

Appeal by BAA Ltd and Stansted Airport Ltd following the refusal by Uttlesford District Council of planning application UTT/0717/06/FUL

**Proof of Evidence on behalf of
Stop Stansted Expansion**

**Economic and Employment Aspects of
Stansted's Proposed Growth Trajectory**

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30 April 2007

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1 INTRODUCTION

1.1 Personal details

- 1.1.1 My name is John Whitelegg and I appear at the Inquiry on behalf of Stop Stansted Expansion ('SSE') by whom I was commissioned to prepare evidence for this Inquiry covering the topic 'Economic and Employment Aspects of Stansted's proposed growth trajectory'.

1.2 Experience and qualifications

- 1.2.1 I am Visiting Professor of Sustainable Transport at Liverpool John Moores University, professorial staff member of the Stockholm Environment Institute at the University of York and Managing Director of transport consultancy, Eco-Logica Ltd. I am the author of ten books on transport and of reports on aviation and I have presented evidence at the public inquiries into Heathrow Terminal 5, Manchester Runway 2, Redhill Airport and the Thames Gateway Bridge.

2 SCOPE OF EVIDENCE

2.1 Core evidence

- 2.1.1 I will examine the economic and job creation case made for the expansion of Stansted Airport and in so doing will follow the headings in Volume 5 of BAA's Environmental Statement ('ES Vol 5'), 'Economic effects' [CD/8] and Volume 6 of the Environmental Statement ('ES Vol 6'), 'Employment and housing effects' [CD/9].
- 2.1.2 After reviewing the BAA evidence I will turn to those aspects of economics that have been omitted from the BAA environmental statements.

3 ECONOMIC EFFECTS (BAA ES Vol 5) [CD/8]

3.1 Business location decisions

- 3.1.1 The evidence quoted by BAA in CD/8 is from a 2004 Department for Transport ('DfT') study¹ and does not provide support for an assertion about the importance of airports, and more specifically airport expansion, as a factor that will 'influence the location decision'. The DfT study [CD/322] is careful to avoid this broad generalisation and states very clearly:

*'This is a complex subject area. There are many types of businesses – each with their individual transport needs and considerations – and the task of unpacking and isolating the influence of transport is a complicated and difficult process. As such, there is very little significant consensus concerning the overall effects of transport on business location and wider economic development and it is recognised that considerations need to be made almost entirely on a case by case basis.'*²

¹ CD/8, paras 6.2.1 and 6.2.2 quoting 'The Importance of Transport in Business Location Decisions, McQuaid et al, January 2004 (a study commissioned by the DfT).

² CD/322, Executive Summary, p2.

- 3.1.2 Having introduced this evidence as supporting a link between aviation and business location decisions, BAA then make it clear that there is no such link:
'none of these factors directly cite transport issues specifically'.³
- 3.1.3 Importantly (and not quoted by BAA) is the clear statement in the study that transport issues only come into play when the location decision has already been made:
'Although some of these have an element of transport within these, none discretely relate to transport per se. As a general rule, studies suggest that transport is only an important factor once the decision has been made. This is thought to be attributable to a number of factors.
The review notes that – within certain parameters, such as access to airports or major motorway interchanges where absolutely necessary – levels of transport provision are generally seen as ubiquitous within developed countries and as such transport is seen as a necessary but not a sufficient condition for influencing business location.
Transportation costs are typically found to be only a small proportion of firms' total costs – usually less than 5%. As such, any improvement to the transport infrastructure is likely to yield small cost savings and gains to firms.
The decision to move may be prompted by transport difficulties and inaccessibility. However it is argued that the transactions cost to any change in transport may be too high to enable the firm to respond fully to a change in transport costs. Therefore the review notes that businesses are likely to change operations in discrete steps, and it is only when certain cost thresholds are reached that it becomes efficient to the firm to revise its number or location of depots'.⁴
- 3.1.4 The significance of the DfT study [CD/322] is the conclusion that access to a major airport is unlikely to be a determining factor of any significance 'within developed countries'. This applies a fortiori to an airport expansion scheme where the presumed advantages of airport location are already in place and the additional gains from an expansion are very difficult if not impossible to demonstrate. There is no credible link between an airport expansion scheme and an impact on business location decisions.
- 3.1.5 The most important factor in explaining business location decisions is labour supply and the accessibility characteristics of the labour market:
'Labour supply is often cited as the most important single factor in business location and that the ability of employee/customer access is perhaps the key transport consideration. Transport investment has an obvious role to play in reducing travel time and increasing the labour pool from which firms can draw. Transport can be used as a tool to boost labour supply, through increasing workplace accessibility and therefore labour market size.'⁵
'Labour is usually a key location factor for businesses and transport changes may influence its accessibility through commuting (e.g. better local transport may increase the labour pool for a business, while congestion may reduce it). Although it should be recognised that locations

³ CD/8, para 6.2.4.

⁴ CD/322, Executive Summary, p3.

⁵ Ibid, p5.

*that improve car accessibility can adversely affect lower paid and part-time workers and some social groups.*⁶

- 3.1.6 The acknowledgment above of the important role of congestion points to a strong negative impact of airports on job creation and local economic development benefits. Airports are major traffic generators and major contributors to congestion and congestion costs operate to reduce the attractiveness of airports as business location choices.
- 3.1.7 Any discussion of business location decisions and their links with airports must also be informed by the overlapping and competing claims of all UK airports. In a situation of dense provision of airport capacity and competing claims it cannot be assumed that business location decisions will favour Stansted as opposed to Manchester, Liverpool or Bristol.
- 3.1.8 On air transport specifically the DfT study (2004,) summarises the situation as follows:

Air Transport and Infrastructure

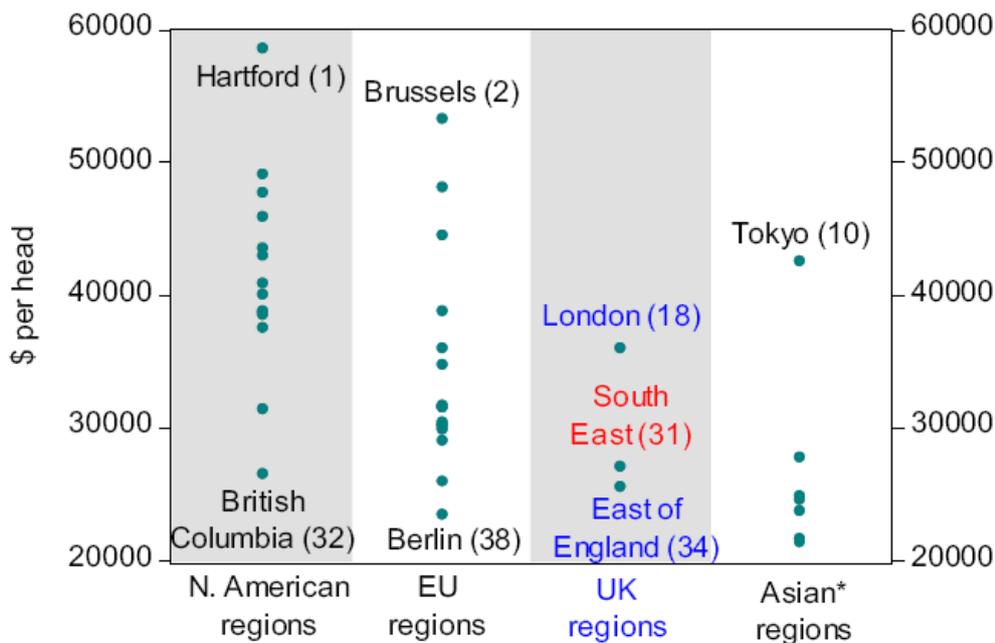
- *Air transport is vital to Business Service firms - air transport per employee in this sector is 6 times the average for UK businesses in general.*
 - *Air transport is of less importance to the other sectors, but still important in computing, software, R&D, biotechnology and some food manufacturing. These businesses tend to manufacture high-value, low-weight and/or perishable goods, and/or are likely to have highly mobile staff. Like Business Services, air transport primarily provides access to external expertise and face-to-face meetings.*
 - *Research has shown that air is the most influential transport factor in the location decisions of most overseas-based business investing in the UK, and is important in attracting tourism.*
 - *Regional air links within the UK are also important in attracting and maintaining business investment.*
 - *Air transport is important to the perceived quality of a location, particularly when a business is unfamiliar with the area.*
 - *There have been concerns raised about air infrastructure investment, specifically overheating of local economies (e.g. Southeast England) and subsequent wage, land and house price inflation, deterring business investment, particularly among SMEs.*
 - *However, the benefit of air transport in regional development has been questioned, specifically that road infrastructure, labour accessibility and a skilled workforce are all more important factors in attracting business investment.*⁷
- 3.1.9 The summary highlights the importance of air transport links for particular sectors of the economy, the significance of regional airports, the risk of over-heating the local economy and the greater importance of road infrastructure, labour accessibility and a skilled workforce. This is not a ringing endorsement of the links between expanding an airport that is already in existence and attracting new businesses to that location.

⁶ CD/322, p5.

⁷ Ibid, p43.

3.1.10 The East of England is a successful regional economy but this success has to be put in context. It ranks at number 34 of 40 regional economies (SEEDA, 2006) and many of these regional economies that are ranked higher than the SE do not have the dense regional concentrations of airport capacity possessed by the SE:

Figure 4.9: GDP per head (top 40 global regions)

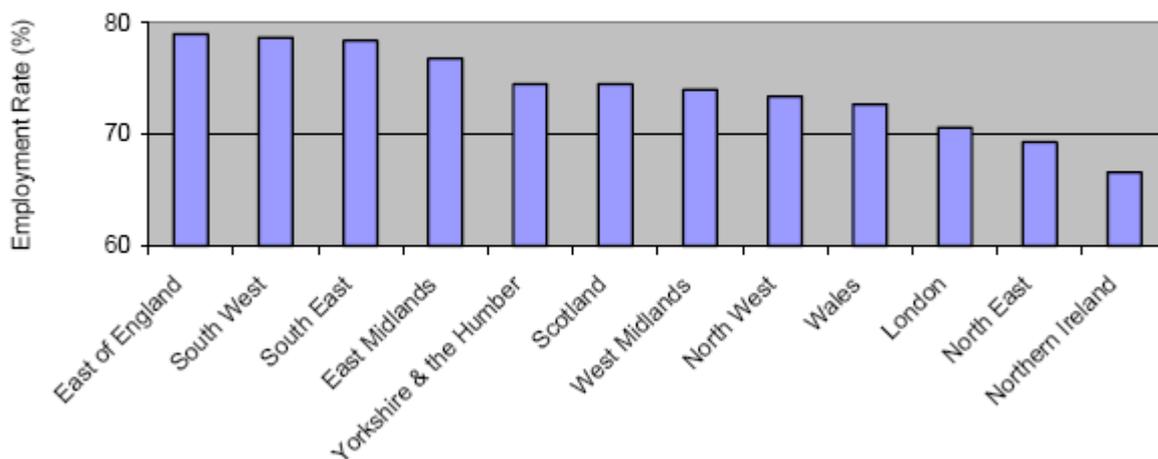


Source: RHA 2004

Source: 'The Regional Economic Strategy 2006-2016, SEEDA, 2006.'⁸

3.1.11 The East of England performs well in comparison to the SE and to London and sits easily in this grouping of three and ahead of other regions:

Figure 8: Employment Rate (%), March to May 2004



⁸ 'The Regional Economic Strategy, 2006-16, The Evidence Base', SEEDA, 2006 [SSE/9/c Appendix 1 p36].

Source: *Going for Growth, IPPR, 2004, p10.*

- 3.1.12 There is very little tangible evidence that airport capacity and service level provision feed through to support the assertions in CD/8, that:

'... airports can be considered important facilitators of this activity.'

*'The proposed expansion of Stansted would... contribute to the 'locational competitiveness' of these areas.'*⁹

- 3.1.13 The data presented by BAA on the geographical distribution of FT global 500 companies¹⁰ is now out of date. Data for 2006 shows a substantial shift towards India and China and a weakening of the role and importance of the UK as preferred location for FT 500 Global companies.¹¹ Quoting Mr Palmisano (IBM Chief Executive Officer) the Economist writes:

'[Mr Palmisano] foresees nothing less than the redesign of the multinational company... putting different activities wherever they are done best, paying no heed to arbitrary geographical boundaries. That is why, for example, IBM now has over 50,000 employees in India and ambitious plans for further expansion there. Even as India has become the company's second-biggest operation outside America, it has moved the head of procurement from New York to Shenzhen in China.'

- 3.1.14 IBM is in exactly the category of company and economic sector quoted as being influenced by a location near an airport and its behaviour clearly shows that it would not be prudent to argue that an expansion of Stansted could counter the global shifts and global reach of large FT Global 500 firms.

- 3.1.15 There is no evidence to indicate that an expansion of existing capacity at Stansted would have an impact on business location decisions over and above that effect already in place and no evidence that this expansion would have any impact whatsoever on London.¹²

- 3.1.16 Any consideration of business location decisions has to take into account the downside of aviation links as recognised in the DfT study:

*'Air transport investment can have negative location impacts through increasing congestion and wage inflation in high-growth areas.'*¹³

and

*'The development of regional airports can create job displacement within a region, leading to a smaller net impact.'*¹⁴

- 3.1.17 Any consideration of business location decisions also has to take into account the case of business re-location or job displacement. A geographical shift of jobs involving job loss in one location and job 'creation' in another location is not an economic gain, again as recognised in the DfT study:

'The OECD (2002) report highlights the need to distinguish between overall growth and the redistribution of benefits following a transport

⁹ CD/8, para 6.2.16.

¹⁰ Ibid, Table 7, p15.

¹¹ 'The Economist', Leader, Vol 383, No 8253, p11 [CD/9/c - Appendix 2].

¹² CD/8, para 6.2.21.

¹³ CD/322, p48.

¹⁴ Ibid, p56.

infrastructure investment in order to avoid double counting. To expand on this, an investment in transport is likely to have two impacts on the immediate locality:

- *there will be genuine additional economic growth brought about through lower travel costs, increased efficiency, extra employment and social inclusion, and the indirect and induced impacts of these;*
- *there will also be a movement, or 'displacement' of economic activity away from areas with less well developed infrastructure, or where investment has not been made.*

In the latter case, there is no net economic benefit, ceteris paribus, as the activity has merely been moved from one geographical location to another. Any benefit will be dependent on the nature of the areas in question - e.g. a redistribution of activity from one group to another or from a congested area to a less well developed area will help spread growth evenly and help ease inflationary or capacity pressures.

*Other prominent studies also raise this issue. SACTRA (1999) makes the point that the role of transport in influencing business location implies displacement from one area to another and therefore not all jobs created can be regarded as additional. The STAG report (Scottish Executive, 2001) argues that few transport infrastructure investments in Scotland are likely to have a net impact at a Scottish level, because they will usually induce movement of economic activity, such as business location, from one area to another.'*¹⁵

3.2 Foreign direct investment (FDI)

3.2.1 The DfT study carries a health warning about FDI:

*'The majority of foreign investment decisions take place through mergers and acquisition rather than the desire for physical (re)location. This inherently limits the potential for transport to influence total investment flows'*¹⁶

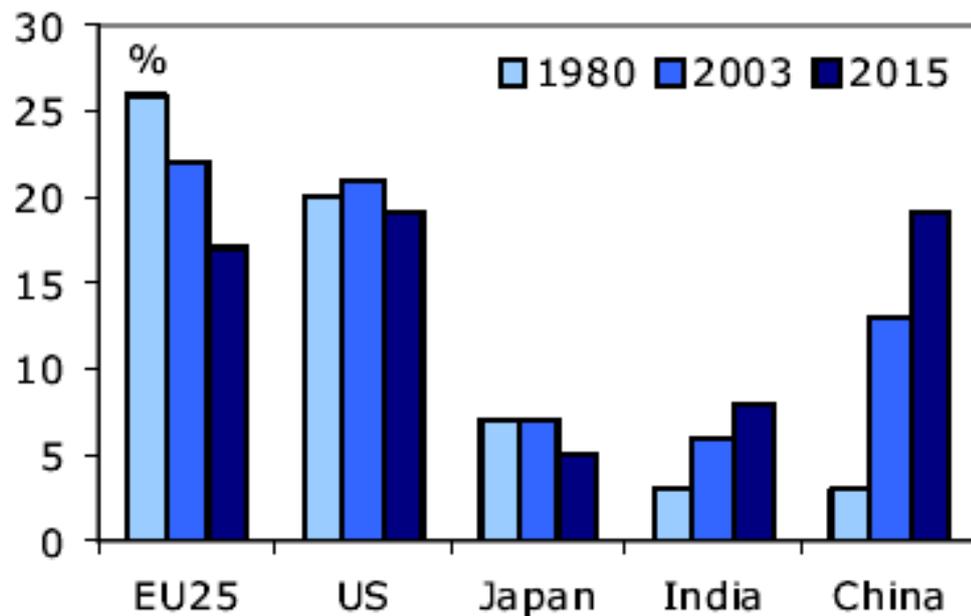
3.2.2 The traditional view of FDI expressed in that 'the UK is one of the most successful countries in attracting inward investment'¹⁷ is no longer the case. SEEDA (2006) emphasises the changing nature of global trade and global business location decisions. The structure of world trade has changed markedly in the last few years with a decline in output in the EU and an increase in China and India:

¹⁵ Ibid, p67.

¹⁶ CD/322, p56.

¹⁷ CD/8, para 6.3.2.

Figure 3.11: Shares of global output



Source: IMF, HMT 2005

3.2.3 This change in world trade is still accelerating and has impacted on FDI:

*'Trade is not the only area that has changed markedly with globalisation. Investment decisions are as ever influenced by the quality and cost of the local labour pool and increasingly by market access. In 1990 China accounted for around 2 per cent of all global flows in Foreign Direct Investment, by 2004 this had increased to 10 per cent. Firms that may have opted for the South East a few decades ago now have the Chinese alternative to choose from.'*¹⁸

3.2.4 The statement in CD/8, para 6.3.2 about the UK's significance in terms of FDI does not reflect the new reality of global trade and its emerging economies:

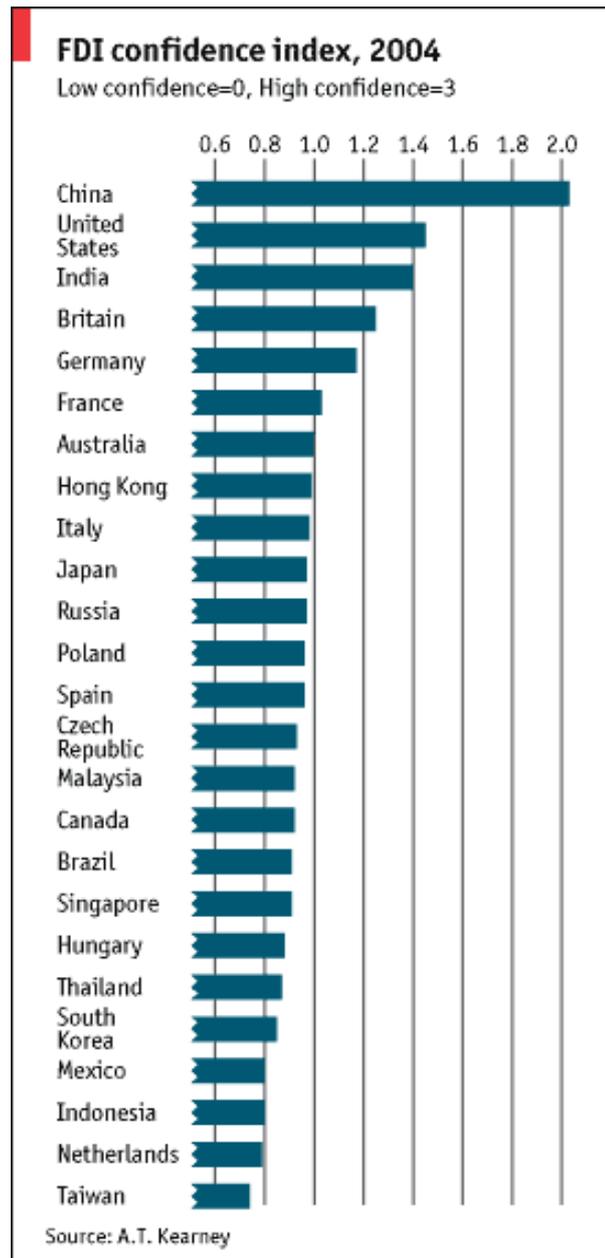
*'No other country attracts as much foreign direct investment (FDI) as China does. Last year some \$60 billion poured in, about twelve times the amount that flowed into India. Between 1979 and 2004, China absorbed a total of about \$560 billion in FDI. According to a survey of big firms by A. T. Kearney, a management consultancy, India is the next most popular destination for foreign investment in manufacturing after China. But in the past four years it has received almost \$200 billion less in FDI than China has.'*¹⁹

3.2.5 According to the Economist the UK was ranked 4th in terms of confidence in FDI in 2004²⁰ (the same data quoted in CD/8, para 6.3.2). The rankings are illustrated graphically:

¹⁸The Regional Economic Strategy, 2006-16, The Evidence Base', SEEDA, 2006 [SSE/9/c Appendix 1, p25].

¹⁹The Economist', The Insidious Charms of Foreign Investment, 3 May 2005 [SSE/9/c Appendix 3].

²⁰The Economist', FDI Confidence Index 2004 [SSE/9/c Appendix 4].



3.2.6 The East of England is an attractive location for inward investment:

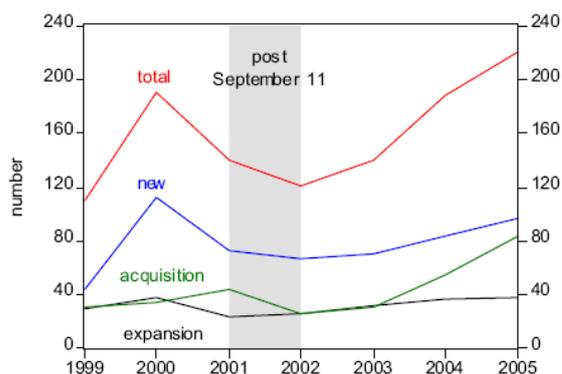
'The East of England offers

- *World-class expertise with R&D expenditure three times the national average;*
- *Excellence in further and higher education;*
- *A well-established manufacturing base;*
- *Clusters of leading-edge high-technology businesses working in partnerships and close networks;*
- *One of the largest concentrations of new and growing businesses in the country;*
- *Fast access to London, without the associated costs of a capital city.'*²¹

²¹ 'East of England International', [SSE/9/c Appendix 5].

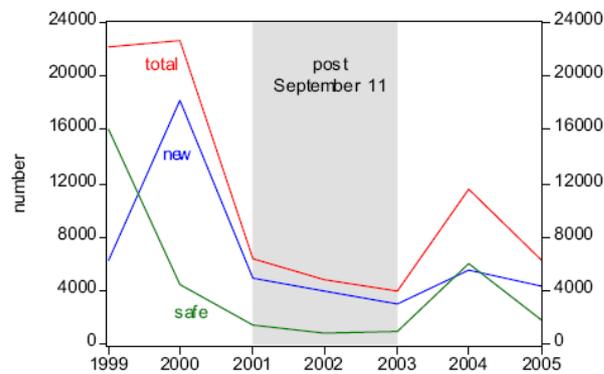
- 3.2.7 These attractions are based on a wide range of factors including world class university research centres but according to SEEDA (2006) FDI is responsible for relatively small numbers of jobs created and the rate of job creation is variable:

Figure 4.41: Number of Investments by Foreign Companies (South East England)



Source: UKTrade and Investment (2006)

Figure 4.42: Number of Jobs created by Foreign Companies, South East England



Source: UKTrade and Investment (2006)

- 3.2.8 The total number of jobs created by FDI in the SE of England in 2004/05 (6,250) is very small indeed when compared to the large numbers quoted by BAA in ES Vol 5 [CD/8]:

- \$800 billion UK FDI (para 6.3.2);
- 1066 projects supporting 39,592 jobs (para 6.3.4);
- sales of £33 billion (para 6.3.7);
- £3.2 billion R&D investment in pharmaceuticals in 2003 (para 6.3.8);
- The East of England, London and the South East account for 44% of total UK projects (para 6.3.11).

- 3.2.9 According to SEEDA:

'Following September 11th and global uncertainty associated with the approaching war in Iraq and sluggish growth in Japan and the EU there was a sharp decline in both the number of investments and number of jobs created in the region (Figure 4.41 and Figure 4.42).

*However, over the past two years there has been a recovery in the total number of investments in the region. Over the past 12 months, the total investment by foreign companies into the South East has risen to some 220 investments. However, the number of jobs created or safeguarded by foreign companies fell to some 6,250 in 2005/06 (Figure 4.42). Slower growth in the number of jobs created reflects strong growth in acquisition activity in the region and the fact that there were few large mobile projects around involving large number of jobs.'*²²

- 3.2.10 The 'slower growth in the number of jobs created' and 'strong growth in acquisition activity' and the observation that 'there were few large mobile projects around' should advise caution in claiming large economic benefits from FDI around

²² 'The Regional Economic Strategy, 2006-16, The Evidence Base', SEEDA, 2006, p59 [SSE/9/c Appendix 1].

Stansted especially when that assertion is based on an expansion of an existing situation rather than a new situation.

- 3.2.11 There is a very important asymmetry issue with FDI and its presumed links with economic development and job creation benefits. If inward bound FDI is used as evidence in favour of positive economic benefits then outward bound FDI should be used as evidence of job loss. To do both is symmetrical and to do only the former is asymmetric. BAA refers to this issue in ES Vol 5 [CD/8] noting that:

*'The UK is also the second largest global investor behind the US with outward investment exceeding its inward investment.'*²³

The point is not pursued.

- 3.2.12 Historical data for the UK as a whole show that the amounts of money invested by UK companies abroad is higher than that invested by overseas businesses in the UK. If there is a link between the enhanced accessibility provided by international air services then it works to the disadvantage of the UK and supports a net outflow of resources. Put very simply potential jobs in the UK are sacrificed for the benefits of investing abroad. Whilst we would not wish to claim that this job loss and net outflow of funds should be 'laid at the door' of aviation we do wish to question the logic of the opposite assertion from the industry itself. Inward investment cannot be claimed as a benefit of airports or aviation. If it is claimed then equal weight has to be given to the debit side of the balance sheet. The balance sheet shows a substantial net deficit (\$313 billion (£190m) over a five year period), approximately £38 billion each year. This is shown below:

Inward Investment and Outward Investment in the UK, 1997-2001

	Inward Investment (billion \$)	Outward Investment (billion \$)	Deficit (billion \$)
1997	33	62	-29
1998	74	123	-49
1999	88	201	-113
2000	117	254	-137
2001	54	39	15
Total	366	679	-313

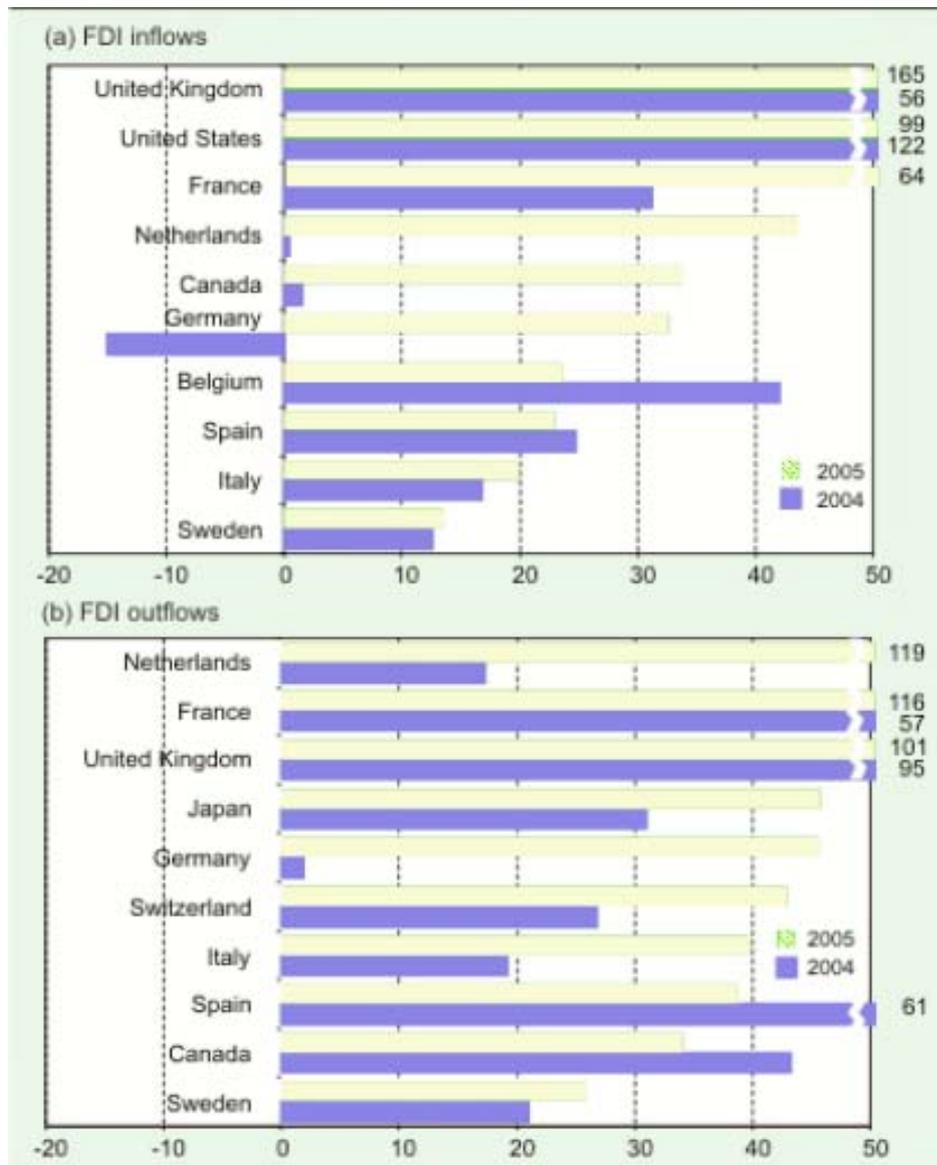
Source: UN Conference on Trade & Development (UNCTAD), *World Investment 2002, Transnational Corporations & Export Competitiveness (September 2002)*, quoted in *'It's the Economy, Stupid'*, HACAN, 2003 [SSE/9/c Appendix 6].

- 3.2.13 This net deficit has a direct equivalence in job losses. If we accept that the cost of creating a job in the UK is approximately £23,000 (National Audit Office, 1999) then this outflow represents a job loss of 1.65 million each year for 5 years (£38 billion divided by £23,000). This job loss is facilitated by the development of air services and the aviation industry.
- 3.2.14 The latest situation is more difficult to interpret. The UNCTAD World Investment Report (2006) tracks both inward and outward FDI for major world economies. This is summarised diagrammatically:²⁴

²³ CD/8, para 6.3.3.

²⁴ World Investment Report, UNCTAD, 2006, p84 [SSE/9/c Appendix 7].

**Figure II. 23. Developed Countries: FDI Flows:
top 10 economies, 2004-2005**
(billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1. ^a Ranked on the basis of the magnitude of the 2005 FDI flows.

3.2.15 The data show that in the year 2004-2005 the UK had an inward FDI of \$165 billion and an outward FDI of \$101 billion. This is a reversal of historical trends referred to above where outward flows exceed inward flows. However this cannot be used to sustain an economic argument in favour of regional or local economic gains from inward FDI, let alone from a link between an expanded airport and FDI. \$74 billion of the inward flow is from one merger:

'FDI inflows into the United Kingdom tripled, from \$56 billion in 2004 to \$165 billion in 2005. The increase was largely due to the merger of Shell Transport and Trading Company Plc and Royal Dutch Petroleum

Company into Royal Dutch Shell, a Dutch company, for some \$74 billion (a transaction reflected in the FDI outflow data of the Netherlands).²⁵

- 3.2.16 The UNCTAD report on World Investment (2006) carries a health warning about relying on continuing growth of FDI in the world economy:

*'Several risks for the world economy persist, with implications for FDI flows from developed countries. Most of them are not new. Global current account imbalances have begun to widen dramatically, and the United States deficit increased to 6.5 % of GDP in 2005. This contrasts sharply with the current-account surpluses of China, Japan and other Asian countries, and of the oil-exporting countries, and could cause abrupt exchange-rate changes. High and volatile oil prices have caused inflationary pressures and a tightening of financial market conditions. High fiscal deficits in Europe in combination with rising interest rates could lead to tax and wage pressures. All these considerations underline the need for caution in assessing FDI prospects for developed countries.'*²⁶

- 3.2.17 The need for caution carries an implication that it would not be wise to build in an over-reliance on this component of economic change in any national, regional or sub-regional spatial or economic strategy.

3.3 International Trade

- 3.3.1 We have already noted that the structure of world trade is changing rapidly with much increased flows of goods and services originating in China and India and destined for the UK. It is too early to be able to conclude whether this structural change will help or hinder Stansted Airport to achieve its ambitions in the area of freight development but we note that trade flows to and from Stansted are currently small compared to national totals and that the proposed increase in capacity will not significantly increase freight transport totals.

- 3.3.2 Total freight handled in UK airports in 2005 was 2.15 million tonnes which compares with freight handled at the ports of Harwich (4.2 million tonnes) and Felixstowe (23.1 million tonnes) in 2005.²⁷ The freight tonnage at Stansted is constant in 2014 between the 25mppa and 35mppa cases. Under these circumstances it is not appropriate to factor freight transport into the discussion of the economic impacts of expansion.

3.4 International Tourism

- 3.4.1 In section 6.5 of BAA's Environmental Statement dealing with economic effects [CD/08] the point is made that tourism is a major world industry with significant numbers heading for the UK and Stansted holding the second position after Heathrow as a major point of entry.²⁸

- 3.4.2 Stansted handled 3.299m inbound international visitors in 2004 and 5.092m outbound UK residents travelling abroad.²⁹

²⁵ World Investment Report, UNCTAD, 2006, Ch II, p83 [SSE/9/c Appendix 7].

²⁶ Ibid, p94.

²⁷ Transport Statistics Great Britain, 2006, DfT, Table 5.3 [CD/234].

²⁸ CD/8, paras 6.5.1 to 6.5.19.

²⁹ Ibid, Tables 17 and 18, p22 and p23.

*'Hence residents of the UK spend more money overseas than overseas tourists spend when they visit the UK.'*³⁰

- 3.4.3 Visitors who leave the UK spend more abroad than those who arrive in this country spend here. In terms of expenditure, tourism is a net drain on the financial resources of the UK. The balance of payments deficit on tourism in 2004 was approximately £17 billion:

**Tourism Deficit in the UK:
Balance of payments deficit in aviation tourism, 2004**

Year	UK resident expenditure overseas (£ billion)	Overseas visitor expenditure in UK (£ billion)	Deficit (£billion)
2004	30,284	13,048	17,236

Source: www.statistics.gov.uk/STATBASE - Visits and Spending by UK residents abroad and overseas residents in the UK monthly series derived from the International Passenger Survey (IPS)

- 3.4.4 The latest figures from the British Tourist Authority show an annual spend (2005) of £17 billion by overseas residents in the UK (including air fares to UK carriers).

Spending by foreign visitors to the UK, 2005

Spending by overseas residents	£billion
Visits to the UK	14.2
Fares to UK carriers	2.8
Total	17.0

Source: <http://www.visitbritain.org/>

- 3.4.5 The £17 billion spent by foreign tourist in the UK (as above) compares to expenditure by UK residents abroad of £35 billion (including air fares to foreign carriers) and a deficit of £18 billion:

*'Another consequence of growing competition, and the availability of low-cost air routes, has been a sharp rise in the propensity of Britons to take overseas trips (more than doubling between 1990 and 2005) thereby helping to turn an international tourism balance of payments surplus of £571m in 1985 (at 2005 prices), into a deficit of £17.9bn twenty years later.'*³¹

- 3.4.6 This revenue stream from inbound tourists is under threat as global developments in tourism provide much improved offers and incentives for tourist to 'spread their

³⁰ Ibid, para 6.5.3.

³¹ 'Foresight', British Tourist Authority, March 2007 [SSE/9/c Appendix 8].

wings' and sample a wider range of global destinations. It cannot be relied upon in the future:

'Topic: Competition and the changing market place

Back in 1980 the UK attracted 6.5% of international tourism receipts, but by 2005 this had fallen to 3.8% despite the UK attracting record numbers of international visitors. There are many reasons for our declining market share, but uppermost are shorter length of stay and consequent declining spend per visit for inbound visits to Britain, along with the rapidly expanding array of destinations on offer to international tourists. As more and more destinations become accessible and governments around the world realise the potential that tourism can provide as a means of employment generation and economic vitality we are witnessing increased public funding invested in marketing countries both small and large. Meanwhile funding for VisitBritain's international marketing has fallen by 22% in real terms between 1995/6 and 2005/6'.

...

'In nominal terms this forecast represents record spending, but we get a stark reminder that declining average spend per visit, driven by declining length of stay, has led to a 'real terms' fall in inbound visitor spending despite record numbers of visitor arrivals. Once we take inflation into account we discover that the central forecast of £15.8bn in 2007 is £650m lower than was achieved in the record year of 1996 – that's a loss equivalent to total spending by visitors from Australia (our sixth most valuable market).³²

- 3.4.7 Stansted has benefited substantially from the growth of low-cost, short distance flights:

'It is insightful to look at airport usage over the period 1996 to 2005 – the number of passengers handled at Stansted jumped from 1.2 million to 22.0 million, almost exclusively as a result of the rapid growth in low-cost route networks from near European destinations. Meanwhile at Heathrow, our key global gateway airport for medium and long-haul destinations, the number of passengers handled increased from 55.8 million to 67.7 million, constrained by the lack of terminal and runway capacity to permit faster growth.'³³

- 3.4.8 The British Tourist Authority has expressed concerns that income from inbound tourists on these short distance routes is not as great as that from long haul and this should be factored into any discussion about the economic benefits that are asserted for an expansion at Stansted:

'Hitherto un-congested airports (and the surrounding skies) favoured by low-cost operators may become congested by the middle of the next decade – there may not be many more years left during which 'spare' airport capacity can accommodate additional flights – but is the development of regional airports at the expense of our international hub airport the best solution considering the difference in spend per visit for short-haul and long-haul visitors?'³⁴

³² Ibid.

³³ Ibid.

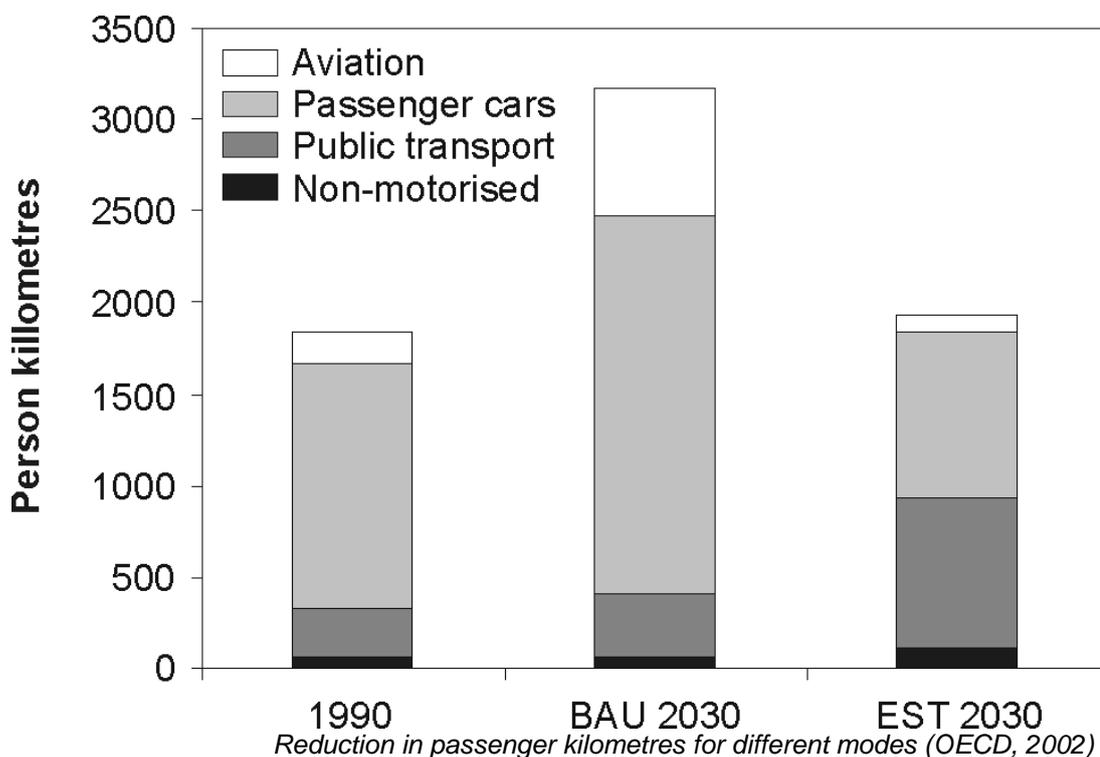
³⁴ Ibid.HH

- 3.4.9 Forecasts for future passenger growth at Stansted do not appear to have been tested against the risks and scenarios associated with the debate around the growth of aviation and the drivers of that growth. These risk factors were listed by the British Tourist Authority (2007) as including:
- *'Future price rises in aviation fuel as a result of geopolitical instability, a decline in the rate at which new sources of oil are being discovered and rapid increase in demand from China and India*
 - *Terrorism, the threat of terrorism and the susceptibility of aviation to the perception of this threat*
 - *The impact of emissions trading, carbon offsetting and 'green taxation'*
 - *The growing public perception of the unacceptability of flying when set against the climate change impacts and environmental debate:*

'If UK consumers do begin to fall out of love with flying should domestic marketing campaigns take advantage of this trend through 'be green – stay in England' messaging? It could be that consumers, both here and abroad, choose to keep on flying, but make fewer trips during the year, choosing instead to stay longer at a single destination in order to gain a deeper insight into its culture. If this happens we might see a reversal of the trend that has dominated international tourism in the past generation for consumers to take an increasing number of trips but with a declining length of stay.'
 - *The large scale subsidy and marketing efforts going into global tourism to win a greater share of the global market for non-UK destinations'*³⁵
- 3.4.10 An additional risk factor lies in the public policy shift in the EU towards the full internalisation of external costs which would imply a re-charge of the social costs of carbon dioxide (estimated at \$85 per tonne by the Stern Report) to the airline and hence the passenger. This shift has been marked by a substantial majority in the European Parliament on 4 July 2006 in favour of new charges and taxes to aviation to deliver this internalisation:
- 'Euro-MPs in Strasbourg voted by 439 to 74 to adopt proposals drafted by Green Party MEP Caroline Lucas to introduce a range of measures including an airlines-only CO 2 Emissions Trading Scheme and emissions charges to tackle their non-CO2 greenhouse gas emissions. There were 102 abstentions.'*³⁶
- 3.4.11 There is now a clear policy consensus that the current fiscal and taxation environment in which airports and airlines operate will change to bring about a much closer approximation of the cost of flying with the external costs of flying including climate change. This will increase the cost of flying and lead to a reduction in the growth rate of aviation passenger kilometres.
- 3.4.12 Such a fundamental shift in the way this industry operates has already been anticipated by the OECD (2002):

³⁵ Ibid.

³⁶ News release from the office of Caroline Lucas MEP [SSE/9/c Appendix 9].



- 3.4.13 In this OECD scenario (known as EST or Environmentally Sustainable Transport) there is a 36% decline in passenger kms flown in the period 1990-2030. This can be seen in the table below:

Aviation activity rates for OECD EST scenario

Person kms of flying in 1990	160
Person kms BAU 2030	700
Person kms in EST 2030	102
Reduction 1990-2030 (EST)	36%
% reduction EST 2030-BAU 2030	85%

BAU = 'Business as Usual' Note - numbers have been rounded.

- 3.4.14 The OECD has adopted a scenario for the future of aviation showing a 36% decline in passenger kms by 2030 compared to a 1990 base.
- 3.4.15 The extra 1.9 million foreign leisure passengers referred to in the 35mppa case³⁷ is only as robust as the assumptions that went into it. If other assumptions including those listed in 3.4.9 (above) were made, the result would be different. Our view is that 'business as usual' assumptions based on extra capacity, continuing subsidy and the absence of emission charges are untenable in the current climate of opinion and especially given the conclusions of Sir Nicholas Stern in his report to the UK Treasury.³⁸
- 3.4.16 Even if the 1.9 million figure could be 'future-proofed' which we very much doubt we remain unconvinced that the extra spend would bring unalloyed extra economic benefits to the region. A growth in the number of tourist arrivals at Stansted is not the same as a growth in tourist stay or tourist spend in the Stansted area or East of England Region. 1.6 million of the additional passengers listed in ES Vol 5, Table

³⁷ CD/6, para 6.5.13.

³⁸ 'Report of the Stern Review on the Economics of Climate Change', HMT, Oct 2006 [CD/157].

6 [CD/6] have a final destination which is London or the rest of the UK and 0.4 million remain in the East of England.

3.4.17 This weakness in the argument is recognised by BAA in ES Vol 5:

*'Growth in leisure passengers is anticipated with the development proposals which would provide a basis for the growth of this industry in both London and the East of England.'*³⁹

No evidence is presented in support of the assertion that passenger throughput at Stansted translates into quantifiable levels of spend in the Region as opposed to being part of a general UK tourism effect which could equally well be served from any of the 28 main airports listed by DfT.

3.5 Productivity Improvements

3.5.1 ES Vol 5 make a general assertion that there is a mechanism linking the availability of airports and air travel for businesses to improvements in productivity.⁴⁰ No evidence is presented in support of this assertion.

3.5.2 Productivity and how to improve it is a longstanding concern of economists, politicians and public policy analysts and the issue is broad, general and often supra-national:

*'Productivity growth in Europe slowed in the late 1990s, whereas in America it speeded up. Unemployment in Europe has been persistently higher than across the Atlantic. Europeans have also been slower to take up information technology, and the economic climate has been less conducive to innovation and research and development (R&D).'*⁴¹

3.5.3 Productivity increases cannot be linked to isolated transport infrastructure proposals especially one that involves an expansion of an existing facility such as an airport. Productivity is a function of labour relationships, support for new firm formation, rewards to employees and senior managers, exchange rate structures, R&D, taxation regimes, health care and social support systems. It is not appropriate to try and construct a link between productivity and an airport expansion project.

4 EMPLOYMENT AND HOUSING EFFECTS (ES Vol 6) [CD/9]

4.1 Context

4.1.1 Before we examine the detail of the evidence presented in ES Vol 6 [CD/9] we note that Stansted Airport is located in a healthy regional and sub-regional economy that would be the envy of many regions in the NW and NE of England and that we are examining the potential increase in employment associated with moving from 25mpps to 35mpps. The East of England is an economically buoyant fast growing region.

'The East of England has one of the strongest and fastest growing economies in the UK, with output totalling £81 billion in 2002. The economy is diverse and includes a strong service sector, which is the

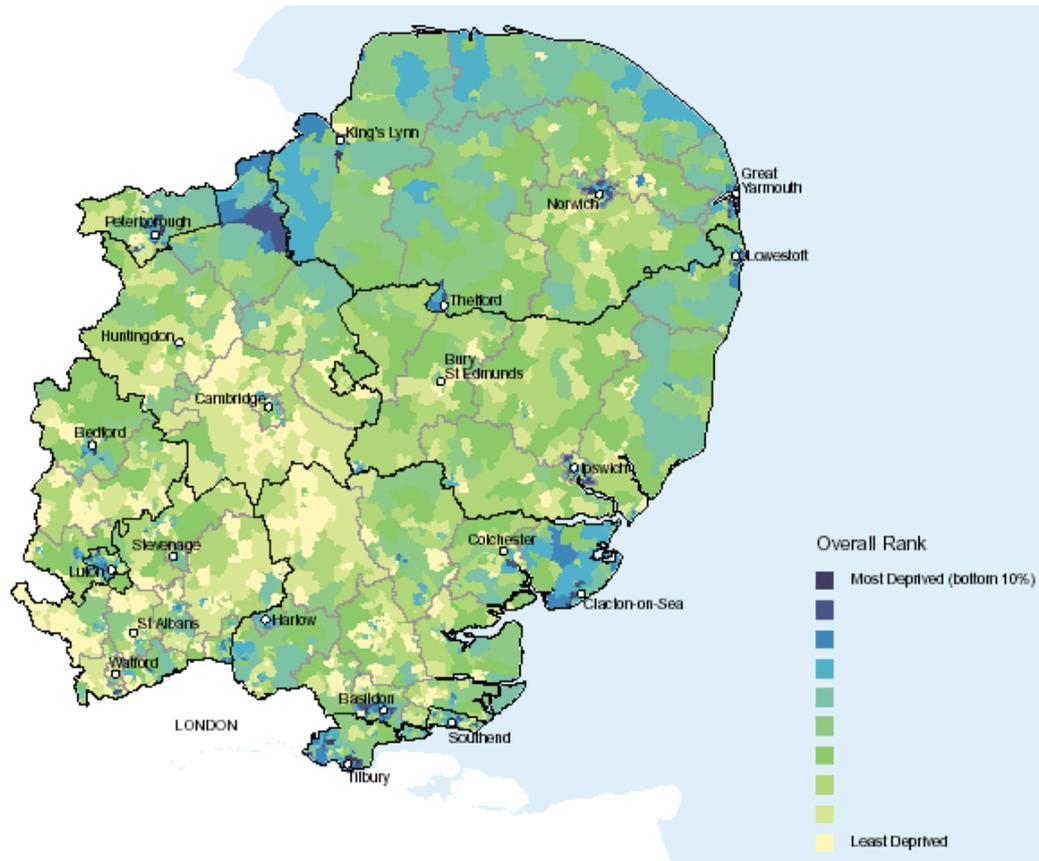
³⁹ CD/8, para 6.5.19.

⁴⁰ Ibid, paras 6.6.1 to 6.6.3.

⁴¹ 'The Economist', The Quest for Prosperity, March 15, 2007 [SSE/9/c Appendix 10].

*source of much of the region's growth. The region has a significant concentration of internationally important businesses engaged in research and development (R&D) and houses over 30 of the world's leading research centres.'*⁴²

- 4.1.2 Stansted Airport is not located in an area with recognised unemployment or other economic difficulties. Paras 8.2.12 and 8.2.13 of ES Vol 6 [CD/9] make it clear that unemployment is very low and all local authorities (with the exception of Harlow) fall within the least deprived areas of the country. This can also be seen in mapped form:⁴³

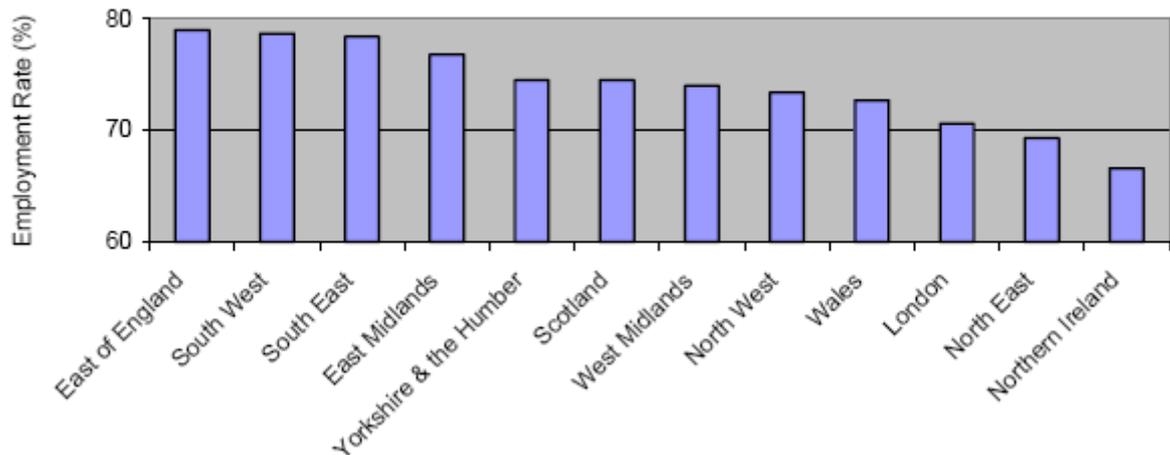


⁴² 'A Shared Vision: The Regional Economic Strategy for the East of England', [CD/119], p8.

⁴³ Ibid, p56.

4.1.3 The East of England has the highest employment rate of all English regions:

Figure 8: Employment Rate (%), March to May 2004



Source: 'Going for Growth', IPPR, 2004, p17.

4.1.4 This high level of growth and economic success is creating problems:

*'managing growth and development sensitively and effectively – the region's high level of growth is creating increasing pressures on our environment, as well as housing, transport, and other infrastructure and services, while per capita levels of public expenditure are the lowest in the country. To address this, the region will need to develop innovation in planning, financing and managing growth in order to maintain and build upon the existing high levels of satisfaction with quality of life.'*⁴⁴

4.1.5 There are also signs of 'overheating':

*'In a regional labour market exhibiting some signs of overheating, the focus for action must be where market failure is greatest and where there is potential to meet the needs of a changing economy. Increasing economic activity rates within the most disadvantaged communities must be an integral part of the region's regeneration programmes. Equally, achieving a better balance between labour supply and demand in local economies showing signs of overheating must be central to developing more sustainable patterns of growth. The use of migrant labour to address skills shortages and other recruitment difficulties is likely to be an increasing trend as a result of EU enlargement. The region will need to co-ordinate support services for migrant workers to ensure that their skills are fully utilised to the benefit of the regional economy.'*⁴⁵

4.2 Employment impacts

4.2.1 Stansted Airport in 2003 had 10,600 direct on-airport jobs and a further 4,300 classified under different headings. This is a total of 14,900 of which direct on-airport staff represents 71.1% of the total.⁴⁶

⁴⁴ 'A Shared Vision: The Regional Economic Strategy for the East of England', [CD/119], p11.

⁴⁵ Ibid, p26.

⁴⁶ CD/9, Table 15, p18.

- 4.2.2 The calculation of direct and indirect employment numbers is not an exact science and is very dependent on the assumptions made in the analysis.
- 4.2.3 The calculation of induced effects is also problematic and was the subject of complex argument at the T5 Inquiry. The central issue revolves around the size of the multiplier and there is no independent verifiable source of empirical information on the appropriate value to attach to a multiplier. This is admitted in para 8.3.17 with reference to the T5 multiplier which was scaled down to 1.24. Even the range 1.24 to 1.3 is entirely arbitrary given the large uncertainties around the geographical spread of consumer spending (e.g. internet sales) and the lack of empirical validation of a particular value for a multiplier.
- 4.2.4 There is also a fundamental flaw in the induced employment argument which carries with it a risk of double counting (CE, Delft, 2005, page 2):
'Summing employment figures inclusive of indirect jobs across all sectors leads to a far larger number than total employment.'
- 4.2.5 It is very difficult to see how summing across direct and indirect employment and then multiplying the result by an arbitrary multiplier can be relied upon to produce accurate results. It is even harder to see how this process can produce a result that is constrained by total regional or national employment figures. If every direct and indirect employee total in the East of England were multiplied up in this way the total would exceed total employment in the East of England and if it were done nationally the total would exceed national employment.
- 4.2.6 The wider uncertainties involved in estimating employment effects have been identified by Halcrow:
'Notes on Uncertainties
*Any dwelling and employment impacts are sensitive to a range of factors including air traffic forecasts, employment multipliers, economic activity rates and net commuting. Within this context the housing impact should be interpreted as indicative within overall provisions in the study area. A key conclusion is that the wider employment aspirations in the emerging RSS have a greater influence on potential dwelling requirements than the impact of a second runway at Stansted.'*⁴⁷
- 4.2.7 The Halcrow study also recommends caution on the so-called 'catalytic' impact on jobs. This refers to the wider effects of airport development in creating an attractive environment for inward investment, R&D and entrepreneurial activity:
*'In terms of catalytic employment we feel it is not possible to establish a causal relationship between catalytic employment and air traffic growth. Therefore, analysis of catalytic impacts is restricted to qualitative assessment on the basis that it should be regarded as a possible and not a probable outcome of airport development. However to meet study requirements quantified catalytic employment has been included in the high sensitivity test using the assumptions formulated by Buchanan et al.'*⁴⁸
- 4.2.8 The size of induced employment depends almost entirely on the amount of salaries and wages spent in a local economy or a specially selected catchment area and is

⁴⁷ 'Employment and housing implications of the second runway at Stansted Airport, 2004 page vi. Government Office for the East of England. Prepared by Halcrow [SSE/9/c Appendix 11].

⁴⁸ Ibid, p48.

therefore very sensitive indeed to geographical assumptions and to leakage outside the economy. If income from airport related employment (direct and indirect) is spent outside the area or on Internet sales then the induced employment effects will be reduced and in some cases reduced dramatically.

- 4.2.9 Internet sales are a special case of leakage and it is simply not possible to claim induced employment for any resources expended on Internet sales. This is relevant to the UK where Internet sales are high (over £100bn) and growing fast:
- 'The value of Internet sales rose by 56 per cent between 2004 and 2005, from £66.2bn to £103.3bn.'*⁴⁹
- 4.2.10 The selection of 1.24 for the Stansted multiplier used to produce an estimate of induced employment cannot be relied upon in the absence of this validation and in the absence of error boundaries e.g. is it accurate to plus or minus 10%?
- 4.2.11 The detail of calculations of future employment at Stansted is even more problematic, as found by Dr Douglas Hart and Professor Philip McCann (Reading University) in a 2004 Policy Critique of Stansted's expansion to 25mppa:
- 'The result of this is that on page 11 of BAA (2001), BAA assume that Stansted will grow by 7234 (82.5%) between 1999-2010, and by 5200 (48.1%) between 2002-2010. On other hand, our 'corrected' estimates suggest that, on the basis of BAA's own productivity assumptions, Stansted will grow by 5154 (58.8%) between 1999-2010, and by 3424 (32.6%) between 2002-2010. As such, the BAA (2001) estimate of total Stansted employment growth from 1999-2010 is 49.9 percentage points higher than our 'corrected' value, which is calculated according to BAA's own proposed methodology. Similarly, in terms of employment, the BAA (2001) estimate of total Stansted employment growth from 2002-2010 is 15.5 percentage points higher than our 'corrected' value, which is calculated according to BAA's own proposed methodology.'*⁵⁰
- 4.2.12 Hart and McCann then go on to compare the forecast employment totals in 2010 (25mppa) made by BAA/Pieda with their own corrected totals. This comparison is shown below:⁵¹
- 'The two sets of estimates can be compared in Table 16 below. Our 'corrected' estimates are in bold, and the stated Pieda and BAA estimates are given in brackets.'*

⁴⁹ '2005 e-commerce Survey of Business', ONS, Oct 2006 [SSE/9/c Appendix 12].

⁵⁰ 'A policy critique of Stansted Airport's Expansion to 25mppa', Hart, D and McCann, P, Reading University, 2004 [SSE/9/c Appendix 13].

⁵¹ Ibid, p16. ('Pieda' refers to 'DTZ Pieda', the economic and planning consultants employed by BAA in relation to BAA's 2001 planning application for expansion to 25mppa).

Table 16 – ‘A Comparison of ‘Corrected’ and Uncorrected Pidea Estimated Employment Multipliers – 1999/2002/2010

	1999 (9.4mppa)	2002 (15mppa)	2010 (25mppa)
Direct	8766 (8770)	10496 (10800)	13920 (16000)
Indirect	402 (500)	610 (770)	892 (1130)
Induced	2200 (2220)	2665 (2780)	3554 (4110)
Total	11368 (11490)	13771 (14340)	18366 (21240)

4.2.13 Hart and McCann are clear that they have used the same data as BAA and Pidea and have simply corrected for errors. The correction produces an employment total in 2010 of 18,366 and not 21,240.

4.2.14 Hart and McCann conclude:

*'All of this means that the impact of Stansted Airport's proposed expansion to 25mppa on the local area in terms of the different types of employment we have been considering and the consequent housing figures is likely to be less than the original Pidea calculations suggested.'*⁵²

4.2.15 The number of jobs claimed for the expansion from 25mppa to 35mppa is 3,800.⁵³ We have already expressed doubts about the claims made for induced employment totals. The methodology underpinning these estimates of induced employment is too simplistic, not empirically verified and not brought up to date with recent trends in spending and leakage. The induced total gain (25mppa compared to 35mppa) of 700 must, therefore, be regarded as speculative. The 35mppa case has produced an employment growth of 3,050 if we exclude the induced category.

4.2.16 In a large and fast growing regional economy the addition of 3,050 is relatively insignificant and comparable with the creation by Sainsbury's of 3,000 jobs:

*'Sainsbury's Supermarkets Ltd has announced a £500 million spending programme on new stores and store refurbishments in London over the next three years, with at least 27 new stores and the creation of over 3,000 new jobs. This will bring the total amount invested in London to £1bn and the total number of new jobs created to over 6,000 over five years (1999 - 2004).'*⁵⁴

4.2.17 Any growth in employment is welcome for those individuals or families who would be able to find work in an expanded labour market which was not available to them before the expansion. In practice it is very difficult to identify this virtuous effect. There are two problems. Firstly new employment opportunities will always attract people who are already in work and seeking to change employment for a wide variety of reasons. The net gain to a regional or sub-regional economy of a job change as opposed to a move from being unemployed or partly employed to employment is small. Secondly the problem of overheating (identified in 3.1.9 and 4.1.5 above) has to be dealt with.

⁵² Ibid, p18.

⁵³ CD/9, Table 22, p23.

⁵⁴ J Sainsbury plc news release [SSE/9/c Appendix 14].

- 4.2.18 Overheating is a general term used to characterise an area or region that is experiencing significant rates of economic growth with consequential growth in traffic congestion, pollution, health problems related to pollution, water shortages, house price increases, housing shortages and pressure on public services including overcrowding on trains. From a national point of view it is uneconomic to allow pressures of this kind to grow with growing externalities (for example, environmental costs) and potentially with a loss of international competitiveness.
- 4.2.19 The key problem of employment growth in Stansted is not its quantitative significance but whether or not it is contributing to overheating of the regional economy. This is not discussed by BAA in ES Vol 6 [CD/9].
- 4.2.20 This problem has been considered in the context of SE England by the IPPR and the comment applies with equal force to the East of England:
- 'Further increasing the rate of economic growth in the South East does not seem a high priority relative to dealing with disparities in prosperity within the region and coping with the problems that current levels of relative economic success pose, particularly in terms of traffic congestion, the lack of affordable housing, the use of natural resources and the quality of the environment. This is not the same as arguing for 'no growth' or even 'lower growth'. At the very least it is merely suggesting that the current rate of growth is acceptable as an economic objective, although this will pose challenges for achieving environmental objectives in the region.'*⁵⁵
- 4.2.21 The Halcrow study referred to above concludes:
- 'We conclude that the current dwelling provision in RPG 14 is sufficient to accommodate employment growth rates targeted in 'EG2021' forecasts and the expansion of a 1-runway Stansted operation. The additional dwellings generated over and above this by the second runway are unlikely to be accommodated within current provisions, but the additionality could be met through the further 18,000 dwellings that EERA might proposes for the London- Stansted-Cambridge-Peterborough corridor. This additionality would be reduced if net in-commuting were to grow above existing levels, as may be the case with BAA's policies of expanding the airport's catchments area into North London.'*⁵⁶
- 4.2.22 The optimistic and generalised statement in the Halcrow report cannot apply in full at smaller geographical scales. The provision of 3,000 extra jobs in a local economy (i.e. at a smaller geographical scale than the London-Stansted-Cambridge-Peterborough corridor) will inevitably add pressure to the existing housing market.
- 4.2.23 The exact amount of pressure will depend on circumstances that are very hard to predict. The pressure will be great if 3,000 'new people' attempt to re-locate within easy commuting range of Stansted and they will be small if all 3,000 jobs are taken by people already living within commuting range and simply looking for a job swap. Under the latter circumstances the beneficial economic impact is also minimised.
- 4.2.24 IPPR (2003) concludes that the economic, social and environmental costs outweigh the benefits:

⁵⁵ 'Going for Growth', IPPR, 2004, p24 ('Policy conclusions'). [SSE/9/c Appendix 15].

⁵⁶ 'Employment and housing implications of the second runway at Stansted Airport, 2004 page vi. Government Office for the East of England. Prepared by Halcrow [SSE/9/c Appendix 11].

'We conclude that unconstrained growth in air transport is not sustainable; the economic and social benefits are outweighed by the economic, social and environmental costs' ⁵⁷

and more specifically on overheating:

'By encouraging industries to migrate to an area, aviation growth can add to congestion at the local level. The inward migration of new residents can increase traffic flows on local roads for both commuting and leisure, exacerbated too by more passengers cars accessing the airport.' ⁵⁸

5 THE WIDER ECONOMIC IMPACTS OF EXPANSION

5.1 Cost-benefit analysis

- 5.1.1 There is a long tradition in the UK of embedding major infrastructural and transport proposals in a cost-benefit analysis ('CBA'). This was done by the Roskill Commission on the 3rd London Airport in 1970 and on the Victoria Underground line in London, also in the 1960s. The Roskill Commission undertook:

'The largest research project undertaken by a Commission of Inquiry, the most far reaching cost benefit study carried out anywhere in the world and an unprecedented degree of public participation in the inquiry process.' ⁵⁹

- 5.1.2 This is not the place for a full description of CBA but it is still the case that any public or private project will produce a number of benefits to society as a whole as well as costs and, further, that it is prudent to base public policy decisions on matters such as aviation expansion, new airports and expanded airports on a clear audit of the scale of those costs and benefits. The underlying message of CBA is that if costs exceed benefits there should be presumption against implementation.

- 5.1.3 According to one of the leading economists on CBA (EJ Mishan):

'As everyone knows, a cost benefit analysis purports to measure in money terms all the benefits and all the costs to be expected over the future of some mooted project, and to admit the project if the sum of the benefits exceeds the sum of the costs by a sufficient margin.' ⁶⁰

- 5.1.4 It is also clear in BAA evidence in Volumes 5 and 6 of the ES that the promoters of the Stansted expansion project support the principles of CBA. They have argued that the wider social and economic benefits are large especially through job creation, developing tourism and attracting FDI.

- 5.1.5 This emphasis on benefits to the exclusion of costs has been reinforced by the work of the Oxford Economic Forecasting organisation ('OEF'), October 2006 [CD/120]. The authors of this report claim substantial benefits from the aviation sector in terms of jobs created and tourism revenues. These claims are very much exaggerated and the OEF study is based on a survey of companies that achieved only a 2.75% response rate (165 replies out of 6,000 surveyed). Such a low

⁵⁷ 'The Sky's the Limit', Simon Bishop and Tony Grayling, IPPR, 2003 [CD/246, p11].

⁵⁸ Ibid, p25.

⁵⁹ 'Choosing a site for the Third London Airport: the Roskill Commission's Approach', A D J Flowerdew (1972) in R Layard (ed) Cost Benefit Analysis, Penguin, 431-451.

⁶⁰ 'What is wrong with Roskill?', E J Mishan in R Layard (ed) Cost Benefit Analysis, Penguin, 452-472 (quotation is on p453).

response rate would normally be accepted as insufficient as a basis for conclusion, inferences or statistical representativeness.

- 5.1.6 There is, on the other hand, a resounding silence from the promoter on the wider societal costs of such a proposal. This is illogical and asymmetrical.
- 5.1.7 Guidance on the use and importance of CBA is available in guidance on transport appraisal in WebTag.
- 5.1.8 The Treasury definition of CBA is:

*'Analysis which quantifies in monetary terms as many of the costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value.'*⁶¹

The concept of cost benefit analysis can therefore be very broad.

- 5.1.9 Further support for this wider evaluation of policies and projects is contained in the HM Treasury Green Book.

*"The Green Book describes how the economic, financial, social and environmental assessments of a policy, programme or project should be combined."*⁶²

5.2 Externalities that must be considered for Stansted CBA

- 5.2.1 The proposed expansion of Stansted Airport is asserted by BAA to be contingent on government policy in favour of airport expansion. It is appropriate, therefore, to subject the proposed expansion to the widest possible 'economic, financial, social and environmental assessment'.
- 5.2.2 Before examining some of the costs associated with an expansion of Stansted we note in passing the influence of transport subsidies on stimulating an increase in demand for transport including air journeys. These subsidies are unlikely to continue into the future and the forecasting of future demand for air transport is based on the assumption that they will. The implication of this is that we should not base policy decisions and planning decisions on flawed forecasts.
- 5.2.3 Transport is heavily subsidised in the EU and these subsidies feed through into lower costs for users (including airline passengers). The absence of subsidies would lead to higher fares and lower levels of demand. The European Environment Agency ('EEA') is Europe's leading expert policy group on the environment and transport and has defined subsidies as follows:

'With this report, the EEA aims to contribute to the discussion of how to estimate the actual value of subsidies that goes to the transport sector. As an illustration of the methodology developed and the data retrieved, the report identifies subsidies worth EUR 270 to 290 billion a year. This figure includes only direct transfers and tax deductions. It does not include more difficult to calculate issues such as value of privileged regulation, land-use policy, etc. The report is a first attempt to quantify the transport subsidies using a narrow definition specific to the aim of comparing all transport modes. Readers should take this into account when using the figures. The study does not distinguish between environmentally beneficial and environmentally harmful subsidies.'

⁶¹ 'Appraisal and Evaluation in Central Government', HMT, 2003, p4.

⁶² The Green Book, HMT, para 1.3.

5.2.4 Aviation is subsidised mainly via preferential tax treatment (exemptions from fuel tax and VAT). The EEA report quantifies the total transport subsidy as in the range 269-293 billion Euros each year of which air transport receives 27-35 billion Euros each year⁶³. The effect of these subsidies is summarised as follows:

'By lowering the costs of transport, subsidies increase transport demand, i.e. the number of trips and their distances. The resulting transport growth affects the environment through higher emissions, increased need for infrastructure, urban sprawl, habitat fragmentation, etc' ⁶⁴

5.2.5 Sewill (2003) has quantified the annual value of tax subsidies in the UK at £9.2 billion and this will have a strong uplifting effect on the demand for air transport through lower prices than would otherwise be the case.⁶⁵

5.2.6 Subsidies contribute to the growth in demand for air transport which then contributes to the increase in environmental impacts and costs. These costs are sometimes referred to as externalities. Externalities include noise, health damage and climate change. The EEA (2007) has summarised the annual cost of these externalities at 650 billion Euros and represented the costs that should be included in a CBA. These are summarised in EEA (2007):

'Transport has significant environmental effects including air pollution, climate change, eco-system fragmentation, loss of natural habitat and increased levels of noise. The total cost to society of transport external cost not borne by the infrastructure users (albeit not defined as a subsidy in this report) has been estimated at EUR 650 billion.' ⁶⁶

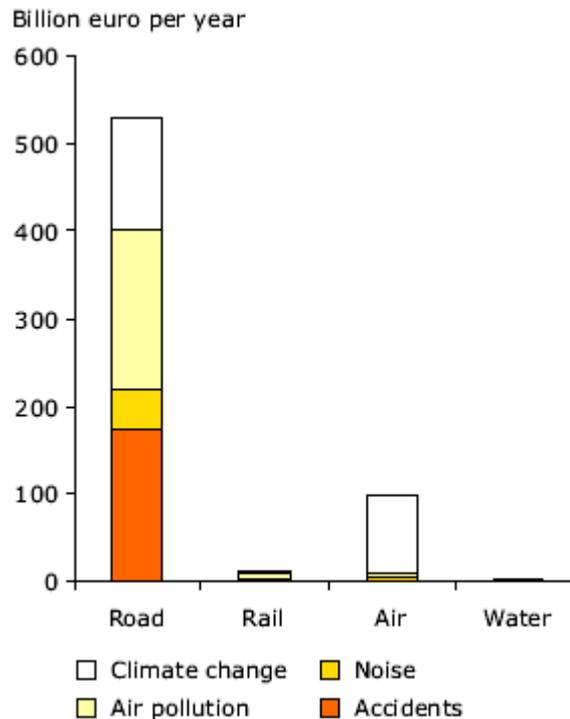
⁶³ 'Size, structure and distribution of transport subsidies in Europe', EEA, 2007, p6.

⁶⁴ Ibid, p12.

⁶⁵ 'The Hidden Cost of Flying', Sewill, 2002 [CD/253].

⁶⁶ 'Size, structure and distribution of transport subsidies in Europe', EEA, 2007, Summary, p7-8.

Total External Cost of Transport, 2000 (EU 15 + Norway and Switzerland)



5.2.7 The above graphical illustration of external costs for air transport from the EEA report⁶⁷ shows the overriding importance of climate change effects. For the sake of brevity and simplicity we will now focus on these effects and use the report of Sir Nicholas Stern to HM Treasury in October 2006 as the starting point.

5.2.8 The Stern Report quantified the social cost of carbon dioxide emissions at \$85 per tonne (equivalent to £238 per tonne of carbon at 2000 prices⁶⁸) and this estimate is based on one of the most thorough reviews of climate change damage and the economics of that damage ever carried out:

'Preliminary calculations adopting the approach to valuation taken in this Review suggest that the social cost of carbon today, if we remain on a BAU trajectory, is of the order of \$85 per tonne of CO₂ – higher than typical numbers in the literature, largely because we treat risk explicitly and incorporate recent evidence on the risks'.⁶⁹

5.2.9 The Stern Report has made it very clear that the costs of proceeding on a trajectory of year on year increases in carbon emission are very large indeed and bring with them significant risks and problems for the economy.

5.2.10 We note that there is no estimate from the appellant before the Inquiry of the amount of additional carbon associated with the proposed expansion of Stansted. Information at a more general level about future carbon emissions associated with

⁶⁷ Size, structure and distribution of transport subsidies in Europe', EEA, 2007.

⁶⁸ 'Report of the Stern Review on the Economics of Climate Change', HMT, Oct 2006 [CD/157], Box 13.1, p288.

⁶⁹ Ibid, Executive Summary, page xvi.

airport expansion in the UK has been presented by the Environmental Change Institute at Oxford University:

Table 2.4 Future emissions of CO₂ from aviation(MtC)

<i>Emissions from aviation</i>	<i>Aviation White Paper (mid range forecast)</i>	<i>Owen and Lee (scheduled traffic only)*</i>	<i>Tyndall Centre scenario</i>
2010	10.8	8.7	12.1
2020	14.9	13.3	17.3
2030	17.7	18.4–22.3	21.3
2040	18.2	26.9–31.4	26.3
2050	17.4	29.4–44.4	32.3

* Figures are therefore under-estimates.

Source : *Predict and Decide. Aviation, climate change and UK policy*, Environmental Change Institute, Oxford University [CD/155], p15.

- 5.2.11 We further note that Stansted will contribute its proportionate share of these emissions and its proportionate share of the total social cost of carbon into the future and that these costs have not been factored into the debate about the proposed expansion. In our view they should be evaluated, costed and be part of that debate.
- 5.2.12 This view is shared by government in its Air Transport White Paper ('ATWP') Progress Report (2006) [CD/88]:

'We are also clear that major decisions on increases in airport capacity need to take account of not only their local environmental effects, but also the wider context of aviation's climate impact.

In accordance with a key conclusion of both the Stern Review and Eddington Study, the Government therefore proposes to introduce a new emissions cost assessment to inform its decisions on major increases in aviation capacity. This assessment would consider whether the aviation sector is meeting its external climate change costs.

We will consult on the development of this emissions cost assessment in the first half of 2007. We will also draw on the recommendations of the Eddington Study, in particular the cost-benefit analysis revisions to further enhance our consideration of climate change costs alongside economic benefits when appraising new airport capacity. We shall also consider how an emissions cost assessment could be applied in the shorter term.

*This approach will reinforce the need to make progress at international and national levels for the aviation sector to meet fully its external climate change costs in areas of operations, technology and economic instruments. The benefits of further gains in fuel efficiency and the use of carbon by the aviation industry will help us to meet our environmental obligations.'*⁷⁰

⁷⁰The Future of Air Transport Progress Report', DfT, Dec 2006, paras 2.33 to 2.36. [CD/88].

- 5.2.13 There should be an emissions cost assessment of the proposed Stansted expansion and the results should be used to inform the public policy decision-making process.
- 5.2.14 We also note that the UK is the first country in the world to introduce legislation to deal with climate change and that the view of government is clear that all sectors should take on the responsibility of delivering reductions in greenhouse gases. On publishing the Draft Climate Change Bill on 13 March 2007, Environment Secretary, David Miliband, said:

*'It argues that all sectors of society will have to contribute to the transition to a low-carbon economy.'*⁷¹

The phrase 'all sectors of society' clearly embraces aviation and clearly identifies the need to move from 'predict and provide' to 'predict and prevent'.

6 CONCLUSIONS

- 6.1 We have demonstrated that the arguments put in support of the expansion proposal in terms of inward investment, tourism, job creation and productivity are weak and unsubstantiated and in the case of tourism strongly negative in that the balance of payments deficit works to the disadvantage of local economies in the UK.
- 6.2 We have shown that in traditional economic and regeneration terms the issues to be tackled in the East of England are those related to over-heating and to the disbenefits of strong economic growth including housing supply, congestion and pressure on services. There is no demonstrable need for traditional job creation strategies.
- 6.3 It is regrettable that a conventional cost-benefit analysis embracing economic and environmental topics has not been done. In our view this would reveal that costs exceed benefits.
- 6.4 If the social cost of carbon as outlined by Sir Nicholas Stern were linked to the growth in these emissions and to the growth of Stansted this would take the whole Stansted project heavily into the red. Costs would exceed benefits by a very large margin.
- 6.5 This points unerringly to the conclusion identified by Mishan in 5.1.3 above: the project should not be admitted.

⁷¹ Press Release, DEFRA, 13 March 2007, <http://www.defra.gov.uk/news/latest/2007/climate-0313.htm>.

Appeal by BAA Ltd and Stansted Airport Ltd following the refusal by Uttlesford District Council of planning application UTT/0717/06/FUL

Economic and Employment Aspects of Stansted's Proposed Growth Trajectory Appendices

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