 2.4 per cent per annum.

Birmingham Airport is serving parts of two of the fastest growing three regions; the South West and East of England.

The Birmingham Airport catchment's economy is set to grow faster than the UK average



Sectoral breakdown of Capital Economics' long term trend forecast for output in the BHX Catchment (% p.a. average growth)

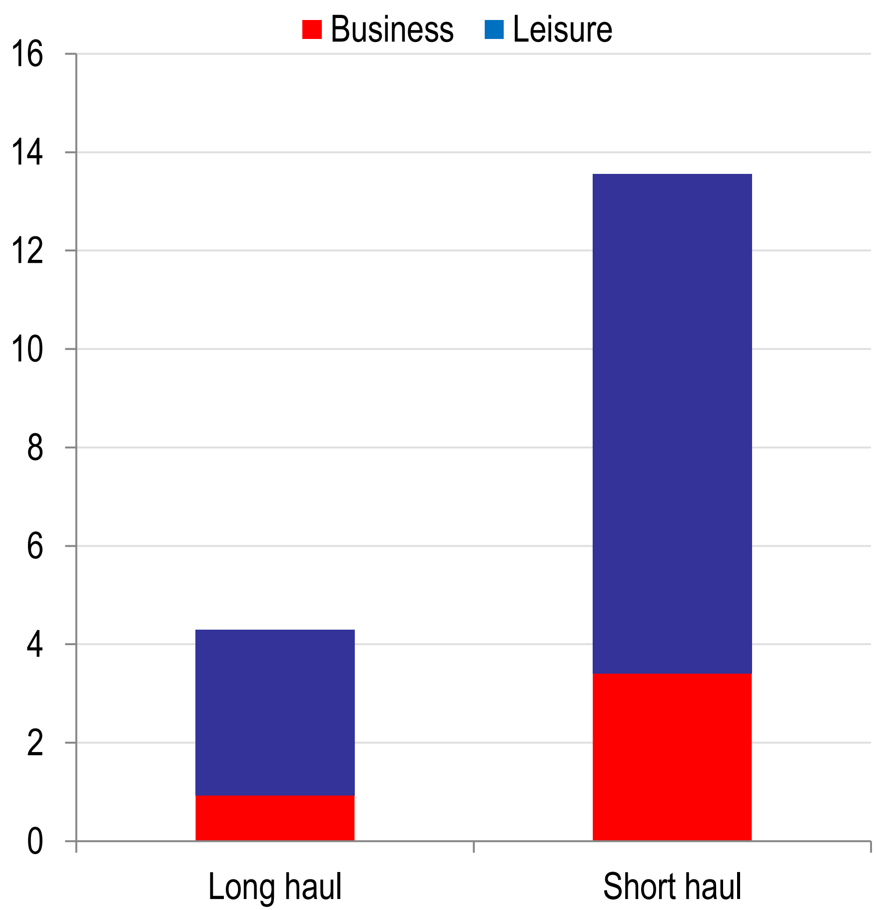
Source: Capital Economics

The sectoral pattern of growth will likely follow the national picture, but with the Birmingham catchment outperforming the United Kingdom average in all sectors except for financial services and energy, utilities and agriculture.

The forces of globalization continue to favour the development of the professional services and other high-tech, skill-intensive industries, which is why, for most regions, those sectors will drive growth.

For the manufacturing sectors represented in the Birmingham Airport catchment area those forces will work both ways. As production in emerging markets moves up the value chain more of the 'traditional' activities will no longer be able to compete. However, there will be greater demand for goods produced from activities that are highly specialised and in which the United Kingdom has world leading expertise.

Performance across sectors will likely follow the UK pattern, with skill-intensive service industries leading growth



Forecast for the increase in trips undertaken by residents of the Birmingham catchment from 2011 to 2032 (millions trips)

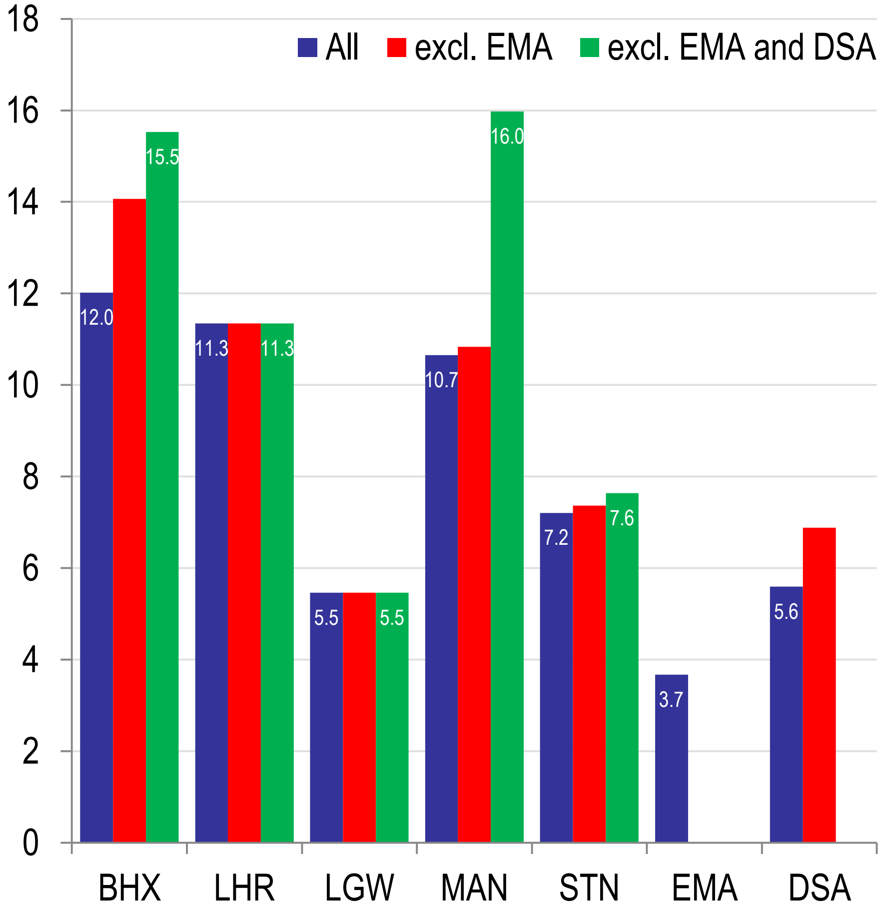
Given the forecasts for population and economic growth, by 2032 residents of the Birmingham Airport catchment could be taking around an extra 18 million trips by plane per year. With more than 4 million of those to long haul destinations.

If people continue to choose airports as they currently do, then there will be an extra nine million trips using London airports by residents in the Birmingham Airport catchment area. Nine million trips which could be served by an airport that was more convenient.

Growth in passenger demand from the Birmingham catchment will put considerable pressure on existing airports

APPENDIX

Catchment analysis including East Midlands and Robin Hood

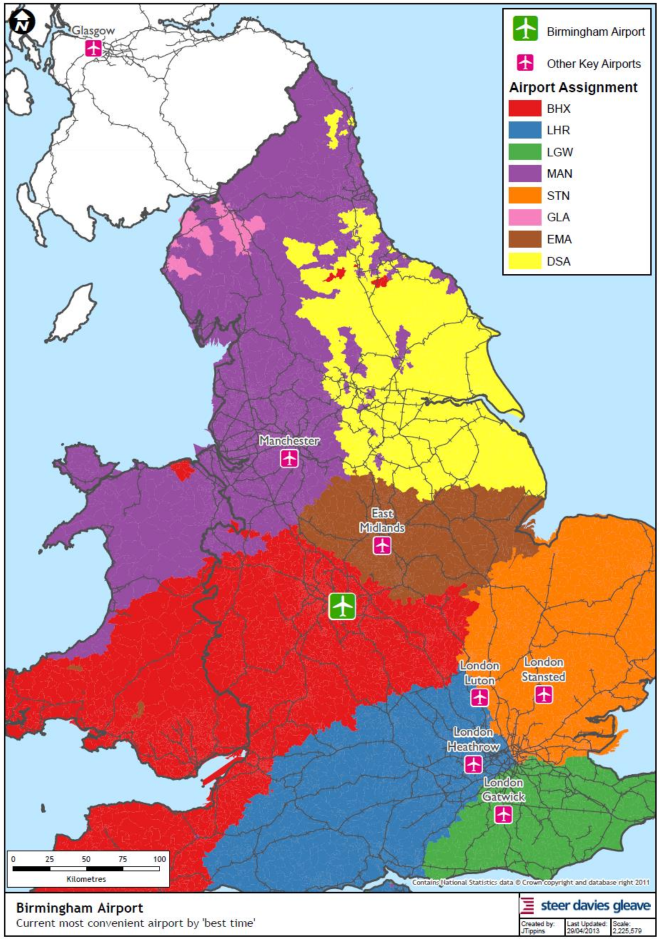


Population catchment by most convenient airport (millions)

Source: Capital Economics analysis of ONS and SDG data

Considering all eight airports that we have identified as those with potential for long distance flights, Birmingham would be the most convenient for 12.0 million people. Heathrow captures 11.3 million and Manchester picks up 10.7 million.

However, in reality, we do not think that East Midlands and Robin Hood will be competing for long-haul traffic. East Midlands is predominantly a cargo airport and does not currently offer a package of long-haul services. Equally, Robin Hood does not have any plans to expand their runway. Excluding these airports, both Birmingham and Manchester capture a larger share of the population.


Birmingham Airport
Other Key Airports
Airport Assignment
BHX
LHR
LGW
MAN
STN
GLA
EMA
DSA
Glasgow
Manchester
East Midlands
London Luton
London Stansted
London Heathrow
London Gatwick
0 25 50 75 100
Kilometres
Contains National Statistics data © Crown copyright and database right 2011
Birmingham Airport
Current most convenient airport by 'best time'
steer davies gleave