

**Appendix C**  
**Economic Impacts on**  
**The Suvarnabhumi Airport**



**APPENDIX C****ECONOMIC IMPACTS ON THE SUVARNABHUMI AIRPORT  
THE STUDY ON THE CONTRIBUTION OF THE AVIATION INDUSTRY  
TO THE UK ECONOMY  
BY OXFORD ECONOMIC FORECASTING INSTITUTE, 1999**

The study shows that the aviation industry plays a prominent role in boosting the country's economy in many ways, one of them is being a part of fundamental transport related to other economic sectors. The effective transport system leads to the market links and market expansion. More markets, then, make economic sector earn more profit from wider distribution, while more market links, in the same way, bring about higher competition among manufacturers. Being more specialized in their lines of business, manufactures will be able to achieve more effective production. Furthermore, the expansion of aviation industry also facilitates direct investment among countries, leading to the introduction of innovations and modern sophisticated technologies to the country and more effective production. The aviation industry not only helps in boosting the country economics through other sectors of industry, but also contributes to the enhanced economic health directly.

The study found that the aviation industry helped in the 1.4% growth of Gross National Product (GNP) in the United Kingdom – higher employment rate, both in the aviation industry itself and in related industry such as hotel industry, tourism, and food industry. It also created higher export value by 20%, and 3% increase in investment.

Regarded as a fast growing industry comparing to other industries, the aviation industry is, therefore, very contributive in boosting the United Kingdom's economics. While other business sectors – exporting industry and international investment industry – have been more and more dependent on the aviation industry. Economic links between economic sectors and air transport are shown in the following Tables B-1 and B-2. Table B-3 displays the economic link of the United Kingdom and other countries. The limited expansion of aviation industry will, therefore, limit the expansion of other business sectors, and finally impact the overall economics of the country.

**Table C-1**  
**Foreign Direct Investment in UK**

Country	Average Inflow 1993-97		Inward Stock End 1997		Inward Stock (% GDP)
	\$ Billion	Share of World Total	\$ Billion	Share of World Total	
US	62.9	20.6	720.8	20.9	8.3
UK	22.0	7.2	274.4	7.9	20.5
France	20.1	6.6	174.2	5.0	10.1
Canada	7.7	2.5	137.1	4.0	22.0
Italy	3.7	1.2	78.5	2.3	7.4
Germany	2.8	0.9	137.7	4.0	5.9
Japan	0.9	0.3	33.2	1.0	0.7

Source: UNCTAD: World Investment Report 1998

**Table C-2**  
**Sectoral Growth and Air Transport Spending per Employee**

Item	1988-98 Average Growth		Rank	Spend per Employee
	Rank	% year		
Agriculture, forestry & fishing	22	0.8	34	14
Extraction	14	1.9	2	1,152
Basic metals	31	-1.1	7	537
Pharmaceuticals	4	5.5	21	90
Other chemicals	15	1.6	10	239
Computers & office equipment	1	13.5	11	220
Electrical engineering	21	1.0	19	100
Electronic equipment	5	5.1	22	85
Food, beverage & tobacco	23	0.7	18	106
Coke, petroleum & nuclear fuel	19	1.3	3	1,044
Mechanical engineering	30	-1.1	26	62
Metal product n.e.c	29	-0.8	27	60
Non-mineral extraction	32	-1.7	12	216
Motor vehicle, parts & accessories	17	1.5	13	207
Other manufacturing	25	0.3	20	97
Other means of transport	18	1.3	6	565
Paper & plastic	26	0.2	29	49
Printing & Publishing	20	1.1	9	454
Precision & optical instruments	28	-0.5	16	140
Rubber & plastics	13	2.1	28	60
Textiles, leather & clothing	34	-2.7	24	68
Wood & wood products	33	-1.9	35	8
Electricity, gas & water	10	2.5	33	19
Construction	24	0.4	32	19
Distribution	11	2.4	23	68
Hotels & catering	27	0.0	30	48
Transport	9	2.8	5	796
Communication	3	6.6	8	478
Insurance	8	3.4	1	1,528
Banking & finance	12	2.3	4	970
Real estate & renting	7	3.8	14	185
Computer activities	2	7.0	17	114
R & D	35	-4.6	25	66
Other business activities	6	4.6	15	183
Non-market services	16	1.6	31	39
Spearman's Rank Correlation				0.35
<b>Spearman's Rank Correlation for Service Sectors Only</b>				<b>0.45</b>

Source : Oxford Economic Forecasting Institute, 1999

**Table C-3**  
**Sectoral Growth and Use of Air Transport**

Item	1988-98 Average Growth		Rank	Spend of Air Transport in Total Transport Demand
	Rank	% year		
Agriculture, forestry & fishing	22	0.8	27	5.7
Extraction	14	1.9	13	13.4
Basic metals	31	-1.1	14	13.1
Pharmaceuticals	4	5.5	23	7.0
Other chemicals	15	1.6	28	4.9
Computers & office equipment	1	13.5	17	11.4
Electrical engineering	21	1.0	18	11.1
Electronic equipment	5	5.1	19	11.1
Food, beverage & tobacco	23	0.7	31	3.9
Coke, petroleum & nuclear fuel	19	1.3	9	22.9
Mechanical engineering	30	-1.1	24	6.7
Metal product n.e.c	29	0.8	25	6.6
Non-mineral extraction	32	-1.7	30	4.7
Motor vehicle, parts & accessories	17	1.5	15	12.8
Other manufacturing	25	0.3	26	6.5
Other means of transport	18	1.3	1	63.8
Paper & plastic	26	0.2	34	3.2
Printing & Publishing	20	1.1	4	34.5
Precision & optical instruments	28	-0.5	10	20.3
Rubber & plastics	13	2.1	32	3.7
Textiles, leather & clothing	34	-2.7	21	7.6
Wood & wood products	33	-1.9	35	0.3
Electricity, gas & water	10	2.5	22	7.4
Construction	24	0.4	29	4.8
Distribution	11	2.4	33	3.4
Hotels & catering	27	0.0	16	12.4
Transport	9	2.8	11	19.4
Communication	3	6.6	8	23.0
Insurance	8	3.4	3	36.0
Banking & finance	12	2.3	2	49.6
Real estate & renting	7	3.8	12	14.7
Computer activities	2	7.0	6	24.2
R & D	35	-4.6	7	23.8
Other business activities	6	4.6	5	30.4
Non-market services	16	1.6	20	11.1
Spearman's Rank Correlation				0.33

Source: OEF calculations based on ONS input-output supply and use balances, 1996

**Table C-4**  
**Links With Key Markets in UK, 1997**

Busiest Routes between Asia-Pacific and Europe			Busiest Routes between North America and Europe		
Rank	Country Pair	Passengers (Million)	Rank	Country Pair	Passengers (Million)
1	Japan United Kingdom	1.4	1	United Kingdom United States	1.4
2	Japan France	1.0	2	Germany United States	1.0
3	Hong Kong United Kingdom	1.0	3	France United States	1.0
4	Singapore United Kingdom	0.9	4	Netherlands United States	0.9
5	Japan Germany	0.8	5	United Kingdom Canada	0.8
6	India United Kingdom	0.8	6	Italy United States	0.8
7	Thailand Germany	0.7	7	Scandinavia United States	0.7
8	India Germany	0.6	8	Switzerland United States	0.6
9	Australia United Kingdom	0.6	9	Spain United States	0.6
10	Japan Italy	0.5	10	Ireland United States	0.5

Source: IATA Passenger Forecast 1998-2002

**Table C-5**  
**Economic Growth of Business Sectors in the United Kingdom,**  
**in 1988, 1998, and 2008**  
**(based on the estimated economic growth boosted by aviation industry)**

Item	Average Annual Value-added Growth		Share of Total Output (%)		
	1988-98 % year	1998-08 % year	1988	1998	2008
Agriculture, forestry & fishing	0.8	-0.2	1.7	1.5	1.2
Extraction	1.9	0.6	2.8	2.7	2.3
Basic metals	-1.1	0.9	1.2	0.8	0.7
Pharmaceuticals	5.5	6.0	0.5	0.7	1.0
Other chemicals	1.6	2.2	1.7	1.7	1.6
Computers & office equipment	13.5	8.7	0.4	1.3	2.2
Electrical engineering	1.0	2.8	1.0	0.8	0.8
Electronic equipment	5.1	4.4	0.8	1.1	1.3
Food, beverage & tobacco	0.7	1.0	3.0	2.6	2.3
Coke, petroleum & nuclear fuel	1.3	0.4	0.6	0.6	0.5
Mechanical engineering	-1.1	1.2	2.0	1.5	1.3
Metal product n.e.c	-0.8	0.3	1.5	1.1	0.9
Non-mineral extraction	-1.7	-0.9	0.9	0.6	0.4
Motor vehicle, parts & accessories	1.5	2.6	1.3	1.3	1.3
Other manufacturing	0.3	1.8	0.6	0.5	0.5
Other means of transport	1.3	2.4	1.1	1.1	1.1
Paper & plastic	0.5	0.4	0.7	0.6	0.4
Printing & Publishing	1.1	2.3	1.7	1.6	1.6
Precision & optical instruments	-5.0	1.0	0.3	0.2	0.2
Rubber & plastics	2.1	1.7	1.0	1.0	0.9
Textiles, leather & clothing	-2.7	-0.7	1.5	0.9	0.7
Wood & wood products	-1.9	1.3	0.4	0.2	0.2
Electricity, gas & water	2.5	2.4	2.1	2.2	2.3
Construction	0.4	1.7	6.6	5.6	5.3
Distribution	2.4	2.7	10.7	11.1	11.5
Hotels & catering	0.0	1.1	2.6	2.1	1.8
Insurance	3.4	0.9	1.2	1.4	1.2
Banking & finance	2.3	1.9	4.0	4.1	3.9
Transport	2.8	4.0	5.3	5.7	6.6
Communication	6.6	4.6	2.6	4.0	4.9
Real estate & renting	38.0	3.1	2.6	3.1	3.4
Computer activities	7.0	7.7	0.9	1.4	2.4
R & D	-4.6	4.3	0.6	0.3	0.4
Other business activities	4.6	4.7	5.7	7.4	9.2
Non-market services	1.6	0.9	28.5	27.2	23.6

Source : ONS OEF

For Thailand, the study considered product, investment, and employment in the aviation and other related industries, such as tourism industry, export industry, etc. Analysis was made of product, investment and employment in the mentioned industries, both before and after experiencing a major change so as to evaluate the impacts of change and its trend.