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An economic introduction to India

This Research Paper is intended to act as a resource which Members of Parliament and their staff can draw upon as a first introduction to the Indian economy.

Part I provides key demographic facts and figures about India. Part II reviews India's internal economy including the main industry sectors. Part III looks at the external economy, summarises the aid India receives and looks at the outlook for India's economy. The Paper ends with a select bibliography of key sources.

The Research Paper is a sister Paper to RP07/41 *A political introduction to India*.

Grahame Allen & Janna Jessee

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Summary of main points

India is highly diverse and complex, as reflected in its ethnic, linguistic, geographic, religious and demographic features. India is only the second country to achieve a population of one billion (after China). Its current population totals 1.1 billion. It accounts for 17% of the earth's population, and it is its fastest growing nation. The majority of people are Hindu, but there are also large populations of Muslims, Christians, Sikhs, Buddhists and Jains.

India has enjoyed strong economic growth for the last couple of decades, growing more quickly than major developed economies such as the UK and US, and only slightly more slowly than the economy of China, which India's economic performance is often compared. However, India remains a very poor country, with Gross National Income (GNI) per capita ranked at 159th (out of 200 countries) in 2005.

India's economy is dominated by services, which represent 60% of GDP. Information technology (IT) services alone represented 5% of India's GDP in 2005-06. 20% of India's GDP is accounted for by agriculture and manufacturing makes up a further 15%.

The UK is India's fourth largest trade partner, being ranked fourth for both imports and exports, behind the US, China and Belgium. As a proportion of total UK-World goods and services trade, both UK exports to, and imports from, India increased between 1995 and 2006 - from 1.0% to 1.1% for exports, and from 0.8% to 1.0% for imports. Exports of goods and services from the UK to India are increasing at a relatively high rate. In 2004, 2005 and 2006, exports to India increased by 26%, 8% and 21%, respectively, compared to increases in total exports from the UK in 2004, 2005 and 2006 of 5%, 7% and 13% respectively.

A dramatic new trend in the UK-India business relationship has been the recent growth of Indian companies as investors into the UK. Indian interests in the UK range from IT-enabled services, such as HCL's call centres in Belfast, through to pharmaceuticals and other manufacturing. High-profile acquisitions include that of Tetley Tea by India's Tata Tea in 2000, and more recently, Tata Steel's purchase of Corus for £6.7 billion, an Indian company's largest foreign acquisition to date.

The Department for International Development's (DFID's) assistance to India is the UK's largest bilateral programme to any single country. In 2005/06, DFID's total bilateral aid programme to India amounted to £250 million, representing 10% of the DFID bilateral programme.

The outlook for India's economy continues to be good. However, inflation figures suggest that the economy may be growing too rapidly. The inflation rate is currently at 5% and is expected to increase over the next two years.

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I Key demographic facts and figures

The Indian sub-continent

A. Population (Julien Anseau)

India is highly diverse and complex, as reflected in its ethnic, linguistic, geographic, religious and demographic features. This diversity, as well as the tension between tradition and change, is evident in India's demography. Fertility decline has played a crucial role in slowing population growth, but there are wide disparities in birth rates between the northern and southern states. Northern states are characterised by high birth rates, abject poverty, poor health, and widespread illiteracy, particularly among women. In southern states, living conditions, educational levels and life expectancy are higher and birth rates lower.

1. Population

India is only the second country to achieve a population of one billion (after China). Its current population totals 1.1 billion, it accounts for 17% of the earth's population, and it is its fastest growing nation. India is the second largest country in the world in terms of population size, and forecasts suggest that before 2030 it will surpass China to become the world's most populous country, a distinction it is expected it will almost certainly never lose. By 2050, India will have to find space for an additional 500 million people.[1]

Table 1: Key Socio-demographic indicators, India

Population mid-2006 (millions)	1,121.8
Rate of natural increase (%)	1.7
Projected population (millions) 2025	1,363
Projected population (millions) 2050	1,628
Projected population change 2006 - 2050 (%)	45
% of population of age: below 15	36
% of population of age: above 65	4
Total Fertility Rate [a]	2.9
Government view of birth rate	High
Women giving birth by age 18 (%)	28
Infant Mortality Rate [b]	58
Life expectancy at birth (years) Total	63
Life expectancy at birth (years) Male	62
Life expectancy at birth (years) Female	63
Percent urban	29
Population density per square mile	884
% of population 15-49 with HIV/AIDS (2003)	0.9
2005 GNI PPP per Capita (US$)	3,460
% population living below US$2 per day	80

Notes: [a] The average number of children a woman would have assuming that current age-specific birth rates remain constant throughout her childbearing years.

[b] The annual number of deaths of infants under age 1 per 1,000 live births.

Source: Population Reference Bureau, 2006 World Population Data Sheet

[1] United Nations Population Division, *World Population Prospects: The 2004 Revision*, Volume 1, 24 February 2005. Available at (9 March 2007): www.un.org/esa/population/publications/WPP2004

2. 2001 Census of India

The 2001 Census of India counted a total of 1,028,610,328 people. The State of Uttar Pradesh has the largest population (166 million), followed by the states of Maharashtra, Bihar, West Bengal and Andhra Pradesh. Together, these states account for nearly 50% of India's population. Population density is as high as 9,340 and 7,900 people per square kilometre in the union territories of Chandigarh and Delhi. Of the 'larger' states, West Bengal, Bihar, Kerala and Uttar Pradesh also have high population densities. 57% of India's population is between the ages of 15 and 59, 35% is under 15 years of age, and only 7% are 65 and over. This contrasts with developed societies, whose populations have older age profiles. The population of India has a sex ratio of 107, meaning there are 107 males to every 100 females. Only in the State of Kerala do females outnumber males.[2]

a. Religion

The population of India is diverse and includes many different religious groups. The majority of people are Hindu, but there are also large populations of Muslims, Christians, Sikhs, Buddhists and Jains. A considerable number of people (7 million) also belong to smaller religions:

Table 2: Population by religious community in India

	Population	%
Hindus	827,578,868	80.5
Muslims	138,188,240	13.4
Christians	24,080,016	2.3
Sikhs	19,215,730	1.9
Buddhists	7,955,207	0.8
Jains	4,225,053	0.4
Other Religions & Persuasions	6,639,626	0.6
Religion not stated	727,588	0.1
Total	1,028,610,328	100

Note: Excludes figures of Paomata, Mao Maram and Purul sub-districts of Senapati district of Manipur state.

Source: Office of the Registrar General & Census Commissioner (India), Census of India 2001, available at www.censusindia.gov.in

In 2001, Hindus accounted for 830 million people, 80% of the population. Muslims formed the second largest religious community, with 140 million people (13% of India's population). Some states have a predominantly Muslim population, such as Lakshadweep (97%) and Jammu & Kashmir (67%); other states with a considerable Muslim population include Assam (31%), West Bengal (25%) and Kerala (25%). The 2001 Census of India counted 24 million Christians, 25% of whom lived in Kerala and a

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[2] Office of the Registrar General & Census Commissioner (India), 2001 Census of India. Available at: www.censusindia.gov.in

further 16% in Tamil Nadu. Sikhs totalled over 19 million, 75% of whom lived in Punjab. A further 6% lived in the neighbouring state of Haryana.[3]

3. Indian emigration

Not only does India have a large population, but many people of Indian origin live abroad around the world. Indians began to migrate overseas in significant numbers in the 19th Century, driven by the economic compulsions generated by colonialism. Indians initially spread to Africa, Southeast Asia, Fiji and the Caribbean. A second wave of emigration took place in the second half of the last century, characterised by a steady outflow of skilled workers to developed countries and in the wake of the oil boom in West Asia and the Gulf in the 1970s. Today the Indian diaspora numbers over 20 million.

Table 3: Estimated size of overseas Indian community

Selected countries, December 2001

Africa		**Southeast Asia & Pacific**	
South Africa	1,000,000	Myanmar	2,902,000
Mauritius	716,000	Malaysia	1,665,000
Reunion	220,000	Fiji	337,000
Kenya	103,000	Singapore	307,000
West		**Gulf**	
United States	1,679,000	Bahrain	130,000
United Kingdom	1,052,000	Saudi Arabia	1,500,000
Canada	851,000	United Arab Emirates	950,000
Netherlands	217,000	Oman	312,000
Australia	190,000	Kuwait	295,000
		Qatar	131,000
Caribbean		Yemen	101,000
Trinidad & Tobago	501,000		
Guyana	395,000		
Suriname	150,000		

Sources: Minsitry of External Affairs (India), *Report of the High Level Committee on the India Diaspora* , available at: http://indiandiaspora.nic.in/ and ONS, 2001 Census (UK)

The historic connection between the UK and India has contributed to the evolution of a large Indian community in the UK. According to the 2001 UK Census, Indians formed the largest ethnic minority group totalling 1.1 million, representing around 2% of the UK population. 46% of Indians were born in the UK, 35% in India and 16% in Africa. The Indian population in the UK is concentrated in London (42%) and the Midlands (30%), particularly in Leicester and the London Boroughs of Harrow, Brent, Hounslow and Ealing. It is well documented that some ethnic minority households are more likely to contain both dependent children and extended families, and that consequently they have larger households. Home ownership is a measure of relative advantage; 76% of Indians in Britain are home owners, more than any other ethnic group in the population. Indians also do well in the labour market.[4]

[3] Office of the Registrar General & Census Commissioner (India), 2001 Census of India. Available at: www.censusindia.gov.in

[4] ONS, *Focus on Ethnicity and Religion*, 2006: www.statistics.gov.uk/StatBase/Product.asp?vlnk=14629

4. Urbanisation

India is experiencing rapid rates of urbanisation, as migrants leave rural areas to find work in cities. Between 2000 and 2005, the average annual rate of growth in the urban population was 2.3%, compared to 1.3% in the rural population.[5] In 2005, 28.7% of the population lived in urban areas, rising to 40.7 % by 2030.[6] At Indian independence in 1947, Delhi's population was one million; today it is home to 15 million people. The population of Bangalore has rise from one million in the 1960s to over 6 million. In 2005, three Indian cities were among the top 10 largest cities in the world, namely Mumbai (5th, 18 million), Delhi (6th, 15 million) and Calcutta (8th, 14.3 million). Other fast-growing major cities include Chennai, Bangalore, Hyderabad, Ahmadabad and Pune.[7] Rapid population growth and urbanisation have important implications for the environment and public health. The number of people living in slums – 37 million according to the 2001 Census - is increasing rapidly, presenting important environmental problems. Overcrowding and poor housing are the most obvious issues, but these are compounded by poor sanitation and a lack of clean water. Slums also suffer badly from pollution because they are often built on contaminated land or undesirable areas near industrial installations.

The Indian Diaspora is looked at in more detail in RP 07/41, *A political introduction to India*.

[5] United Nations Population Division, *World Urbanization Prospects: The 2005 Revision*, October 2006: www.un.org/esa/population/publications/WUP2005/2005wup.htm

[6] United Nations Population Division, *Urban and Rural Areas 2005*. 2006, United Nations: New York

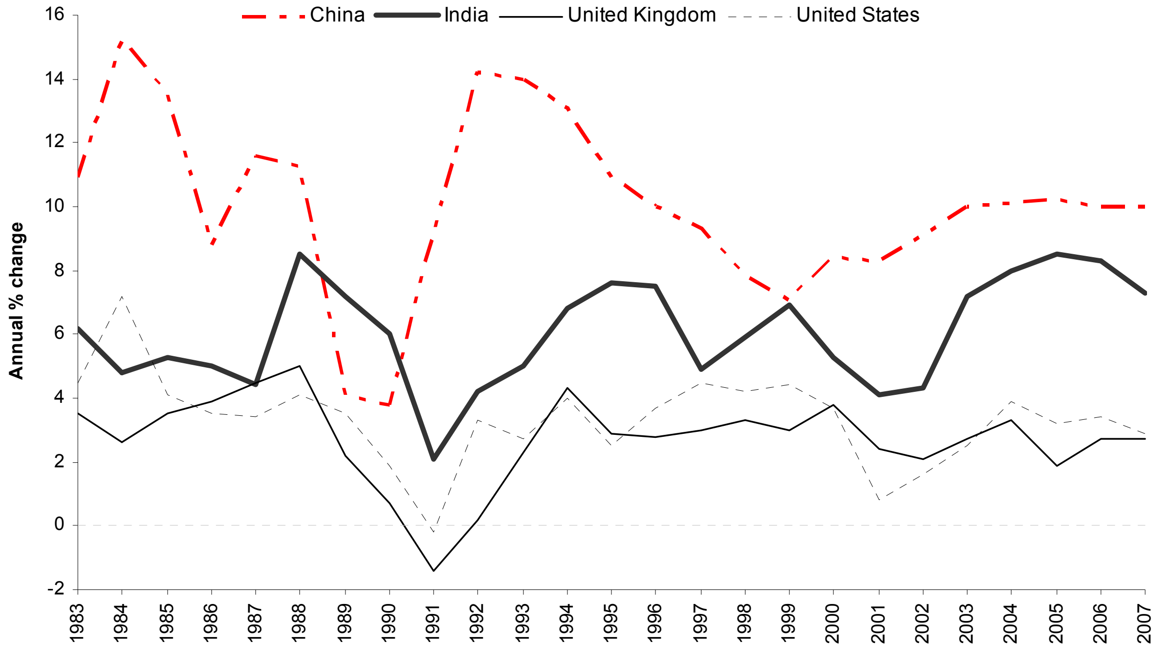
[7] *ibid*.

II The domestic economy

A. Gross Domestic Product (GDP) (Janna Jessee)

India has enjoyed strong economic growth for the last couple of decades, growing more quickly than major developed economies such as the UK and US, and only slightly more slowly than the economy of China, to which India's economic performance is often compared (see Chart 1, below). However, India remains a very poor country, with Gross National Income (GNI) per capita ranked at 159th (out of 200 countries) by the World Bank in 2005.

Chart 1 - Real GDP Growth 1980-2007



Source: IMF

The Economist offers the following overview of India's economy:[8]

> Although business processing, information technology, telecoms and manufacturing have boomed in recent years, India's economy remains mostly agricultural. Parts of the country are cut off from the benefits of free trade, the public sector fails to deliver needed services, and restrictive labour laws and red tape frustrate business. Ninety-seven per cent of retail sales are made in tiny, mom-and-pop stores. Where there is growth, such as in Mumbai, infrastructure is under strain.
>
> Because India's ruling coalition includes Communist parties hostile to open markets, economic reform has been slow. A plan to institute special economic zones has been frozen, and a fully convertible rupee remains a distant prospect. Yet even without significant reform, India's economy has performed so well that it may be overheating. The Reserve Bank of India's most immediate problem is curbing inflation.

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8 The Economist, *India's Economy*, 19 February 2007,

Table 4 shows the rank of India and other major economies under a number of measures of Gross Domestic Product (GDP):

Table 4: Gross Domestic Product

Current prices, $US

	GDP, current prices, US$				
	1980 *Rank*	1990 *Rank*	2000 *Rank*	2005 *Rank*	2005 *Value (billions)*
US	1	1	1	1	12,456
Japan	2	2	2	2	4,567
Germany	3	3	3	3	2,792
China	7	10	6	4	2,234
UK	5	6	4	5	2,229
France	4	4	5	6	2,127
Italy	6	5	7	7	1,766
Canada	8	7	8	8	1,132
Spain	9	8	10	9	1,127
Brazil	16	9	9	10	796
India	**13**	**12**	**13**	**12**	**772**

	GDP per capita, current prices, US$				
	1980 *Rank*	1990 *Rank*	2000 *Rank*	2004 *Rank*	2004 *Value*
Luxembourg	4	2	1	1	74,208
Norway	8	5	2	2	55,500
Switzerland	6	1	5	3	49,448
Denmark	10	6	7	4	45,419
Ireland	29	21	10	5	45,371
Iceland	9	7	6	6	44,567
US	14	9	4	7	39,863
Sweden	7	3	9	8	38,950
Qatar	1	20	8	9	37,610
Netherlands	12	15	16	10	37,419
India	**139**	**127**	**132**	**137**	**615**

Purchasing Power Parities (PPPs)

	GDP, PPPs, US$				
	1980 *Rank*	1990 *Rank*	2000 *Rank*	2004 *Rank*	2004 *Value (billions)*
US	1	1	1	1	11,570
China	8	3	2	2	8,353
Japan	2	2	3	3	3,741
India	**9**	**5**	**4**	**4**	**3,307**
Germany	3	4	5	5	2,440
France	4	6	6	6	1,759
UK	6	8	7	7	1,753
Italy	5	7	8	8	1,627
Brazil	7	9	9	9	1,489
Russia	..	..	10	10	1,457

	GDP per capita, PPPs, US$				
	1980 *Rank*	1990 *Rank*	2000 *Rank*	2004 *Rank*	2004 *Value*
Luxembourg	3	1	1	1	66,297
Norway	8	5	2	2	40,177
United States	6	2	3	3	39,377
Ireland	30	23	4	4	38,547
Denmark	11	6	5	5	33,239
Iceland	9	7	6	6	33,072
Canada	10	8	9	7	32,798
Austria	12	10	7	8	32,209
Switzerland	4	4	8	9	31,583
Hong Kong SAR	34	20	14	10	30,970
India	**128**	**118**	**122**	**122**	**3,058**

Source: IMF, *World Economic Outlook database*, September 2006

The table shows that when considering total levels of GDP using current exchange rates, India's economy is significant, ranked 12th of all economies. In terms of purchasing power parities (PPPs), which account for differences in the cost of living, India's economy is ranked as the fourth largest world economy.[9] However, the measure of GDP per capita shows that India still lags behind developed economies, regardless of the method of comparison. It is however, worth noting that although the UK is ranked 5th and 7th in terms of GDP using current exchange rates and in terms of PPPs respectively, it too does not appear in the 'top ten' countries when ranked in terms of per capita GDP.

India's economy is dominated by services, which represent 60% of GDP. Within the services sector, 44% of activity relates to trade, hotels, transport and communication; 21% to financing, insurance, real estate and business services; 22% to community, social and personal services; and 13% to construction. Information technology (IT) services alone represented 5% of India's GDP in 2005-06. 20% of India's GDP is accounted for by agriculture and manufacturing makes up a further 15%.[10]

9 Measuring GDP at PPP adjusts the values to take account of the price differences for goods in each economy.

10 Reserve Bank of India, Annual Report 2005-06, p25-26

India's economy has been growing at a relatively rapid pace, increasing by an average annual rate of 6% between 1990 and 2005. The services sector has seen the most vigorous growth, averaging 8% annually from 1990 to 2005, while the agriculture sector's growth rate averaged only 3% per year between 1990 and 2005.[11] Both industry and manufacturing's contribution to the Indian economy has grown at an average rate of 6% per year since 1990. Both sectors have seen growth fluctuations during this period, with growth averaging 9% over 2004 and 2005.

B. Further economic indicators (Janna Jessee)

Other economic indicators, as given in table 5 below, show above-average growth in the economy. Between 1990 and 2000, per capita household consumption expenditure increased by an annual average of 3%; this expenditure rose to almost 5% per year from 2000 to 2004. The growth in household consumption expenditure was 7% in 2005. Investment, measured by gross capital formation, grew by an average of 7% per year from 1990 to 2000, and increased by almost 8% annually from 2000 to 2004.[12] The investment growth rate was 16% in 2005.[13] Table 5 below gives some key economic indicators for India as a whole.

C. The regional economies (Janna Jessee)

Table 6 below shows regional GDP statistics for India, and gives an indication of the regional variation in economic activity. One state, Bihar, has less than one-third the national average GDP per capita while the territory of Chandigarh has more than three times the national average. There is increasing concern about disparities between states and a recognition that the poorer states are failing to grow at the same rate as the relatively rich states. To add to this concern, poorer states are expected to increase in population the most – between 2006 and 2051, about 60% of the projected 620 million people increase in Indian population is expected to occur in its three poorest states - Bihar, Madhya Pradesh and Uttar Pradesh.[14]

Investment within India is not surprisingly unevenly distributed amongst states. The worst performing states – Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, Rajasthan, and Uttar Pradesh – represent 25% of India's GDP and accounted for 23% of investment in 2003. The average per capita income in these states is only 54% of that of the other major states. On the other hand, states successful at attracting investment – Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Punjab and Tamil Nadu – attracted more than 66% of total investment in 2003.[15] Labour productivity in these six states is 20% higher compared to the rest of India; labour productivity is 85% higher in the metropolitan areas of these states compared to the rest of India.[16]

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11 The World Bank, *2007 World Development Indicators*
12 *ibid*., table 4.9
13 *ibid*.
14 IMF, *Survey*, Vol.35, No12, 26 June 2006, p188
15 The World Bank, *India – Inclusive Growth and Service Delivery: Building on India's Success – Development Policy Review*, Report No. 34580-IN, 29 May 2006, table 9.1 p146
16 *Ibid*., p146.

Table 5: Key economic indicators

	2003	2004	2005	2006
A. Real Expenditure Growth (%)				
1. GDP at market prices	8.6	8.5	8.5	8.7
2. Private consumption	8.2	6.5	7.4	8.0
3. Government consumption	3.7	9.2	4.4	5.2
4. Fixed investment	12.5	9.3	12.0	13.7
5. Exports, goods	9.8	16.0	22.4	26.0
6. Imports	11.7	29.5	19.5	27.0
B. Contribution to GDP Growth (percentage points)				
1. Private consumption	5.3	4.2	4.7	5.0
2. Government consumption	0.4	1.0	0.5	0.6
3. Fixed investment	2.8	2.1	2.8	3.2
4. Net exports	-0.2	-2.0	0.3	-0.4
C. Price Deflators				
1. GDP at market prices	8.7	8.6	6.6	1.4
2. Private consumption	1.1	1.2	1.2	1.3
3. Exports, GNFS	5.2	7.7	8.8	2.7
4. Imports, GNFS	10.9	10.7	12.8	6.8
D. Share of GDP (%)				
1. Private consumption	64.0	35.5	35.4	35.5
2. Government consumption	11.3	6.4	6.3	6.1
3. Fixed investment	22.7	12.9	13.5	14.2
4. Change in stocks	0.3	0.2	0.1	0.1
5. Total investment	23.0	13.1	13.6	14.4
6. Exports	14.9	9.2	10.6	12.5
7. Imports	16.4	11.6	13.6	16.7
E. Memo				
1. Nominal GDP ($US billions)	601	1,214	1,404	1,548
2. Population (millions)	1,071	1,087	1,103	1,118
3. GDP per capita, current $US	561	1,117	1,273	1,385
4. Real per capita GDP growth	6.9	6.9	6.9	7.3
5. $US Exchange rate	46.0	45.3	44.1	45.7
6. Current account balance (% GDP)	1.1	-0.8	-1.3	-2.2
7. General government balance (% GDP)	-9.1	-7.7	-7.5	-7.5

Source: The World Bank, *Prospects for the Global Economy,* 22 November 2006

Table 6: GDP by state

	Per capita net domestic product 2004-05		Proportion of Indian GDP		
	(India = 100)	Rank	1993-94	1999-2000	2004-05
A & N islands	..	..	0%	0%	..
Andhra Pradesh	116	14	8%	8%	8%
Arunachal Pradesh	99	16	0%	0%	0%
Assam	68	24	2%	2%	2%
Bihar	29	28	3%	3%	2%
Chandigarh	338	1	0%	0%	0%
Chattisgarh	76	21	2%	1%	2%
Delhi	271	4	3%	3%	4%
Goa	292	2	0%	0%	0%
Gujarat	142	8	6%	6%	7%
Haryana	164	5	3%	3%	3%
Himachal Pradesh	138	9	1%	1%	1%
J & K	81	20	1%	1%	1%
Jharkhand	65	26	2%	2%	2%
Karnataka	120	13	6%	6%	6%
Kerala	136	10	4%	4%	4%
Madhya Pradesh	71	23	5%	5%	4%
Maharashtra	161	6	15%	15%	15%
Manipur	75	22	0%	0%	0%
Meghalaya	98	18	0%	0%	0%
Mizoram	..	..	0%	0%	..
Nagaland	..	..	0%	0%	..
Orissa	68	25	2%	2%	2%
Pondicherry	281	3	0%	0%	0%
Punjab	154	7	4%	4%	4%
Rajasthan	81	19	4%	5%	5%
Sikkim	121	12	0%	0%	0%
Tamil Nadu	130	11	8%	8%	8%
Tripura	..	..	0%	0%	..
Uttar Pradesh	58	27	11%	10%	9%
Uttaranchal	99	17	1%	1%	1%
West Bengal	113	15	7%	8%	9%

Note: .. Not available

Source: Government of India Ministry of Finance

D. Industry sectors (Janna Jessee)

Table 7 provides a broad industrial breakdown of Indian GDP as well as industrial growth rates over the past two years. The largest industry sector – trade, hotels, transport and communication, at 26% of India's GDP – is also expected to have the highest growth rate in 2006-07 (13.0%). All industrial areas are expected to grow strongly in 2006-07 with the slowest growth in agriculture, forestry and fishing (2.7%) and mining and quarrying (4.5%).

The Government of India's Central Statistical Organisation (CSO) provides forecasts and commentary for each of these sectors.[17] Much of the growth expected in the construction industry is due to increased production of cement (10%) and steel (9%)[18]. The estimated growth in trade, hotels, transport and communication is mostly attributable to increases in telephone communications (52%), commercial vehicle production (34%), air passengers (28%), air cargo (11%), railway earnings from freight traffic (10%) and major port cargo handling (8%).[19]

Table 7: Industry size and growth rate

GDP at factor cost at constant (1999-2000) prices

	Proportion of GDP	Percentage annual growth (estimates)	
	2004-05	2005-06	2006-07
Trade, hotels, transport and communication	26%	10.4	13.0
Agriculture, forestry & fishing	20%	6.0	2.7
Manufacturing	15%	9.1	11.3
Community, social & personal services	14%	7.7	7.8
Financing, insurance, real estate & business services	14%	10.9	11.1
Construction	7%	14.2	9.4
Electricity, gas & water supply	2%	5.3	7.7
Mining & quarrying	2%	3.6	4.5
Total GDP		9.0	9.2

Source: Government of India Ministry of Statistics and Programme Implementation: Central Statistical Organisation, *Advance Estimates of National Income 2006-07* , 7 February 2007.

The sectoral balance in India's economy has changed over time. The services sector represented more than half the economy's economic output in 2005, an increase of more than than 10 percentage points over 1990. At the same time, the agriculture sector's contribution to economic output decreased from 31% of the economy to 18%.[20] Between 1990 and 2005, the economy grew at an average of 6% and while services grew by 8% per year, agriculture grew by an average of less than 3% per year.[21] Other sectors grew at close to the average rate for the economy as a whole.[22]

The IMF has highlighted the growth of the services sector, noting in September 2006 that high productivity growth was due to advances in information communications technology (ICT). India has been able to exploit ICT due to its large population of trained English-speaking personnel, privatisation and opening up to foreign direct investment, successful

17 Government of India, "Advance Estimates of National Income, 2006-07", CSO Press Note, 7 February 2007, available at www.mospi.nic.in/press_release_7feb07.htm
18 Based on growth rates in the sector during April to November 2006
19 *Ibid*.
20 World Bank, *2007 World Development Indicators*
21 Measured at constant prices.
22 World Bank, *2007 World Development Indicators*, table 4.1

deregulation of communications and other service sectors, and finance sector reforms.[23] In an earlier report, the IMF noted that:[24]

> A striking feature of India's growth performance over the past decade has been the strength of the services sector. The most visible and well-known dimension of the take off in services has been in software and IT-enabled services. However, growth in services in India has been much more broad-based than IT. The pickup in growth in the 1990s was the strongest in business services (which includes the IT sector), communication, and financial services, followed by community services (such as education and health services) and hotels and restaurants.

The IMF suggests that less restrictive labour rules applied to services have partly contributed to services growing at a faster rate than industry; the services sector has also benefited from better tax incentives. Technological advances have also enabled an increase in trade in services which, in the case of India, resulted in a four-fold increase in services exports in the 1990s.[25]

Table 8: Structure of manufacturing in India, 1990 and 2004

% of total

	Food, beverages and tobacco	Textiles and clothing	Machinery and transport equipment	Chemicals	Other manufacturing
1990	12	15	25	14	34
2004	12	24	16	9	38

Notes: Other manufacturing covers wood and related products, paper, petroleum, basic metals and mineral products, fabricated metal products and professional goods and other industries.

Source: World Bank *2007 World Development Indicators*

The World Bank's *2007 World Development Indicators* provide statistics on the structure of manufacturing.[26] Value added in manufacturing increased from $37 billion in 1990 to $91 billion in 2005 (constant 2000 US dollars). Table 8 above shows the contribution of each manufacturing sector to the value added. Chemicals, and machinery and transport equipment saw a fall in share of value-added manufacturing, while textiles and clothing and other manufacturing represent an increased share of value-added manufacturing. The contribution of the food, beverages and tobacco sector was unchanged.

An IMF Working Paper on development patterns in India provides an overview of industrial development in India in recent decades and some comment on how India is expected to develop.[27] The paper suggests that India's post-independence policies, including emphasis on tertiary education, efforts to create capital goods production

[23] IMF, World Economic Outlook – Financial Systems and Economic Cycles, September 2006, p86
[24] IMF, *India: Selected Issues*, Country Report No. 05/87, March 2005, p11
[25] *ibid.*, pp14-15.
[26] World Bank, 2007 World Development Indicators.
[27] IMF, *India's Pattern of Development: What Happened, What Follows?* Working Paper 06/22, January 2006. Available at: www.imf.org/external/pubs/ft/wp/2006/wp0622.pdf

capability, regulatory limits on large private enterprise, and rigid labour laws, contributed to India's relative lack of labour-intensive manufacture and abundance of small-scale diverse manufacturing industries compared to other developing countries.[28] Economic reforms in the 1980s led to the private sector being allowed into skill-intensive services sectors such as telecommunications, as well as the well-publicised growth of business services (in particular, business process and software outsourcing) and construction. Analysing economic development in Indian states, it becomes clear that since 1980, India has continued to move away from labour-intensive industries and into skill-intensive services. The paper goes on to speculate on India's future development:

> […] economic reforms combined with growing decentralization of policymaking appear to have allowed states to use the capabilities built up over the period of heavy policy intervention—in other words, freed them to grow at a pace consistent with their built-up skill base and institutional, as well as infrastructural, capability. On the one hand, this freedom has increased India's overall growth rate. On the other, it has led to a considerable divergence between states in growth and incomes and in the pattern of specialization. The fast-growing peninsular states are starting to resemble industrial countries in their specialization, moving towards skill-intensive services and manufacturing. But the areas where India has built capabilities serve least well the populous, institution- and infrastructure-poor states of the hinterland. Whether these states can develop appropriate growth strategies and whether these strategies will be impeded or helped by the growth of the more advanced states is a central question for India's economic future.[29]

Table 9, in Appendix 1, shows broad industry categories in India broken down by state or union territory as well as the indexed per capita state domestic product.

E. Agriculture (Matthew Whittaker)

1. Agricultural population

Table 10: Population and labour force indicators in India: 1979-2004

	1979-1981	1989-1991	1999-2001	2003	2004
Numbers (millions)					
Total population	689	846	1,017	1,065	1,081
Rural population	530	630	736	764	773
Agricultural population[a]	441	493	546	557	560
Economically active population	302	359	439	472	477
Economically active population in agriculture	208	230	264	274	277
Proportions (%)					
Total population	100%	100%	100%	100%	100%
Rural population	77%	74%	72%	72%	71%
Agricultural population[a]	64%	58%	54%	52%	52%
Economically active population	100%	100%	100%	100%	100%
Economically active population in agriculture	69%	64%	60%	58%	58%

Note: [a]Figures include those actively engaged in agriculture, hunting, fishing or forestry, and their non-working dependents.

Source: FAO, *Statistical Yearbook 2005-2006*, December 2006, Tables A.1-A.3

[28] *Ibid*., p4
[29] *Ibid*., p5

Table 10 above shows population and labour force figures for India between 1979 and 2004. Over the period, the proportion of the population living in rural areas fell from 77% to 71% and the proportion depending for their livelihood on agriculture, hunting, fishing or forestry fell from 64% to 52%. Of the economically active population in 2004, 58% were engaged or seeking work in agriculture, hunting, fishing or forestry, compared with 69% in the period between 1979 and 1981. Table 11 shows how important agriculture is to the Indian economy relative to the UK and the World:

Table 11: Population and labour force indicators, 2004

	Numbers	Proportions (%)			
	(millions)	India	UK	China	World
Total population	1,081	100	100	100	100
Rural population	773	71	11	61	51
Agricultural population[a]	560	52	2	66	41
Economically active population	479	100	100	100	100
Economically active population in agriculture	277	58	2	65	43

Note:[a]Figures include those actively engaged in agriculture, hunting, fishing or forestry, and their non-working dependents.

Source: FAO, *The State of Food and Agriculture 2005*, Table A4

2. Agricultural land use

Table 12 shows total land area and its use in India, the UK and the world in 2002. Of the 300 million hectares of land in India, 61% was agricultural and a further 22% was forest and wooded. Of the agricultural area, 89% was arable, compared with a world average of 28%. By contrast, just 6% of India's agricultural land was given over to permanent pasture, compared with a world average of 69%. One-third of India's arable and permanent crops area was irrigated; compared with 3% in the UK and 18% worldwide.

Table 12: Land use in India, 2002

	India	UK	World
Total land area (thousand hectares)	297,319	24,088	13,039,650
Forest and wooded area[a]	64,113	2,794	3,868,796
Agricultural area	181,177	16,943	5,006,880
Arable land	*89.3%*	*34.0%*	*28.0%*
Permanent crops	*4.6%*	*0.3%*	*2.7%*
Permanent pasture	*6.1%*	*65.7%*	*69.2%*
Agricultural area per capita (ha/person)	0.17	0.29	0.80
Fertiliser consumption (kg/ha arable land)	99.6	313.1	100.8
Irrigated area (proportion of arable and permanent crops area)	33.6%	2.9%	18.0%

Note: [a]Figures for 2000

Source: FAO, *The State of Food and Agriculture 2005*, Table A5

3. Agricultural production

Table 13 shows India's share of worldwide agricultural production in 2004. Cereal production in India accounted for 10% of the world total, with Indian millet and coarse grains both representing around one-third of world totals. Fertilisers produced in India also made up 10% of the world total, while Indian-grown fruits and vegetables accounted for 9% of world production.

Table 13: Agricultural production in India and share in world total: 2004

	Production (000 tonnes)	Share in world
Cereals	232,360	10.2%
Millet	9,400	33.9%
Coarse grains	323,000	31.3%
Rice	128,000	21.0%
Sorghum	7,530	13.0%
Wheat	72,060	11.4%
Maize	14,000	1.9%
Barley	1,370	0.9%
Fertilisers[a]	14,460	9.8%
Fruits and vegetables	127,560	9.2%
Meat	6,032	2.3%

Note:[a]2002 data

Source: FAO, *Statistical Yearbook 2005-2006*, December 2006, Tables B.1-B.10

4. Agricultural trade

Table 14 details average annual agricultural trade values in India, the UK and the world over the period 2001-03. Agricultural exports accounted for 11% of India's total exports, compared with 5% in the UK and a world average of 7%. Net of imports, food trade produced an average inflow of $3.2 billion per year in India, compared with annual average outflows of $13.9 billion in the UK and $15.7 billion globally.

Table 14: Average annual agricultural trade indicators in India: 2001-03
$ million

	India	UK	World
Agricultural exports	5,753	15,067	459,493
As share of total exports	*11.2%*	*5.3%*	*6.9%*
Agricultural imports	4,282	30,347	482,258
As share of total imports	*7.0%*	*8.5%*	*7.1%*
Net food imports	-3,231	13,917	15,659

Source: FAO, *The State of Food and Agriculture 2005*, Table A6

F. Financial services (Tim Edmonds)

The development of the financial services sector in India has been described as both a success and a disappointment. Like much of the rest of Indian economic and cultural life, its development has been shaped by restrictions inherited from its historical past. The imprint of political nationalism and state sector control and the legacy of a soviet-inspired directed economy hang over much of its recent past and help explain its current strengths and weaknesses. Over the last decade there has been a significant legislative and de-regulatory momentum aimed at making the sector more competitive and engaged with the outside world whilst at the same time making it more relevant and enabling of the vast domestic market. There are two principal challenges ahead. First, to construct a system which simultaneously meets the needs of developed industrial India plus one that can reach out and meet the needs of poor agricultural India. Secondly, to introduce more flexibility and freedom into the system without sacrificing its existing virtues of stability and soundness.

1. Historical legacy

The development of the Indian financial system is explained in detail in an IMF journal article – *Domestic financial Liberalisation and International Financial Integration: an Indian perspective,* Suman Bery and Kanhaiya Singh – and this section draws heavily on this.[30]

Prior to its independence India enjoyed a relatively liberal domestic financial system with capital account convertibility within the old sterling area. Domestically the financial system was relatively sophisticated, with established stock and commodity exchanges, and domestic and foreign banks largely under foreign ownership. A series of events transformed this system into a far more repressive and rigid system. In 1955, the State Bank was nationalised. In 1956, import and exchange controls were introduced following a foreign exchange crisis. In 1969, 14 of the largest domestic banks were nationalised; six more were to follow in 1980. These last two acts were aimed at improving the scope of the banking system in the rural economy. It was successful, in the sense that in 20 years the number of bank branches rose by about 20,000, but it also saw the start of the end of market forces as the main driver of monetary policy. Interest rates and bank lending ceased to have a significant market allocation role. Instead, credit was allocated centrally as part of overall development planning. Monetary policy, even into the 1990s, was conducted by means of quantitative cash control and depository requirements that would have been familiar to UK economics students in the 1970s.

A programme of reform of the system started in 1991. It was born out of a realisation that the rigidities of the financial system and its consequences for monetary policy management were holding back the development of the rest of the economy. Two important committees were established: the Committee on Financial Services Systems and the Committee on Banking Sector Reforms. A range of reforms (though not including denationalisation of the banks) were instituted during the 1990s – decontrol of interest rates, greater reliance on open market operations for monetary control, gilt auctions, establishment of prudential norms and mechanisms for the banking sector on internationally approved guidelines. The framework of centrally determined interest rates was gradually dismantled by 1997 and the ratios of assets banks had been required to keep were substantially reduced too.

2. Developments and issues since 2000

Despite the substantial reforms, calls for greater reform of the financial system persist: perhaps a case of needing to run fast to stand still in an economy growing at about 8% a year. The biggest debate, in several sectors, is the extent to which foreign capital is to be admitted. Currently foreign banks or insurance companies are not allowed to hold majority shareholdings in Indian institutions. Between March 2005 and 2009 overseas banks that satisfy the State bank's criteria will be able to open wholly owned subsidiaries, subject to restrictions on the number of branches and their distribution – priority being given to new branches in areas that are currently unbanked or poorly served. Applications for outside finance are looked at more favourably if the bank happens to be

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30 Published in *China and India Learning from each other: Reforms and policies for Sustained Growth,* 2006

weak or undercapitalized, but overall the impression given is one of uncertainty for foreign investors. Efforts to overcome the continuing legacy of state intrusion in banking are widely recognised. Obstacles to reform are outlined in an article from a special report by the *Financial Times*:

> In the wake of the extraordinary success of the Industrial and Commercial Bank of China's initial public offering, which last week raised close to $20bn, Mr Chidambaram [Indian finance Minister] needs no convincing that the moment is right to allow India's feeble state-controlled banks, constrained by their relatively narrow capital bases, greater access to foreign investment.
>
> The problem, as ever, will be the Indian government's lack of political nerve in the face of unionised public sector workers and an ultra-conservative central bank governor. The Reserve Bank of India seems wholly indifferent to the opportunity cost of the defensive posture it has adopted in its roadmap for banking liberalisation, which prevents domestic banks accessing foreign funds until 2009.
>
> The swing factor will undoubtedly be the Left parties that are vital to the Congress-led government's majority in parliament. Only if Manmohan Singh, prime minister, can persuade them that the reform of Indian capital markets is an absolute prerequisite to securing the long-term debt capital needed to finance investment in infrastructure will financial sector reforms stand a chance of success. The chances are slim.[31]
>
> There appears to be no shortage of willing foreign investors in India. Barclays has a strong presence throughout Asia and has plans to start issuing credit cards in India in 2007 adding to the 37.9 million cards estimated in use in 2004.[32]

Current controls extend to the insurance sector too. Controls, limiting foreign share ownership in insurance companies to about a quarter, are due to rise to just under a half this year. Both Gordon Brown and US officials have pressed the Indian authorities to meet this pledge during recent meetings.[33] Aegon UK Insurance and Standard Life are two Scottish based life companies with plans to expand. The life assurance market in India trebled in size between 2000 and 2006 and is likely to grow further still as the economy and living standards progress.

In respect of the future, both Bery and Singh and the FT's *Engaging India* study make a similar point. The strength and stability of the Indian financial system as exhibited during the economic crash evident in several Asian countries between 1997 and 1998, but which left India untouched, might prove to be a mixed blessing. Bery and Singh:[34]

> The contradictions between a still largely nationalised banking system and the needs of an increasingly sophisticated and rapidly growing economy are growing more serious and more glaring.

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31 "Engaging India", *Financial Times*, 26 October 2006
32 "Barclays set for Indian credit cards and loans banks", *Financial Times,* 30 January 2007
33 Reported *Financial Times* 26 October 2006 and *the Guardian* 19 January 2007
34 *Op. cit.*

The FT emphasises much the same point:[35]

> The Reserve Bank of India's concern over the systemic risks involved in exposing underperforming public banks to the full blast of competition is the principal cause of the country's slow-motion liberalisation. In February, the RBI released an ultra-cautious roadmap for the sector, putting a brake on foreign takeover of banks until 2009. "If I had to sum it up in one sentence, I'd say the banking system has traded efficiency for stability," says Ms Basu [an Indian academic]. "India's financial system is not about to collapse and if the government really wants the economy to grow at a faster pace, the time has come to focus on banking sector efficiency.

The Indian securities industry has gone through a similar period of regulatory change and growth. According to IMF *World Development Indicators* market capitalisation of listed companies as a percentage of GDP rose from less than 10% in the early 1980s to more than 30% between 2001 and 2003. Some of this growth is ascribed to the establishment of the Securities and Exchange Board of India (SEBI) in 1989 with further autonomous powers of investigation and enforcement added in 1992. Figures below from SEBI illustrate the scale of new issues raised on the domestic exchanges:

Table 15: New capital Issues by non-government plc's

Rs million

	Ordinary shares		Preference shares		Debentures		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
1970	64	380	41	130	8	150	113	660
1980	-	890	-	20	-	730	237	1,640
1985-86	758	8,980	9	10	83	8,460	850	17,450
1990-91	246	12,840	3	130	115	30,150	364	43,120
1995-96	1,591	118,770	9	1,500	63	39,700	1,663	159,980
2000-01	128	26,080	2	1,420	9	30,680	139	58,180
2001-02	6	8,600	-	-	13	48,320	19	56,920
2002-03	5	4,600	-	-	4	14,180	9	18,780
2003-04	35	24,710	-	-	3	12,510	38	37,220
2004-05	51	114,520	-	-	3	16,270	54	130,790
2005-06	128	208,990	1	100	2	2,450	131	211,540

Source: SEBI, *Handbook of Statistics on the Indian Securities Market*, table 10, 2007

A journal article by G.N. Bajpai, noted that flotations of dubious value have practically ceased; new issues have generally performed above their flotation price; the system has survived sharp price corrections and the "Indian stock market is next only to the US market in terms of size…the National Stock Exchange is the third largest in the world".[36] An Indian Government *Economic Survey of 2003-04* claimed "India's securities market is now being increasingly seen as a success story on a world scale".[37]

Foreign activity in the investment dealing and brokerage sectors has been intense:[38]

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35 "Engaging India", *Financial Times*, 26 October 2006

36 Bajpai G.N. "Development of the securities market in India", In J Aziz, E Prasad, S Dunaway (eds.), 2006

37 *Op. cit.* p 100

38 "Citigroup plans Indian brokerage network", *Financial Times*, 21 September 2006

> Over the next year, [Citigroup] plans to build a 25-branch brokerage network, which it hopes will boost its other businesses, such as its nascent private banking operation and its services targeting small and medium enterprises.
>
> One of the largest foreign investment banks in India, Citigroup is jostling with DSP Merrill Lynch, JM Morgan Stanley, Deutsche Bank, UBS, JPMorgan, ABN Amro and others for market share. Goldman Sachs is also rapidly building up scale after splitting with its former local partner while others, such as Lehman Brothers and Credit Suisse, are launching or relaunching operations in the country.

It is also the case that the large, US, private equity firms have been active in India too.

3. Financial services in the Indian economy today

An IMF journal article by Dmitry Rozhov,[39] describes the various indices of financial services growth in the Indian economy. The annual growth in bank credit since 2004 has averaged over 30% a year while deposits have averaged 17% growth. This is ascribed to both a deepening of the financial infrastructure in India and the high rates of GDP growth referred to earlier. Credit of all types is starting from a low base and is heavily concentrated in the major metropolitan areas: 40% of all outstanding credit balances in March 2005 were based in Mumbai and Delhi.[40] The majority of the rural population (including large farmers) still does not have access to finance from a formal source. To compensate for this absence microfinance initiatives have sprung up which have business and social objectives. However, such initiatives are poor substitutes for rural engagement with mainstream institutions. The failure to develop is said to be due to the continuation of the priority sector lending requirements. Directed lending norms that require banks to allocate 40% of their lending to 'priority sectors' have not generated the intended results; access to finance by the rural poor remains at a very low level. Lending in rural areas and to small firms remains a high risk and high cost proposition for banks. Uncertainty about the borrowers' ability to repay in the absence of credit information systems drives up default risk. Rozhov concludes by saying that:[41]

> India is currently in a fortunate position where a relatively sound financial system provides the opportunity to take a significant step towards increasing the efficiency of the financial sector. Prudential issues remain important, as recent rapid credit growth poses a number of potential risks that need to be monitored. But the soundness of the banking sector combined with its resilience to potential shocks present a unique opportunity to accelerate banking reforms. The key steps here would be to reduce reliance on priority lending sector targets as a way to provide finance to rural areas and SMEs, and to allow more private ownership in the banking system, domestic as well as foreign.

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39 Rozhov D, "India goes global: its expanding role in the world economy", IMF, 2006
40 *Op. cit.* p 93
41 *Ibid*. p 106

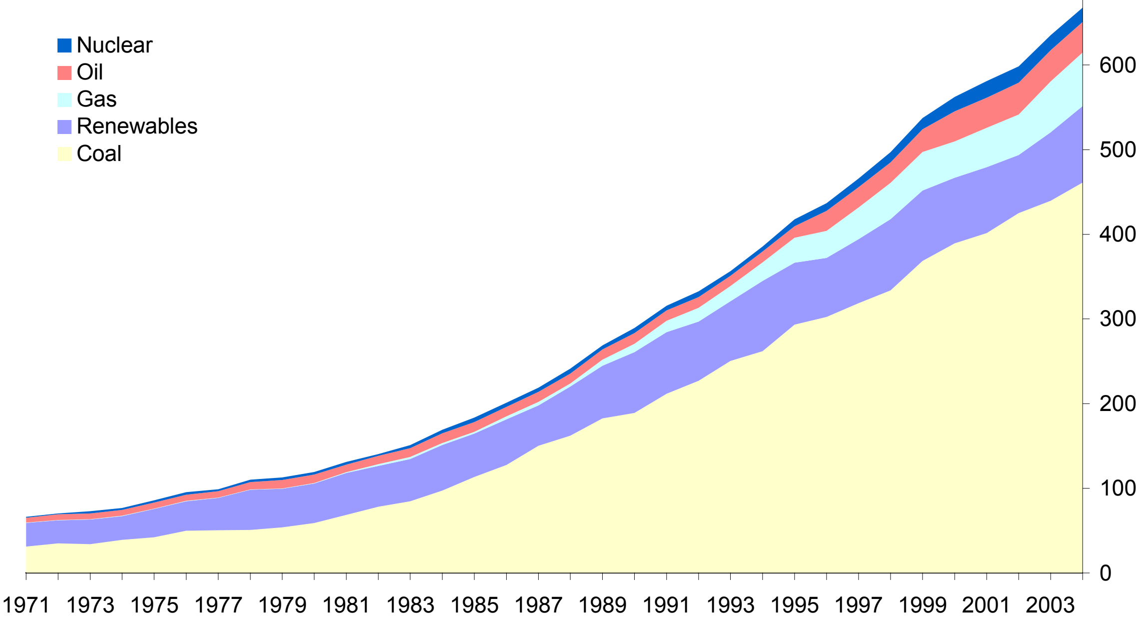
G. Energy (Paul Bolton)

1. Energy use and production

Total primary energy supply in India was 570 million tonnes of oil equivalent (MTOE) in 2004. Energy use has been increasing at a steady rate of around 9 MTOE a year over the past 30 years. In 2003 and 2004 growth in energy supply was over 3%; the highest percentage rate for a decade. The residential sector dominates energy consumption. In 2004 57% of final consumption was by this sector, 24% by industry, 9% by transport and 7% by non-energy uses. Domestic production has not kept pace with energy demand and net imports have increased steadily. In 2004, net imports were more than 100 MTOE, this figures has doubled in 10 years and in 2004 made up 18.4% of total primary energy supply.[42] Oil is the main imported fuel and in 2003 the large majority of India's imported oil came from OPEC countries, the main sources were Saudi Arabia (34%), the UAE (19%), Kuwait (18%) and Iran (16%).[43]

The largest single source of energy was 'combustible renewables and waste' – largely wood burned for fuel in homes. This made up 37% of primary supply in 2004 and was followed in importance by coal (34%), petroleum (22%), gas (4%), hydro and nuclear (both 1%). Most of the growth in energy supply has come from fossil fuels, in 1983 they provided 40% of India's energy this increased to 50% in 1991 and 60% 2004. India is a net importer of coal and oil. In 2004 net imports made up 11% of coal and 69% of oil used in India.[44]

Chart 2: Electricity output in India by fuel, TWh



Source: *Energy Balances of Non-OECD Countries*, IEA

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[42] IEA, *Energy Balances of Non-OECD Countries 2006*
[43] UN, *2003 Energy Statistics Yearbook*
[44] IEA, *Energy Balances of Non-OECD Countries 2006*

Chart 2 above illustrates trends in electricity generation (in terawatt hours [TWh]) by fuel since 1971. This shows the rapid expansion of generation over this period. Coal has increasingly dominated generation and made up 69% in 2004. Generation from gas has doubled over the last decade but was still below 10% in 2004. Renewable generation (mainly hydro) has increased by less than the other sources and its share fell from 42% in 1971 to 14% in 2004.

2. Energy resources and capacity

Coal - there are an estimated 96 billion tonnes of proven coal reserves in India and reserves with a lower level of certainty (indicated or inferred) are thought to be even larger. In 2004-05 coal production was around 380 million tonnes.[45] At this rate proven reserves would last more than 200 years, but production is expected to expand rapidly.

Oil - Proven and indicated reserves of oil were estimated at around 760 million tonnes in 2006. Provisional production in 2005-06 was 32 million tonnes and has been at around this level for the past five years.[46] This gives a reserves to production ratio of around 23 years.

Gas - Reserves of gas have increased in recent years to an estimated 1,100 billion cubic metres in 2006. Production in 2005-06 was 32 billion cubic metres,[47] giving a reserves to production ratio of around 34 years

Nuclear power - At the end of 2006 India had 15 nuclear reactors with a total net capacity up to 3,500 Megawatts (MW). India currently has seven reactors under construction that have an expected net capacity of 3,000MW. Four are due to start operation in 2007, two in 2008[48] and the last one, India's first Fast Breeder Reactor, is expected to go online towards the end of 2010.[49] The Fast Breeder Reactor marks the start of the second stage of nuclear power in India. The first stage consisted of Pressurised Heavy Water Reactors and the third stage is expected to be based on Thorium based reactors. India's Department of Atomic Energy plans that total gross capacity will reach 10,300MW by the end of 2012 and 20,000MW by 2020.[50] [51]

Hydro - According to the World Energy Council India's gross theoretical hydropower potential at 2,600TWh a year and theoretically feasible potential 660TWh a year are among the highest in the world.[52] This compares to actual generation in 2004 of 85TWh.[53] Total hydro capacity in January 2007 was 34,000MW,[54] a further 8,000MW of

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45 Ministry of Coal: www.coal.nic.in
46 Ministry of Petroleum & Natural Gas, *Basic Petroleum Statistics*, available at http://petroleum.nic.in/petstat.pdf
47 *ibid*.
48 IAEA, *Nuclear Power Reactors in the World*, 2006
49 Bharatiya Nabhikiya Vidyut Nigam Ltd "BHAVINI marching towards its goal", press release, 25 May 2005
50 Indian Department of Atomic Energy, *Long Term Vision of the Department of Atomic Energy*
51 Indian Department of Atomic Energy "Unit-3 of NPCIL's Tarapur atomic power project declared commercial operation", press release, 18 August 2006
52 World Energy Council, *World Energy Resources 2004*
53 IEA, *Energy Balances of Non-OECD Countries 2006*
54 Ministry of Power: http://powermin.nic.in

capacity in large-scale projects is under construction and an additional 41,000MW is planned.[55]

Solar - India receives a high level of solar radiation and its solar energy programme is said to be one of the largest in the world. Within the Solar Photovoltaics programme systems with a total capacity of 250MW had been installed by the end of 2005.[56] A figure of 55,000MW of solar power from solar energy farms has been suggested by the President to help contribute to India's growing energy needs by 2030.[57]

Wind – India's Ministry of New and Renewable Energy has estimated that India's wind energy potential is around 45,000MW, with 15,000MW grid-connected. In their 2005-06 annual report they state that India had the fourth largest installed capacity in the world at 4,400MW.[58]

3. Projections

The International Energy Agency's reference ('business as usual') scenario shows that India's demand for coal, oil and gas are expected to increase annually by 4.2%, 4.2% and 3.0% respectively up to 2030. All the rates are more than double the global averages. Oil production is expected to fall between 2015 and 2030 and result in India's oil import dependence increasing to almost 90% by 2030.[59] Energy-related carbon dioxide emissions are expected to increase by 2.9% a year over the period to 2030, compared to 1.6% globally, 2.7% in Brazil and 2.4% in China.[60]

4. Greenhouse gas emissions

Between 1850 and 2002, India accounted for just 2.2% of the worlds greenhouse gas emissions.[61] Estimated emissions were 1.1 billion tonnes of CO_2 in 2004 and increased at an average rate of 4.8% over the previous decade. India was the fifth largest source country in 2004 after the US, China, Russia and Japan. However, its rates per capita and per $ of GDP were around one-quarter and one-third of the respective global averages.[62]

India is often placed alongside China as an example of large developing countries which has the potential to greatly increase global emissions of greenhouse gases. However, there is a large difference in scale (China's emissions were more than four times greater in 2004) and in rates per capita and per $ of GDP. India's emissions per capita have been around one-third of China's for most of the past three decades, but from 2000 to

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55 "Hydropower & Dams in South and East Asia", The International Journal of Hydropower & Dams

56 Ministry of New and Renewable Energy, *Solar Energy Programmes at a Glance*: http://mnes.nic.in/so1.htm

57 Ministry of New and Renewable Energy, "Renewable power capacity crosses 8,000MW", press release, 18 April 2006

58 Ministry of New and Renewable Energy, *Annual Report 2005-06*, Chapter 8

59 IEA, *World Energy Outlook 2006*

60 *ibid*.

61 World resources Institute, *Navigating the Data: Greenhouse Gas Data and Internationsl Climate policy*, 2005, p32

62 IEA, *CO2 Emissions from Fuel Combustion 1971-2004*, 2006 edition

2004 the difference has increased – emissions per capita increased by 349kg in China and 16kg in India. Emissions per $ of GDP in India have changed little over the past 30 years and were 0.1kg in 2004. In China this rate has fallen dramatically from around 0.5kg in 1980 to less than 0.2kg in 2004. These differences reflect underlying differences in the size, development and energy-intensity of the two economies and the balance between fossil-fuels and other energy sources.[63]

Detailed inventories of all greenhouse gases and all sources of CO_2 are not up to date for developing countries, but estimates of all sources of the 'Kyoto basket' of greenhouse gases places India as the third largest emitter in 2000 after the US and China. This higher ranking is largely due to particular high emissions from agriculture and biomass burning.

The Indian Government has emphasised its relatively low emission rates and contrasted these with the potential negative consequences of climate change on India. While it has stated that constraints (direct or by way of targets) on its emissions would impinge on its 'over-riding priority' to develop it has developed policies on a number of different areas such as energy efficiency, nuclear power, renewables, transport and pollution abatement that it says should result in a 'relatively benign' greenhouse gas growth path.[64]

A discussion of the political aspects of India's energy policy can be found in RP07/41, *A political introduction to India*.

H. Labour Market (Janna Jessee)

1. Labour force

Table 16 shows the size and composition of the labour force in India in comparison with a sample of other countries. The official Indian labour force was 435 million in 2005, although there is also a large unofficial labour force in India that is not included in these statistics.

Table 16: Labour force structure

	Labour force participation rate, % aged 15-64				Labour force				
	Male		Female		Total millions		Aged 15+, average annual % growth	Female % of labour force	
	1990	2005	1990	2005	1990	2005	1990-2004	1990	2005
Brazil	89	84	48	61	62	91	2.6	35	43
China	89	88	79	76	650	776	1.2	45	45
India	**87**	**84**	**40**	**36**	**335**	**435**	**1.7**	**30**	**28**
United Kingdom	88	82	67	69	29	31	0.2	44	46
United States	85	81	68	70	129	155	1.2	44	46

Source: World Bank, *World Development Indicators*, 2006, table 2.2 and *World Development Indicators*, 2007

63 *ibid*.
64 Ministry of Environment & Forests, *National Environment Policy 2006,* pp 41-43

Approximately two-thirds of the labour force works in the agricultural sector.[65] Male labour force participation rates in India are comparable to the other countries included in Table 16 at 84%; however, female participation is much lower, with only 36% participation compared to 76% in China. As a result, women represent only 28% of the labour force in India, compared to 46% in the UK and the US.

India's demography is seen as a potential strength as its working-age population is expected to increase over the next few decades, unlike China, whose working-age population is expected to fall. However, 60% of the increase in the working population is expected to take place in five poor Indian states, so the economic benefits of India's increased labour force may not be fully realised.[66]

The World Bank provides statistics on children in the workforce. In 2000, 5% of Indian children between the ages of 7 and 14 were "economically active", and 90% of these worked and did not attend school. The majority of children, both boys and girls, worked in the agriculture sector (71% of males and 77% of females). Of the economically active children, the manufacturing sector employed 10% of boys and 15% of girls; the services sector employed 16% of boys and 7% of girls.[67]

2. Labour market policies

The rigidity of India's labour laws has been cited as one of the barriers to increasing domestic supply to rein in inflation. According to The Economist:[68]

> Another obstacle to growth in manufacturing is India's labour laws, which are among the most restrictive in the world. Firms employing more than 100 people cannot fire workers without government permission, which discourages expansion. Today's central government cannot scrap these laws because it relies on the support of the communist parties. In theory, the state governments can apply the laws more flexibly, especially in the special economic zones, but this is unlikely to lead to more flexible labour markets overnight.

India's labour laws are often blamed for the relatively slow growth of the manufacturing sector particularly in comparison to China where manufacturers may hire workers seasonally and can therefore adjust staffing depending on orders. Labour laws in India, reportedly, both discourage hiring and make short-term contract work virtually illegal in some companies (by prohibiting contractors from performing work that is "perennial" to the client company). According to Goldman Sachs, it is extremely difficult to lay off Indian workers, and doing so can cost more than a year's wage.[69] The laws are described as complex due to the more than 2,500 central-government statutes and 25,000 state statutes. These laws are said to deter foreign companies. Nonetheless, large companies are increasingly using temping agencies and the government appears willing to "turn a

65 "India's budget", *The Economist*, 6 March 2007.
66 "India on fire", *The Economist*, 1 February 2007
67 World Bank, *World Development Indicators 2006*, table 2.4
68 "India on fire", *The Economist,* 1 February 2007
69 Goldman Sachs, "India's rising growth potential", Global Economics Paper No. 152, 22 January 2006

blind eye" if workers' rights are maintained and jobs are created. The government is also considering proposals to change labour laws within special economic zones.[70]

The World Bank's "Doing Business" database provides comparative measures of business regulations, including employment regulations. The database includes indices that assign values between 0 and 100, with low values representing less rigid regulations. India ranks higher than OECD countries for three of the four employment indices – difficulty of hiring (33 compared to the OECD's 27), rigidity of employment (41 compared to 33 for the OECD), and difficulty of firing (with a much higher index of 70 compared to 27 for the OECD). India has a much lower rigidity of hours index, rating 20 compared to the OECD's 45. Non-wage labour costs are a smaller relative to salary in India, at 19 percent compared to 21 percent in the OECD. Firing costs, on the other hand, are much higher: 56 weeks of wages in India, compared to 31 weeks for OECD countries.[71]

The World Economic Forum publishes an annual Global Competitiveness Report, which examines the underlying factors of competitiveness using wide-ranging data compiled from an Executive Opinion Survey as well as publicly available "hard" data. The 2006-07 report shows that, according to surveys, restrictive labour regulations were the most problematic factor for doing business in India after infrastructure and bureaucracy.[72] In addition, hiring and firing practices (with India ranked 101 out of the 125 countries examined in terms of flexibility of practice), flexibility of wage determination (ranked 51st of 125), and cooperation in labour-employer relations (ranked 49th) were identified as "notable competitive disadvantages" for India.[73]

3. Unemployment

Table 17: Unemployment

	Unemployment						Unemployment by educational attainment		
	Male		Female		Total		% of total unemployment		
	% of male labour force		% of female labour force		% of total labour force		Primary	Secondary	Tertiary
	1990-92	2000-04	1990-92	2000-04	1990-92	2000-04	2000-04	2000-04	2000-04
Brazil	5.4	7.8	7.9	12.3	6.4	9.7	..	..	..
China	..	..	..	..	2.3	4.0	..	..	..
India	**..**	**4.4**	**..**	**4.1**	**..**	**4.3**	**27.0**	**41.1**	**31.9**
United Kingdom	11.5	5.0	7.3	4.2	9.7	4.6	30.3	44.4	14.6
United States	7.9	5.6	7.0	5.4	7.5	5.5	18.4	34.3	47.3
High income countries	7.0	6.2	7.9	6.6	7.4	23.9	34.8	34.4	29.7
Middle income countries	..	..	..	..	4.1	6.8	..	..	..
Low & middle income	..	..	..	..	..	5.6	..	..	..
World	..	..	..	..	..	6.5	..	..	..

Note: .. Not available

Source: World Bank, *World Development Indicators* , 2006, table 2.5

[70] "India's labour laws remain an anachronism", *Financial Times*, 14 December 2006. The special economic zones have been designated to provide an internationally competitive environment for exports by reducing regulatory burden and providing tax breaks and improved infrastructure.

[71] World Bank, "Doing Business with India", 2006

[72] World Economic Forum, *Global Competitiveness Report 2006-2007*, 2006, p242

[73] *Ibid.*, pp485-487

Although there is some question about the consistency of the data (for example unemployment by educational attainment for the UK does not add to 100%) table 17 shows unemployment figures for Brazil, China, India, the UK and the US. Between 2000 and 2004, India, at 4.3%, had a much lower unemployment rate than the world average of 6.5% and a slightly higher rate than China's. High income countries on average had an unemployment rate of 6.4% over the same period, middle income countries a rate of 6.8% and low and middle income countries a rate of 5.6% (an average unemployment rate for low income countries is not available).

India has experienced only a slightly higher incidence of unemployment amongst men, unlike Brazil, where unemployment of women was five percentage points higher than for men. Unemployment in India occurs more amongst higher-educated members of the population, with 73% of the unemployed having secondary or tertiary education. This contrasts with the UK, where 59% of the unemployed have secondary or tertiary education.

4. Wages and productivity

Table 18 shows comparative wage and productivity statistics. Recent data are difficult to obtain; however, the information available shows that India's wages and labour costs have been relatively low. For example, there is a large gap between India and the US and the UK in terms of labour costs, however as the final column (a House of Commons Library calculation) shows, the productivity of manufacturing workers relative to cost in the US is actually higher.

Table 18: Wages and productivity

	Hours worked average per week		Minimum wage $ per year		Agricultural wage $ per year		Labour cost per worker in manufacturing $ per year		Value added per worker in manufacturing $ per year		Productivity relative to labour cost
	1980-84	1990-94	1980-84	1990-94	1980-84	1990-94	1980-84	1990-94	1980-84	1990-94	1990-94
Brazil	..	..	1,690	1308a [a]	..	..	10,080	14,134	43,232	61,595	4.4
China	..	..	..	..	349	325	472	729	3,061	2,885	4.0
India	**46**	**..**	**..**	**408**	**205**	**245**	**1,035**	**1,192**	**2,108**	**3,118**	2.6
United Kingdom	42	40	..	..	..	..	11,406	23,843	24,716	55,060	2.3
United States	40	41	6,006	8,056 [a]	..	..	19,103	28,907	47,276	81,353	2.8

Notes: [a]1995-99; .. Not available

Source: World Bank, *World Development Indicators*, 2006, table 2.2

The World Bank uses two other employment statistics to give an indication of vulnerability and security of a population: the percentage of the population employed in the "urban informal sector", and the percentage of youth unemployment. The World Bank describes the proportion of urban employment in the "informal sector" as follows:[74]

> employment in urban areas in units that produce goods or services on a small scale with the primary objective of generating employment and income for those concerned. These units typically operate at a low level of organization, with little or no division between labour and capital as factors of production. Labour

[74] World Bank, *World Development Indicators 2006*, table 2.6

relations are based on casual employment, kinship, or social relationships rather than contractual arrangements.

There is a high proportion of informal employment in Indian urban areas – 54% of male urban employment and 41% of female urban employment.

Both male and female youth employment averaged 10% between 2000 and 2004. While India's youth unemployment rate is about the same as that of other South Asian economies, it is higher than the average unemployment rate for the country (see Table 17).[75]

I. Taxation (Richard Cracknell)

While the ratio of tax revenue to GDP in India is low by international standards, the tax system was characterised by high marginal tax rates in the late 1980s and early 1990s. The Indian fiscal framework was also highly complex and bureaucratic. Faced with a balance of payments crisis in 1991, the government initiated a reform process based around the idea that foreign enterprise and capital are essential for a robust and vibrant economy. Since 1991 the Indian tax system has undergone radical change in line with a more liberal economic policy and India's WTO commitments. Improvements to the administration of taxes were combined with a reduction in customs and excise duties, lower rates of corporate tax, extension of VAT to some industries and a broadening of the tax base to some services. More recently a task force under the chairmanship of Dr Vijay Kelkar, suggested further reforms. The aims of these reforms include:

- Widening of the tax base;
- Low and few tax rates;
- Enhancing the equity of the tax system;
- Shifting to non-distortionary consumption taxes; and
- Enhancing international competitiveness of Indian goods and services.[76]

The main thrust of tax reforms has been to combine lower tax rates with a broadening tax base, to realise more revenue while lowering marginal tax rates.

Authority to levy taxes in India is divided between central and state governments. Central government levies direct taxes such as personal income tax and corporation tax as well as indirect taxes such as customs and excise duties, a service tax and a sales tax on inter-state transactions. States levy a VAT on goods, state sales taxes and various local taxes.

1. Personal Income Tax

This is levied on non-agricultural income at rates of 10%, 20% and 30%. Income up to Rs 100,000[77] is income tax free. The first Rs 50,000 above this is taxed at 10 %, the

[75] World Bank, *World Development Indicators 2006*, table 2.9
[76] Ernst & Young, *Doing Business in India,* 2006: www.ey.com/GLOBAL/content.nsf/India/Home
[77] £1=Rs 85: Rs 100,000 = £1,200.

next Rs 150,000 at 20% and income above Rs 250,000 is taxed at 30% (Above Rs 1,000,000 there is a 3% surcharge, making the effective top rate 33%).[78] Income tax applies to Indian residents and foreigners on income earned in India, although the exemption thresholds result in a relatively low number of income taxpayers of around 40 million. Deductions and rebates are provided for housing purchases, rent, long term savings, and insurance.

2. Business income

Businesses are taxed at a flat rate of 33% for Indian companies and 40% for foreign companies. Dividends are income tax free to shareholders. Instead, companies are charged a 15% dividend distribution tax.

3. Profile of tax revenues

In spite of reforms, the tax structure remains dominated by indirect taxes. Table 20 shows that State taxes on services and commodities represent around one-third of the total tax take. By comparison, VAT accounted for just under 15% of UK government receipts in 2004/05.[79]

Table 19: Structure of general government revenues, 2004-05
Rps billion

		as % of Total
Central government		
Corporate tax	836	17%
Income tax	483	10%
Excises	992	20%
Customs	577	12%
Other	163	3%
State and union government		
Taxes on income	16	0%
Taxes on property	215	4%
Taxes on commodities and services	1,603	33%
Total	4,885	100%
as % of GDP		15.7%

Source: IMF Working Paper, *The Tax System in India* , April 2006

In international terms, the reliance on indirect taxes contributes to effective rates of tax on labour and capital in India which are lower than in the EU, USA or Japan.[80] Effective rates of taxation of labour in India are also low, reflecting the lack of a social security system. While the average effective tax rate on labour in the EU15 was 38%, and on capital 5%, the IMF has calculated that the effective tax rate on labour in India was 1.6%,

[78] The thresholds apply to resident and non-resident individual taxpayers for the year ending 31 March 2007. There is a higher minimum threshold of Rs 135,000 for a resident woman and Rs 185,000 for a resident senior citizen.
[79] HM Treasury, Budget 2006, HC 968, March 2006
[80] IMF Working paper *The Tax System in India: could reform spur growth?* April 2006

and on capital 5%. These rates match those of other low income countries in the region, such as Sri Lanka and China, but are below those of higher income emerging countries such as Thailand and Korea. This suggests that there is scope for these taxes to increase in India, as income levels rise, without adversely affecting competitiveness.

4. Tax Incentives for industry:

There are various tax incentives which allow for 100% of profits or gains to be offset against tax for up to 10 years. These tax incentives are, subject to specified conditions, available for new investment in:

- Infrastructure;
- Power distribution;
- Certain telecom services;
- Undertakings developing or operating industrial parks or special economic zones;
- Production or refining of mineral oil;
- Companies carrying on R&D;
- Developing housing projects;
- Undertakings in certain hill states;
- Handling of food grains;
- Food processing;
- Rural hospitals; etc.[81]

In addition there are various state-level incentives to encourage investment and attract capital.

[81] www.indianembassy.org/newsite//Doing_business_In_India/Fiscal_Taxation_system_in_India.asp

III The external economy

A. Trade (Grahame Allen)

1. Summary trade data

The UK is India's fourth largest trade partner, as well as being ranked fourth for both imports and exports, behind the US, China and Belgium in that order in each case (Financial Year 2004/05 data).[82] Data on the FCO site for financial year 2005/06 suggests that the UK is now the fifth largest destination for India's exports, 5% of the total, after the US, the UAE, China and Singapore. For imports, the UK was ranked sixth, with just under 3% of the total, after China, the US, Switzerland, Germany, and Australia.[83]

As a proportion of total UK-World goods and services trade, both UK exports to, and imports from, India increased between 1995 and 2006 - from 1.0% to 1.1% for exports, and from 0.8% to 1.0% for imports.[84] Exports of goods and services from the UK to India are increasing at a relatively high rate. In 2004, 2005 and 2006, exports to India increased by 26%, 8% and 21% respectively. This compares to increases in total exports from the UK in 2004, 2005 and 2006 of 5%, 7% and 13% respectively.[85]

The UK balance of trade in goods and services with India has fluctuated between deficit and surplus in the recent past, but was at a deficit of £114 million in 2005[86]:

- Exports of goods to India were valued at just over £2.8 billion, making India the 16th largest export market for UK goods that year. Imports of goods into the UK were valued at just under £2.8 billion, making India the 22nd largest source of UK imports.[87]

- The trade in services with India has been at a lower level than the trade in goods. India ranked 20th as a destination for exports of UK services (£1.1 billion and 1.0% of all UK service exports) and 15th as a source for UK services imports (£1.2 billion and 1.4% of all UK service imports) in 2005.[88]

- The balance of services trade with India has been in deficit since 1998, having gone from a surplus of £57 million in 1995 to a deficit of £145 million in 2005.[89]

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[82] UK Trade & Investment fact sheet: www.uktradeinvest.gov.uk/ukti/ShowDoc/BEA+Repository/345/375548
[83] FCO website: www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1007029394365&a=KCountryProfile&aid=1018965323192
[84] ONS, *Pink Book 2006*, table 9.3 and ONS, Monthly Review of External Trade Statistics, table G1, February 2006
[85] ONS database, series LGLG, KTMX
[86] ONS, *Pink Book 2006*, table 9.3
[87] *ibid*., table 9.4
[88] *ibid*., table 9.5
[89] *ibid*.

This suggests the UK is becoming a more important market for Indian services, as highlighted by the recent increase in offshoring of business process outsourcing (BPO) by UK companies.

The services deficit, combined with a slight surplus on goods trade, has brought about a deterioration in the overall balance of trade with India, which has gone from a £214 million surplus in 1995 to a deficit of £479 million in 2005, although 2003 saw a £33 million surplus.[90]

From an Indian perspective, the evidence suggests that the UK is also an important trading partner for India. In 2004/05 the UK was India's fourth largest goods trade partner (4% of India's World trade in goods), after the US (11%), China (6%) and Belgium (4%). India's main trading partners, by exports, were the US (17%), China (6%), Singapore (5%), Hong Kong (5%), the UK (4.5%) and, by imports, China (6%), US (6%), Switzerland (5%), Belgium (4%), Germany (4%), Australia (3%), and the UK (3%).[91]

Major goods items traded between the UK and India have come from the traditional manufacturing sector such as textiles, apparels, crude materials and various manufactured articles. These include:[92]

- Exports to India: pearls, precious and semi precious stones; machinery and transport equipment; metal scrap and other crude materials; and other manufacturing; and
- Imports from India: textiles and readymade garments; gems and jewellery; footwear; electrical machinery and transport equipment; metal manufactures; power generating equipment; organic chemicals; and vegetables and fruit.

The main services traded between the UK and India include:

- Services exports to India: financial/business services; royalties and licence fees; transportation and travel; insurance; communications; construction; and
- Services imports from India: transportation and travel; IT and other information services; and other business services.

Trade between the UK and India is expected to continue to grow in the future. Sectors in which the growth in trade is currently most pronounced are:[93]

Imports into the UK from India

- Medicinal and pharmaceutical products: This category first appeared in the 'top ten' items exported to the UK in 2003. In 2005, exports reached an estimated £90

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[90] ONS, *Pink Book 2006*, table 9.2

[91] FCO website: www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1007029394365&a=KCountryProfile&aid=1018965323192

[92] *ibid*.

[93] TISC, *Trade and Investment Opportunities with India*, HC 881-II, Third Report Session 2004-05, Volume II, 22 June 2006. Available at:www.publications.parliament.uk/pa/cm200506/cmselect/cmtrdind/881/881i.pdf

million,[94] suggesting an average growth rate of around 50% per annum over the last two years.

Exports from the UK into India

- Pearls, precious and semi-precious stones: The UK does not have a large domestic precious/semi-precious stones industry. Most exports are thought to be re-exports from Belgium and other countries.

In its Report on *Trade and Investment Opportunities with India*, the TISC were concerned that the growth in India-UK trade had been slower than the overall growth in Indian-EU trade:[95]

> India's exports to the UK have grown at a compound annual growth rate (CAGR) of 12 percent per annum compared to a CAGR for Indian exports to the EU as a whole of 13 percent. Of far more concern is that UK exports to India are growing at a CAGR of just two percent per annum compared to a CAGR of 14 percent for the EU.

And that the "statistics appear to be showing the re-export of imported goods and the export of goods in sectors in which the UK does not have a comparative advantage over its competitors". This, it suggested was "unsustainable in the long run".[96]

2. India as a challenge for the UK

The Treasury's report, *Long-term global economic challenges and opportunities for Europe*, detailed the challenges of globalisation for the UK, with a focus on India (along with China).[97] Its follow-up report, *Globalisation and the UK: Strength and Opportunity*, also looked at the challenges and opportunities of rapid growth in India:[98]

> India now produces 260,000 engineers a year, and its number of engineering colleges is due to double to 1,000 by 2010. It is of course the quality rather than the quantity of graduates that matters and the Indian Institutes of Technology are ranked among the world's best universities. […]
>
> The emergence and rapid growth of the outsourcing and business services industry in India is a good example of a sector taking root in Asia. Outsourcing from other countries earned India revenues of over $17 billion in 2004/05 (44 per cent of the world total) according to NASSCOM, India's software services trade association, and this is growing at over 30 per cent a year. As more firms look to outsource and offshore to minimise costs, the importance of outsourcing to India is likely to continue to grow – NASSCOM believes that revenues could grow to $50 billion a year by 2008/9 if India remains an attractive location and costs do not rise. The global outsourcing industry has grown rapidly since it emerged in

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94 HC Library estimate.

95 TISC, *Trade and Investment Opportunities with India*, HC 881, Third Report Session 2004-05, 22 June 2006: www.publications.parliament.uk/pa/cm200506/cmselect/cmtrdind/881/881i.pdf

96 *ibid*.

97 www.hm-treasury.gov.uk./media/A1D/6B/global_final_140305.pdf

98 www.hm-treasury.gov.uk/media/E7A/10/ent_globaluk021205.pdf (Box 1.2)

> India, and India's facility in the English language has given it a competitive edge. The Indian market has become highly competitive, with strong competition on price, and significant wage competition for graduate employees.

Noting that India still faced a number of challenges, including "growing income inequalities, serious environmental issues and poor infrastructure" (para 5), the three main conclusions of the TISC report, *Trade and Investment Opportunities with India*, were (paras 9-11):[99]

> First, that the UK is not as engaged with India's markets as it should be. Despite our long history of commerce with India, UK companies are falling behind their major competitors, perhaps because UK companies tend to see India as a source of low-cost labour rather than an emerging market in its own right. The UK needs to be far more entrepreneurial in its approach to India if it is to take advantage of the huge opportunities this vast country has to offer our companies and institutions.
>
> Second, the Indian market is liberalising at a rate not always fully appreciated in the UK. Constant vigilance is needed by those wanting to do business with India, if the fullest advantage is to be secured by them from this progressive liberalisation. However, uniform and continuing progress cannot be assumed and UK diplomacy must continue to urge the Indian authorities to continue on their chosen course—and to demonstrate by example in world trade talks our own country's adherence recognition of the merits of liberalisation.
>
> Third, that the UK's institutional arrangements to support trade with and investment both in and from India are characterised by enthusiasm but also by confusion. A great deal of good work is being done, but by too many overlapping bodies with ill-defined responsibilities, and often inadequate resources. Viewed from India, the UK is a small country, and our efforts need to be far more focussed to have a real impact.

The TISC found that a number of barriers to UK trade remained, including "heavy import duties, excessive red tape and bureaucracy, and corruption" (para 37). On tariffs it noted in particular the case of Scotch whisky, which is subject to particularly high import tariff. The EC published conclusion from a Trade Barriers Regulation report on India's import restrictions on wines and spirits on 9 August, finding that India is "in violation of its WTO obligations to provide non-discriminatory market access".[100]

The matter is currently going through the disputes procedure at the WTO. In its considerations, the European Communities considered that the measures were inconsistent with Articles II:1(a) and (b), read in conjunction with Article III:2 of the GATT 1994, and with Articles III:4 and XI of the GATT 1994, and requested consultations with India in November 2006. In December 2006, the United States and Australia requested to join the consultations.

More information on the disputes passage through the complaints system is available on the WTO website at: www.wto.org/english/tratop_e/dispu_e/cases_e/ds352_e.htm

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[99] TISC, *Trade and Investment Opportunities with India*, HC 881, Third Report Session 2004-05, 22 June 2006: www.publications.parliament.uk/pa/cm200506/cmselect/cmtrdind/881/881i.pdf

[100] http://trade.ec.europa.eu/doclib/docs/2006/august/tradoc_129668.pdf

UK Trade and Investment's economic overview states that India's peak tariff rate has fallen to 25% in 2003, from 350% in 1991 and that quantitative import restrictions were abolished in 2001.[101] UKTI's overview also states that:

> India's privatisation initiatives have enhanced the attractiveness of state-owned assets in sectors with a promising future such as telecoms, oil and gas, pharmaceuticals, real estate development and travel and tourism.

3. India's response to 'globalisation' (Ian Townsend)

India is widely recognised to be benefiting from 'globalisation'. A January 2006 *Financial Times* survey on India and globalisation stated that:[102]

> India, long overshadowed by China, its populous northern neighbour, is the country of the moment. Signs abound of an India surging with self confidence and a global investor community increasingly anxious to do business with the world's fastest-growing free market democracy and default back office. […] At the root of this change is a reappraisal of the country's economic potential. This has been brought on by a jump in the trend growth rate to 7 to 8 per cent, double the "Hindu rate of growth" to which India seemed condemned for much of the post-war period, and by the government's promises of 10 per cent growth in the near future.

A 2006 article in *Foreign Affairs*, a special edition on India, discusses its particular model of economic development, which differs from that pursued by other Asian economies:[103]

> After being shackled by the government for decades, India's economy has become one of the world's strongest. The country's unique development model - relying on domestic consumption and high-tech services - has brought a quarter century of record growth despite an incompetent and heavy-handed state. But for that growth to continue, the state must start modernizing along with Indian society. […]
>
> Rather than adopting the classic Asian strategy -- exporting labor-intensive, low-priced manufactured goods to the West -- India has relied on its domestic market more than exports, consumption more than investment, services more than industry, and high-tech more than low-skilled manufacturing. This approach has meant that the Indian economy has been mostly insulated from global downturns, showing a degree of stability that is as impressive as the rate of its expansion. The consumption-driven model is also more people-friendly than other development strategies. As a result, inequality has increased much less in India than in other developing nations.

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[101] The Doha Round of WTO multilateral trade liberalisation talks were likely to have led to further reductions in India's import tariffs, but with the recent suspension of the negotiations (see below) this is unlikely to happen soon.

[102] "Surging with self-confidence and ambition India, long overshadowed by China, is the country of the moment", *Financial Times Report: India & Globalisation*, 26 January 2006, p1

[103] Gurcharan Das, "The India Model", Foreign Affairs, July/August 2006; full text (also author of *India Unbound: The Social and Economic Revolution From Independence to the Global Information Age*)

The author also contrasts China's production/export and state approach with India's consumption and entrepreneurialism led approach, though noting the lack of a 'broad industrial revolution' to the benefit of all Indians. Also, as a *Financial Times* article noted:

> With few exceptions, the world-class manufacturing facilities for which China is famous are products of FDI, not of indigenous Chinese companies. Yes, "Made in China" labels are still more ubiquitous than "Made in India" ones; but what is made in China is not necessarily made by China. Soon, "Made in India" will be synonymous with "Made by India" and Indians will not just get the wage benefits of globalisation but will also keep the profits - unlike so many cases in China.[104]

The *Financial Times* survey article on India and globalisation also stated that:[105]

> India is now intertwining with the world beyond its borders as never before. The transformation has far to go. Trade represents just 29 per cent of Indian GDP, compared with about 57 per cent of China's. Although India has made some progress in eliminating trade barriers since it joined the World Trade Organisation in 1995, import tariffs remain high. India is still a minnow in world trade, with its goods exports accounting for just 0.8 per cent of the global total, compared with 6.4 per cent for China's.
>
> But its share could quadruple in a decade, according to McKinsey, if the myriad infrastructural and regulatory hurdles to global competitiveness facing manufacturers are lifted. Its potential to attract more foreign direct investment is also considerable, given that existing flows are small both in absolute terms and as a percentage of GDP. India received less than one-tenth of the Dollars 60bn of FDI that went to China in 2004. This could increase rapidly if market deregulation and liberalisation make further progress. Anecdotal evidence suggests a wall of cash waiting to enter. Foreign companies are rushing to hold board meetings in India, occupancy rates in hotels exceed 100 per cent because of double booking and McKinsey reports three times as many visits by Fortune 500 chief executives contemplating investments as last year.
>
> "The tipping point will be deregulation of retail and banking," says Ranjit Pandit, co-founder of McKinsey's India practice. Once elections in the left's bastions of West Bengal and Kerala are out of the way, he expects the government to allow FDI in retail but to shy away from bringing forward banking liberalisation not scheduled until 2009.

The Economist has also called for further reforms:[106]

> First is more liberalisation, continuing the good work of the past 15 years, opening India's markets even wider to competition and reducing the role of the state in the economy. Second is the improvement of India's woeful infrastructure, the biggest bottleneck in the race for growth. Third is a change in India's labour laws, which act as a serious obstacle to labour-intensive manufacturing. Fourth is education, which is not only failing to prepare the rural poor for work off the land,

[104] Yasheng Huang, "What China could learn from India's slow and quiet rise", *Financial Times*, 24 January 2006, p17

[105] "Surging with self-confidence and ambition India, long overshadowed by China, is the country of the moment", *Financial Times Report: India & Globalisation*, 26 January 2006, p1

[106] "Now for the hard part", *The Economist*, 1 June 2006

> but is also no longer equipping enough talented young graduates with the skills that have fuelled the services boom.

In a response to the *Foreign Affairs* article,[107] Pankaj Mishra highlighted continuing low per capita GDP, 'jobless growth', continued inequalities (with growth focused in urban areas), slow progress on human development measures, and continuing malnutrition. It also noted that a:

> labour-intensive manufacturing boom of the kind that powered the economic growth of almost every developed and developing country in the world has yet occurred in India. Unlike China, India still imports more than it exports. This means that as 70 million more people enter the work force in the next five years, most of them without the skills required for the new economy, unemployment and inequality could provoke even more social instability than they have already.

In terms of external activity, India has been a key member of the G20 group of larger developing countries which has played an increasingly prominent role at the WTO. India, along with Brazil, was in the key G6 group attempting to forge a Doha deal before the Round was suspended early last year. India's offensive interests in the WTO Doha Round included lower agricultural EU tariffs and lower US agricultural subsidies, as well as access for services exports. With the multilateral talks suspended until earlier this year, India's trade minister, Kamal Nath, publicly stated that India intended to pursue bilateral trade deals with key trading partners, particularly the EU and Japan.[108]

India has had limited free trade agreements with Sri Lanka and Thailand, and signed a Comprehensive Economic Cooperation Agreement (CECA) with Singapore in June 2005. It is negotiating with the ASEAN countries, the Gulf Co-operative Council countries, Bangladesh and Mauritius, and looking at talks with a number of other countries including China. A three-way FTA with South Africa and Brazil is also being looked at, while there are reports that India and Japan have agreed to start negotiations towards a bilateral Free Trade Agreement following the recommendation of a joint study.[109]

a. *EU-India trade links*

The European Commission's DG Trade page on trade with India states that there is "an enormous potential for improving trade and investment flows between the EU and India".[110]

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107 "The Myth of the New India" by Pankaj Mishra, was published in *New York Times* on 1 August 2006, highlighting continued poverty in India - only available via subscription, but an article with same name and author on *Hindustan Times* website (dated 9 July 2006): www.hindustantimes.com/news/181_1739224,00300006.htm

108 http://in.today.reuters.com/News/newsArticle.aspx?type=businessNews&storyID=2006-07-25T194304Z_01_NOOTR_RTRJONC_0_India-260977-1.xml

109 www.financialexpress.com/fe_full_story.php?content_id=135412

110 http://ec.europa.eu/comm/trade/issues/bilateral/countries/india/index_en.htm

The EU-India *Joint Initiative for Trade and Investment* was launched in 2001.[111] At the sixth EU-India summit on 8 September 2005 the *EU-India Joint Action Plan* adopted which:[112]

> […] seeks to enhance economic co-operation between the EU and India in a number of areas where both parties have mutual interests. A broad range of sectors are envisaged under which EU-India co-operation will be broadened and enhanced: Trade, Transport, Environment, Energy, Science and Technology, Space Technology, Information and Communication Technologies, Pharmaceuticals and Biotechnology, Industrial Policy, Customs Co-operation, Dialogue on Economic and Financial Matters, Employment and Social Policy, Agriculture and Business Dialogue & Co-operation.

The Commission page also notes that the EU and India agreed to establish:

> a High Level Trade Group to study and explore ways and means to deepen and widen their bilateral trade and investment relationship and agreed to cooperate on a number of other trade-related issues.

This could ultimately see a bilateral free trade agreement between the EU and India.

b. India-US & India-Australia trade links

While the EU imposed a moratorium during the WTO Doha Round on bilateral and regional trade agreements not already under negotiation, there are indications since the Round restarted that India is interested in a bilateral trade deal with the EU. It has been suggested that the US and Australia have done better than the UK in building trade links with India.

On 18 July 2005 India and the US announced a new Trade Policy Forum as a 'standing bilateral committee', with five focus groups on agricultural products, tariffs and non-tariff barriers, services, investment, and innovation and creativity.[113] The US Trade Representative website has a factsheet,[114] and a press release on the TPF's third meeting in July 2006.[115]

An Australia-India Council was created in May 1992, and then in 1995 the Indian government created an India-Australia Council. Like the US, Australia is also pursuing a number of bilateral FTAs, including the ASEAN countries with New Zealand.[116] A bilateral Trade and Economic Framework (TEF) agrement was signed in March 2006.[117] This is intended to:[118]

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111 http://ec.europa.eu/comm/external_relations/india/intro/trade.htm
112 http://ec.europa.eu/comm/external_relations/india/eco/index.htm and http://trade-info.cec.eu.int/doclib/docs/2005/september/tradoc_124785.pdf
113 www.ustr.gov/Document_Library/Press_Releases/2006/March/US_India_Issue_Joint_Statement_on_Trade.html
114 www.ustr.gov/assets/Document_Library/Fact_Sheets/2006/asset_upload_file321_9583.pdf
115 www.ustr.gov/Document_Library/Press_Releases/2006/June/United_States_India_Discuss_Key_Trade_Issues.html
116 See www.dfat.gov.au/trade/fs_fta_essential_guide.html
117 See press release at announcement of TEF negotiations, May 2005; www.trademinister.gov.au/releases/2005/mvt039_05.html
118 www.dfat.gov.au/geo/india/india_brief.html

> provide a framework for the facilitation of future economic development and enhance economic dialogue in such areas as energy and mining, infrastructure development, information and communications technology, services, agriculture, inspection and quarantine and biotechnology.

An Australian Government information brief on India suggests that exports to India increased by 28% in 2005, and is now India's 8th largest import source.[119]

The policy aspects of India's international relationships are discussed in RP07/41, *A political introduction to India*.

B. Foreign Direct Investment (FDI) (Grahame Allen)

With the market for FDI into China becoming increasingly saturated, India is being increasingly viewed as a priority destination for FDI.[120] A survey of the World's leading companies' executives' confidence in, and preferences for, FDI found that while for a third year running, China remained the top-ranked country,[121] India was ranked second in 2005 (moving the US into third place) rising from third in 2004 and sixth in 2003. FDI into India has been estimated to have averaged around £250 million per annum prior to the regulatory reforms of the mid-1990s, but has increased year on year since then. In 2004, FDI stocks in India amounted to more than £33 billion. By the end of 2005, FDI flows into India were $6.6 billion (£3.6 billion)[122] and UNCTAD's preliminary estimates for 2006 suggest that inflows into India increased to $9.5 billion (£5.2 billion).[123]

In a submission to the Trade and Industry Select Committee (TISC) on *Trade and Investment Opportunities with India*, UKTI commented that, based on the findings of the above survey, "the Indian reform programme is beginning to be recognized on a wider scale" and that "India still lags behind China in World FDI, but is gaining on it".[124]

The Economist Intelligence Unit predicts that FDI into India will increase to $10.0 billion in 2007, and could rise to as much as $14.3 billion by 2010.[125] Nonetheless, India's share of inward FDI is low by global standards (inflows were equivalent to less than one percent of India's GDP in 2005) and the total stock of inward investment is lower

119 www.dfat.gov.au/geo/fs/inia.pdf

120 Defined by ONS as an investment that adds to, deducts from, or acquires a lasting interest in an enterprise operating in an economy other than that of the investor where the purpose is to have an 'effective voice' in the management of the enterprise. See ONS, Foreign Direct Investment 2005, 12 December 2006

121 AT Kearney, *Global FDI Recovery Clouded by Savings Glut Overhang*, 7 December 2005: www.atkearney.com/main.taf?p=1,5,1,169

122 Based on the Bank of England annual average spot exchange rate for the US dollar against Sterling (£1:$1.8189), December 2005

123 UNCTAD, *World Investment Report 2006*, October 2006: www.unctad.org/en/docs/wir2006_en.pdf . Conversion based on the Bank of England annual average spot exchange rate for the US dollar against Sterling (£1:$1.843), December 2006

124 TISC, *Trade and Investment Opportunities with India*, HC 881, Third Report Session 2004-05, 22 June 2006, Appendix 29

125 The Economist Intelligence Unit, *World investment prospects to 2010: Boom or backlash?* 6 September 2006, p170

than both Pakistan and China[126] on a per capita basis.[127] Concerns cited about investing in India include intellectual property rights protection, bureaucracy and political instability, infrastructure inadequacy, business regulations and heterogeneity of markets.[128]

In 2005, net FDI by UK companies in Indian subsidiary and associate companies amounted to £515 million, representing just over one percent of all net direct investment by UK companies overseas and an increase of £241 million (88%) on the 2004 total.[129]

UK businesses have a long history of investment in India. In 1865, India was the recipient of £7.5 million of British capital exports,[130] equivalent to £630 million in 2005 prices.[131] Long-standing UK companies in India include Glaxo, Rolls-Royce, British Aerospace, SmithKline Beecham, British Petroleum, British Airways and Cadbury. More recent UK investors in India include National Power, National Grid, British Telecom, Shell International Petroleum Co., British Gas, United Distillers, Singularity Software, Trafalgar House, Oxygen Healthcare Ltd, JCB Excavators Ltd, Mivan, Cranes Software International and Huntleigh Healthcare.[132]

Concern has been expressed that, although the statistics suggest the UK is doing reasonably well in isolation, compared with other countries the situation is relatively poor, especially given the UK's historical links with India.[133] The UK was only the sixth largest provider of FDI into India in 2004/05, after Mauritius (35%), US (20%), Netherlands (8%), Germany (6%) and Japan (5%).[134] Provisional data for 2005/06 suggests that the UK is gaining some ground having risen to 8% of total FDI by overseas companies in India and third in the ranking of investors in India behind Mauritius (41%) and the US (10%).[135]

The official statistics may not tell the whole story. According to the Commonwealth Business Council, many companies, including those based in the UK, invest in India via Mauritius because of its economic relationship with India, which allows investors special tax breaks.[136] In addition, in estimating FDI figures, UKTI has suggested that India does not include the reinvestment of retained earnings by overseas companies back into their

126 India's stock of inward FDI is equivalent to \$50 per person, Pakistan's is \$60 per person, and China's is \$480 per person.

127 *Ibid.*, p171

128 Exim Bank, *FDI Flows and Investment Policies in India and Select Asian Countries: A Comparative Analysis*, Research Brief No.20, October 2005, p3

129 ONS, *Foreign Direct Investment 2005*, 12 December 2006

130 These statistics are "capital called" and may not be comparable with current FDI figures. Source: Stone, Irving, *The Global Export of Capital from Great Britain, 1865-1914 – A Statistical Survey*, 1999, p82

131 HC Library, *Inflation: the value of the pound 1750-2005*, Research Paper 06/09, 13 February 2006

132 From UKTI Investment Summit, "Global Partners, Shared Vision", www.ukinvest.gov.uk/10389/en_GB/0.pdf as at (22 February 2007) and UK High Commission of India, Indo-British Economic & Commercial Relations, UK Investment in India", available at (22 February 2007): www.hcilondon.org/comukinv.htm

133 HC Deb 16 February 2006 c1544 and "British business left behind in India", *Financial Times*, 22 June 2006

134 Reserve Bank of India, *Annual Report*, 2005/06, Table 1.76

135 *Ibid.*, p98.

136 TISC, *Trade and Investment Opportunities with India*, HC 881, Third Report Session 2004 05, 22 June 2006, Appendix 11, section 2.3.

local companies. As shown above, many UK companies have had investments in India for many years, so this re-investment of profits may be considerable over time.[137]

According to UKTI, by far the most dramatic new trend in the UK-India business relationship has been the recent growth of Indian companies as investors into the UK, as India's restrictions on investing overseas have been reduced.[138] The number of inward investment projects from India into the UK increased from 36 in 2004/05 to 76 in 2005/06.[139], creating an estimated 1,449 jobs.[140] In addition, the UK is India's top location for FDI in Europe.[141] In terms of numbers of projects, India was the third largest foreign investor in the UK behind the US and Japan in 2005.[142] Total Indian FDI in the UK was estimated at £186 million at the end of 2004.[143] The UK is the sixth largest recipient of India's outward FDI with 5.5% of outflows, behind Russia (19.9%), the US (16.3%), Bermuda and British Virgin Islands (11%), Mauritius (8%) and Sudan (6.5%).[144] The Indian Commerce and Industry Minister reported that 2004/05 was the first year gross FDI in the UK by Indian companies exceeded UK investment in India.[145]

Indian interests in the UK range from IT-enabled services – for example, HCL's call centres in Belfast and the joint venture between Pearl Group Ltd and Tata Consultancy Services/Diligenta in Peterborough – through to pharmaceuticals and other manufacturing. El Forge's acquisition of Shakespeare's Forgings safeguarded 103 jobs in the West Midlands,[146] and other high-profile acquisitions include that of Tetley Tea by India's Tata Tea in 2000,[147] and more recently, Tata Steel's purchase of Corus for £6.7 billion, an Indian company's largest foreign acquisition to date.[148]

Not all of the benefits of this investment have accrued to the UK economy. Net inward FDI by Indian companies and subsidiaries into the UK has been estimated to have amounted to around -£18 million in 2004, suggesting that Indian companies tend to repatriate their profits back to India rather than re-invest them in the UK.[149]

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[137] *Ibid.*, para 2.4. According to the Economist Intelligence Unit, the Indian govt changed its measures of FDI to include reinvested earnings in 2000/01, but UKTI's website states that reinvestments are not included in FDI figures.

[138] TISC, *Trade and Investment Opportunities with India*, HC 881, Third Report Session 2004 05, 22 June 2006, Appendix 29.

[139] UKTI, *First ever UK Trade and Investment India business awards announced*, 2 November 2006, available at: www.newsroom.uktradeinvest.gov.uk/index.asp?PageID=50&PressReleaseID=834.

[140] UKTI, *UK Inward Investment 2005/2006*, July 2006, p2.

[141] UKTI, *First ever UK Trade and Investment India business awards announced*, 2 November 2006, available at: www.newsroom.uktradeinvest.gov.uk/index.asp?PageID=50&PressReleaseID=834.

[142] Ernst & Young, *European Investment Monitor 2006 Report*, p5.

[143] TISC, *Trade and Investment Opportunities with India: Government Response to the Committee's Third Report of Session 2005-06*, HK 1671 Session 2005-06, 3 November 2006.

[144] Hay, Francoise, "FDI and Globalization in India", paper prepared for the International Conference *The Indian economy in the era of financial globalisation*, 28-29 September 2006, p16-17.

[145] "Warning to British firms as India's UK investment rises", *The Times*, 17 January 2006.

[146] UKTI, *UK Inward Investment 2005/2006*, July 2006, p2.

[147] "Business hero returns with historic trophy", *Financial Times*, 1 February 2007.

[148] "Unleashed: why Indian companies are setting their sights on western rivals", *Financial Times*, 7 February 2007.

[149] Office for National Statistics.

The TISC had concerns with regard to FDI in its June 2006 Report; *Trade and Investment Opportunities with India*, that the UK is falling behind its main competitors in investing in India. The Report stated:

> flows of FDI between the two countries have been increasing, but while Indian companies appear to be taking advantage of the increased opportunities to invest in the UK, UK FDI in India, although substantial, is not increasing commensurately.

At the same time, the Report acknowledged that UK companies may be investing in India via Mauritius to reap tax advantages, and that the profits of UK companies, which have invested in India in the past, do not appear in official statistics. In response to the TISC's conclusions,[150] the Government replied that there were many UK businesses long-established in India, which reinvested significantly in India. In addition, at the end of 2004 the UK had a net FDI position of £1,674 million in India, more than triple the amount at the end of 1996 (£532 million). The UK's FDI position in Mauritius was £844 million at the end of 2004 (up from £185 million at the end of 1996), and the Government suggested that the majority of this investment was destined for India.[151]

On investment in general, the TISC Report noted that Indian Government restrictions on Foreign Direct Investment were the "largest barrier" to UK investment (para 61).[152] The report gives a detailed sectoral analysis of the barriers to increased FDI. The report also noted that:

> There is a worrying lack of familiarity with the Indian market amongst some parts of the UK business community. The UK Government needs to address this by making more information available on the Indian market to UK companies, even those which are not currently seeking to enter the market there.
>
> The UK Government needs to engage more systematically with senior members of the UK business community, especially those from medium sized enterprises, to bring about a 'step' change in their perceptions of India. For example, UKTI could offer 'insight tours' for senior executives to learn about the realities of doing business in India, such as that there are lots of different regional markets, in a country of 1.1 billion people. This would overcome the perceptions that too frequently hold back investment, highlight the very significant business opportunities in India, and so result in more commitment from the top.

The report's supporting evidence includes a number of useful submissions from a range of bodies on UK links with India, covering trade and investment and related support (see in particular the UKTI memo, Appendix 29).[153]

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[150] TISC, *Trade and Investment Opportunities with India: Government Response to the Committee's Third Report of Session 2005-06*, HK 1671 Session 2005-06, 3 November 2006.

[151] TISC, *Trade and Investment Opportunities with India: Government Response to the Committee's Third Report of Session 2005-06*, HK 1671 Session 2005-06, 3 November 2006. Note that the ONS FDI statistics include unremitted profits in net foreign direct investment flows.

[152] www.publications.parliament.uk/pa/cm200506/cmselect/cmtrdind/881/881i.pdf

[153] *ibid*.

July 2006 saw the Indian Government open up India's retail and energy markets to greater foreign investment, despite some political opposition. India is also keen to attract US investment, along with its technical and management skills, to "create jobs, improve the country's infrastructure and make India more globally competitive".[154]

C. UK-India trade and investment initiatives (Grahame Allen)

The UK Government has recognised that the rise of the Indian economy provides a number of opportunities for UK business. In December 2005 the then Minister for Trade and Investment, Ian Pearson stated that:[155]

> We must see the growth of India as an opportunity, not as a threat, and take advantage of the trading opportunities that will accrue as a result of their rapid economic expansion.

1. Joint Economic and Trade Committee (JETCO)

A speech on UK-India bilateral relations from the UK Minister for Trade and Investment outlined some of the key initiatives, including the JETCO, which were taking place:[156]

> The Joint Economic and Trade Committee is a key part of that initiative. It will focus on developing areas of potential growth in our bilateral trade and investment relationship, particularly in biotechnology, healthcare, pharmaceuticals and ICT. I hope that it will also help to identify barriers to greater trade and investment and find ways of overcoming those barriers.

JETCO formally met for the first time on 13 January 2005 in New Delhi.[157] On the UK side, UKTI suggest that "sector teams [through working groups] are taking forward much of this work, with others leading on specialist issues, such as the Department of Constitutional Affairs (DCA) on Legal Services and the Patent Office on Intellectual Property Rights".[158]

The third, and latest, Annual JETCO meeting took place in New Delhi on 16 January 2007. The meeting was presented with feedback from the chairs of the various working groups listing progress to date and plans for future activity.[159]

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154 "India courts more US investment", *BBC News Online*, 3 March 2006; http://news.bbc.co.uk/1/hi/business/4770302.stm
155 HC Deb 1 December 2005 c375
156 UK-India Bilateral Relations, 28 June 2005; www.uktradeinvest.gov.uk/ukti/appmanager/ukti/southasia?_nfpb=true&portlet_17_1008_actionOverride=/pub/portlets/advancedGeneric/all
157 A UKTI press release on the launch of JETCO in January 2005 is at www.newsroom.uktradeinvest.gov.uk/index.asp?PageID=2&PressReleaseID=590
158 www.uktradeinvest.gov.uk/ukti/appmanager/ukti/countries?_nfpb=true&portlet_3_5_actionOverride=%2Fpub%2Fportlets%2FgenericViewer%2FshowContentItem&_windowLabel=portlet_3_5&portlet_3_5navigationPageId=%2Findia&portlet_3_5navigationContentPath=%2FBEA+Repository%2F328%2F400949&_pageLabel=CountryType1
159 Notes from the third meeting can be found on the UKTI website: www.uktradeinvest.gov.uk/ukti/ShowDoc/BEA+Repository/345/400945

2. Indo-British Partnership

The Indo-British Partnership (IBPN),[160] launched by the then British and Indian Prime Ministers, John Major and Narasimha Rao in 1993, aims to act:[161]

> […] in response to opportunities created by the bold and imaginative liberalisation programme introduced in India, the then British and Indian Prime Ministers publicly endorsed the creation of the Indo-British Partnership Initiative (IBPI). Its mandate is to increase bilateral trade and investment with particular emphasis on small and medium enterprises and to promote technology and science links between the two countries.

Its principal mandate is to increase bilateral trade and investment between the two countries. It is backed by both governments and chaired by leading industry figures. Current Co-Chairmen are Mr Sunil Mittal (Chief Executive, Bharti Enterprises) and Lord Bilimoria (Chief Executive of Cobra Beer Ltd) representing the Indian and UK industry respectively.

Made up of 25 members, the Board comprises representatives from UK companies in the fields of finance, healthcare, accountancy, business and legal services, tourism, the creative industries, education and other affiliated organisations including UKTI, the CBI and International Business Link. Asia House, a pan-Asian organisation, has been appointed to manage the Secretariat of the IBPN.[162]

3. Asia Task Force

The Asia Task Force[163] was announced in the *Pre Budget Report 2004*, to "bring together experts from industry, education and government to focus on boosting British exports to, and investment in, Asian countries".[164] The Indo-UK Economic and Financial Dialogue was announced alongside the Asia Task Force in *PBR 2004*, and launched in February 2005.[165]

Noting the range of UK organisation operating in India, the TISC Report on India recommended that JETCO "should operate at a strategic level, but it is, understandably, operating at too high a level to have a direct influence on agencies on the ground". It also suggested that the IBPN be positioned "as the leading player for the private sector in the UK; it should become the *de facto* Indo-British Chamber of Commerce and so the natural voice of commerce in relation to Indian trade and investment issues".[166]

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[160] www.ibpn.co.uk

[161] British High Commission in India website: www.britishhighcommission.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1058275657558

[162] www.ibpn.co.uk/overview.asp

[163] More information on the aims and objectives of the Asia Task Force can be found on the UKTI website: www.uktradeinvest.gov.uk/ukti/fileDownload/atf_aims_objectives.pdf?cid=385135

[164] www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr04/prebud_pbr04_speech.cfm

[165] "Launch of Indo-UK economic and financial dialogue", *HMT press notice* 16/05, 4 February 2005; http://www.hm-treasury.gov.uk/newsroom_and_speeches/press/2005/press_16_05.cfm

[166] TISC, *Trade and Investment Opportunities with India*, HC 881, Third Report Session 2004-05, 22 June 2006. Available at: www.publications.parliament.uk/pa/cm200506/cmselect/cmtrdind/881/881i.pdf

D. Outsourcing to India (Grahame Allen)

Manufacturing businesses in developed countries have offshored part or all of their activities for many years to take advantage of the reduced cost of production offered by lower-cost economies. In recent years, media speculation has suggested that UK companies have begun to also offshore some of their service provision and that as many as 40,000 service sector jobs could be offshored from the UK to lower-cost economies such as India.[167]

Two major categories of outsourcing can be identified:

- Type 1: A UK, or UK based, business procures goods or services it could perform in-house from an outside source in the UK; and

- Type 2: A UK, or UK based, business procures goods or services it could perform in-house from an outside source overseas.

Along with a UK, or UK based, business which performs in-house functions at an overseas facility which it owns, the activities described in type 2 have become commonly known as 'offshoring'.

The preferred host country for UK based businesses offshoring services has varied over time but countries with large populations of English speakers, in particular India, have become the main beneficiaries of this type of investment. Businesses which had already announced major offshoring projects in India include; Abbey National, Aviva, AXA Insurance, British Telecom, CentricaCMG, JP Morgan Chase, Lloyds TSB, National Rail Enquiries, Powergen, the Prudential, and Standard Chartered. More recently HSBC announced the export of 4000 jobs to India.

A Trade and Industry Committee (TISC) Report on the *Knowledge-Driven Economy* identified the type of service sector jobs most at risk from offshoring in the future.[168] These tended to be low-skill, low-paid jobs in customer contact centres (CCCs), commonly referred to as 'call centres', and repetitive back-office jobs such as data entry. Intermediate skilled jobs including remote diagnostics, word processing work, insurance claims, credit card processing and airline reservations were also at risk of being offshored. Higher skilled job categories, also identified to be at risk, included software development, legal advice, accounting, equity research and analysis. In essence, any business process which did not need to be geographically placed could be offshored.[169]

India has been the preferred country for UK CCCs offshoring their activities because it has an abundance of low-cost, well educated and high-skilled English speakers. Starting wages in Indian CCCs are generally one-tenth of those in Western economies' CCCs

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[167] For example see: *Offshoring 2006: Beyond Bangalore*, CIO website (2 March 2007): http://searchcio.techtarget.com/originalContent/0,289142,sid19_gci1153592,00.html and

[168] TISC, *Progress towards the Knowledge Driven Economy*, HC 432 Session 2004-05, 22 March 2005

[169] *ibid*.

and one eighth of those in the UK.[170] India produces around two million graduates a year, of which 70% do not find full employment immediately. This provides a large 'pool' of skilled people to draw on.[171] The Indian ICT sector also has around half a million 'professionals' of which 70% are university graduates. 7% of the population, approximately 72 million people, are English speaking, while for each CCC vacancy, on average, 400 job applications are received. India is also considered attractive as it offers lower infrastructure costs, such as land and rental costs, lower utility costs, such as electricity and internal telecommunications, and lower costs of ancillary services such as lawyers and consultants. It also enables businesses to offer a continuous 24-hour service to their UK customers due to time zone differences (for example from operations in the UK during UK daylight hours and from India at other times).[172]

A Report by the Call Centre Association (CCA) and the National Association of Software and Service Companies (NASSCOM), the trade association of the Indian ICT industry, for the DTI, has suggested that there are further workforce advantages for UK businesses investing in India including greater flexibility, higher quality and higher productivity. An excess supply of labour in India enabled UK businesses to scale up their operations quickly should they need to, an option that was not always possible in the UK due to a 'tight' labour market. Some UK businesses had increased productivity through offshoring to India by reducing error rates in transactions by 20% and by increasing the number of calls/transactions processed per hour. However, the DTI's study into UK CCCs suggested that such claims of higher productivity in India depended on how productivity was measured in each case. Although calls are answered more quickly in India, the proportion of callers who had their enquiries solved with a single call was lower, 60% in India compared to 87% in the UK.[173]

When giving evidence to the TISC inquiry into the knowledge-driven economy, NASSCOM told them that the total benefit for the UK economy for every CCC position offshored to India was just over £46,000 per annum. Within this total, they suggested that the direct financial benefit for a UK business offshoring their CCCs' activity was just under £20,000 per 'agent' employed in India. Of this, 84% was accounted for by operating cost reductions for the UK business with the remaining 16% accounted for by profit repatriation from the captive overseas CCC to the UK parent business. In addition to the benefits for individual businesses, there were further benefits for the UK economy which amounted to an extra £27,000 per person per annum. The majority of this benefit, 79%, accrued from the economic contribution of UK employees redeployed in new, higher skilled positions.[174]

Not all UK businesses believe that offshoring to India is good for their business and not all businesses which have offshored to India have done so successfully. Some, businesses such as Shop Direct and Littlewoods, have offshored some of their activities

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[170] McKinsey Global Institute, *Offshoring: Is it a Win-Win Game?* August 2003

[171] Vijay Bhat, *India as an Offshoring Destination: A Historical Perspective*, Offshoreexperts website: www.offshorexperts.com/index.cfm/fa/articles.india-as-an-offshoring-destination

[172] DTI, *The UK Contact Centre Industry: A Study*, May 2004, pp177-178

[173] *ibid*.

[174] TISC, *Progress towards the Knowledge Driven Economy*, HC 432 Session 2004-05, 22 March 2005, Appendix 16

previously but have subsequently returned (inshored) them back to the UK.[175] The main reason they have given for returning is the hidden costs of offshoring they found, both direct costs - from higher than anticipated staff turnover costs - and indirect costs - from consumer dissatisfaction with offshored activities.[176]

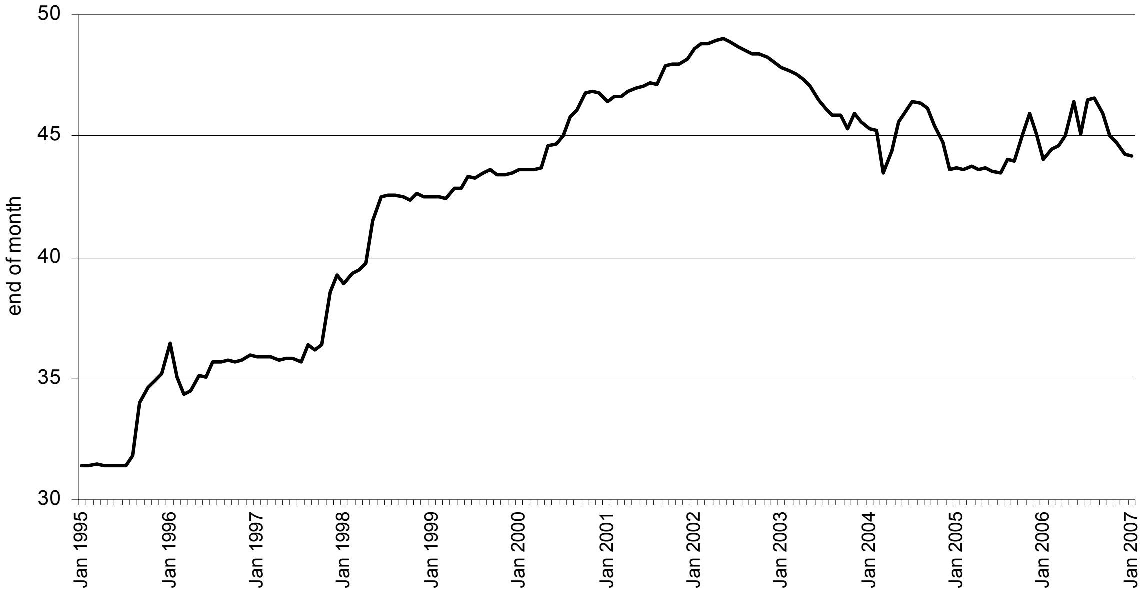
1. Opportunities from offshoring for the UK

As low-cost economies, such as India, develop, new opportunities will arise for UK businesses to trade their products and services within these new markets. In the long-term, India will 'migrate' further up the value chain, promoting development and ultimately increasing the global markets for UK products and services. The geographic nature of offshoring also brings its own advantages. UK businesses, which offshore to India, will be able to take advantage of their presence to provide similar products and services to indigenous businesses and consumers. Developers and support personnel, employed by these companies in India, will have a better understanding of customers' needs, regulatory compliances and regional preferences in India, and will be better placed to successfully launch new products or services which are being provided.

E. The Indian Rupee (Ed Potton)

The Indian Rupee is the currency of India. One rupee is made up of 100 paise. Bank notes and coins are issued by the Reserve Bank of India (RBI).[177]

Chart 3: Rupees per $US, 1995-2007



Source: IMF

The rupee floats freely, but can be subject to interventions by the RBI. At the end of March 2007 $US1 was worth 43.2 rupees, and £1 was worth 84.7 rupees.[178] Chart 3

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[175] CWU website (2 March 2007): www.cwu.org/default.asp?step=4&pid=541

[176] For example see: Nationwide Building Society, *Nationwide says no to sending call centres abroad*, 12 January 2004

[177] For further information see: www.rbi.org.in/scripts/FAQView.aspx?Id=39

below shows the US dollar against the rupee since 1995. While the RBI currently uses a market-determined exchange rate policy (but it does intervene in the market) the Rupee is not fully convertible; it is fully convertible for trade, but some restrictions remain on capital flows. In February 2007 the IMF noted:[179]

> The rupee has fluctuated against the U.S. dollar and its real effective value is broadly around its 2004−2005 level. The rupee depreciated against the U.S. dollar in the first half of 2006, against a backdrop of tightening global liquidity and a widening current account deficit. In addition, the RBI intervened in the foreign exchange market, easing exchange-rate volatility and smoothing domestic liquidity pressures that arose following the redemption of Indian Millennium Development Bonds. Since then, the rupee has regained ground against the dollar and the RBI has intervened only occasionally, both buying and selling dollars.

The Tarapore committee reported in September 2006 on capital account liberalization. Commenting on the outcomes of the committee the IMF notes:[180]

> In October 2006, the RBI announced additional steps to gradually liberalize capital flows, including increases in the limits on outflows by individual residents and overseas investments by mutual funds, and enhancements in currency hedging available for external trade. The authorities stressed that the liberalization process would proceed gradually in light of the fiscal deficit, as well as the need to further develop financial markets–which was seen as key.

F. Economic aid to India (Janna Jessee)

The Department for International Development's (DFID's) assistance to India is the UK's largest bilateral programme to any single country. In 2005/06, DFID's total bilateral aid programme to India amounted to £250 million, representing 10% of the DFID bilateral programme. Other UK official sources added another £17 million in bilateral aid. Total UK public expenditure for aid to India totalled £270 million in 2005/06, 6% of the UK total. Table 20 details the types of bilateral aid to India between 2001/02 and 2005/06:

Table 20: Total DFID and other UK official sources of bilateral aid to India
£000s

	Financial Aid	Technical Cooperation	Grants and Other Aid in Kind	Humanitarian Assistance	**Total DFID Bilateral Programme**	Aid from other UK Official Sources[a]	**Total Bilateral Gross Public Expenditure**	Percentage of Total Bilateral
2001/02	119,886	34,302	18,547	6,872	**179,608**	19,555	**199,163**	10.0
2002/03	103,776	26,514	19,975	5,217	**155,480**	27,966	**183,446**	7.3
2003/04	157,646	18,742	20,322	1,399	**198,109**	45,839	**243,948**	9.4
2004/05	180,738	16,035	62,237	442	**259,451**	9,861	**269,313**	8.7
2005/06	175,439	14,182	59,797	3,757	**253,176**	17,306	**270,482**	6.1

Notes: [a]Includes CDC investments, non-DFID debt relief, contributions from Other Government Departments to CSOs, British Council and Global Conflict Pool, and small amounts of drug related assistance funded by the home office and FCO.

Source: DFID, *Statistics on International Development 2001/02-2005/06* , October 2006, table 12.3, p89

178 Source: Bank of England statistical database
179 IMF, *Staff Report for the 2006 Article IV Consultation*, 29 November 2006, paragraph 8
180 IMF, *Staff Report for the 2006 Article IV Consultation*, 29 November 2006, paragraph 33. Further information is available in the report in Box 4.

DFID is the largest bilateral aid donor to India.[181] However, this aid represents less than 0.06% of India's GDP.[182] India received $1,700 million (£950 million[183]) in official development assistance (ODA) from donors in 2005.[184] The UK's aid represented 68% of all bilateral aid and 34% of total ODA to India in 2005. Table 21 shows the top 15 bilateral ODA donors to India in 2005:

Table 21: ODA disbursements to India 2005

	$millions	Percentage of total
UK	579.24	33.6%
Netherlands	72.81	4.2%
Japan	71.46	4.1%
United States	53.26	3.1%
Canada	34.01	2.0%
Switzerland	24.62	1.4%
Sweden	16.46	1.0%
Australia	12.78	0.7%
Norway	11.96	0.7%
Spain	11.24	0.7%
Austria	8.01	0.5%
Ireland	6.59	0.4%
Denmark	6.22	0.4%
Finland	5.78	0.3%
Italy	3.49	0.2%
Total, bilateral donors	849.56	49.3%
Multilateral donors	874.55	50.7%
Total, all donors	**1724.11**	**100.0%**

Source: OECD Statistics, available at: http://www.oecd.org ("Statistics")

DFID's 2004 India Country Plan, covering 2004-2008, states that while India has halved the number of people under the poverty line in the past 20 years, approximately 260 million people still live below India's official poverty line (23% of the population[185]). This means their income is not enough for adequate nutrition.[186] More than 350 million people live below the $US1 per day international poverty line.[187] DFID is focusing support on three objectives:[188]

181 DFID India, *Facts and Figures*: www.dfidindia.org/about/facts.htm
182 DFID, *India Country Plan*, February 2004, p3: www.dfidindia.org/pub/pdfs/cap_india.pdf
183 Based on the Bank of England annual average spot exchange rate for the US dollar against Sterling (£1:$1.8189), December 2005
184 OECD Statistics, available at: http://stats.oecd.org/wbos/default.aspx?DatasetCode=TABLE%202A
185 Based on a total population of 1,110.455 million in 2004, from the International Monetary Fund *World Economic Outlook Database*, September 2006: www.imf.org/external/pubs/ft/weo/2006/02/data/index.aspx
186 *ibid.*, p2
187 *Ibid.*, p1
188 *ibid.*

- Tackling poverty in focus states (Andhra Pradesh, Madhya Pradesh, Orissa and West Bengal);
- Improving the enabling environment for sustainable and equitable economic growth; and
- Improving the access of poor people to better quality services.

Since DFID's decision to focus on four states in 2000, Andhra Pradesh has been the largest single recipient of DFID funding, followed by Orissa, West Bengal and Madhya Pradesh. The programme budget allocation in 2006/07 is shown in table 22:

Table 22: DFID's India programme budget breakdown 2006-07

	Budget (£millions)	Percentage of total
National Programme	135	45.0
Andhra Pradesh	47	15.5
Orissa	35	11.5
Madhya Pradesh	35	11.5
West Bengal	48	16.5
Total	**300**	**100.0**

Sources: Select Committee on International Development, *DFID's bilateral programme of assistance to India* , Third Report of Session 2004-05, Volume I, 9 March 2005, p9

Country-wide assistance programmes received 45% of DFID's funding in 2006/07. According to the *2004 Country Plan*, DFID is working to strengthen the National Programme in key areas such as health and education and to renew emphasis on support to civil society. For example, the UK recently announced a four-year commitment of £200 million for funding primary education under the Sarva Shiksha Abhiyan (Education for All) programme. This programme has received £210 million from DFID over the past three years.[189] DFID also recently announced a five-year commitment of £250 million in support for the Government of India's Reproductive and Child Health Programme to reduce maternal and early childhood mortality.[190]

Beyond the DFID programme, the UK also funds education and research cooperation through the UK-India Education and Research Initiative (UKIERI).[191] The UK committed more than £12 million through the FCO, the DfES, the Office of Science and Innovation and the British Council. On 18 January 2007, UKIERI announced the first round of research awards under the initiative; more than £5 million was distributed among 6 major and 23 standard awards for research areas such as climate change, human genetic makeup and environmentally-friendly aircraft.[192]

[189] DFID, *UK announces £200 million for primary schooling in India*, News Release, 18 January 2007: www.dfid.gov.uk/news/files/pressreleases/india-200m-primary-education.asp
[190] DFID News Release *DFID Commits £252 million to save the lives of a million children and mothers in India,* News Release, 23 August 2006: www.dfid.gov.uk/news/files/pressreleases/india-252.asp
[191] UK-India Education and Research Initiative: www.ukieri.org/
[192] British Council *Rt Hon Gordon Brown, MP, Chancellor of the Exchequer announces the UK-India Education and Research Initiative Awards*, Press Release, January 2007: www.ukieri.org/docs/ukieri-standard-major-awards-press-release-jan07.pdf

G. The outlook for the economy (Janna Jessee)

The Economist Intelligence Unit provides the following projections for India's economy to 2010: [193]

Table 23: India's GDP prospects

	2007	2008	2009	2010
GDP ($US bn at market exchange rates)	939	1,055	1,181	1,297
GDP ($US bn at PPPs)	4,682	5,157	5,660	6,223
GDP (% real change)	7.0	6.9	6.8	7.0

Source: The Economist Intelligence Unit, *World Investment Prospects* , 2006.

The outlook for India's economy continues to be good. However, inflation figures suggest that the economy may be growing too rapidly.[194] The inflation rate is currently at 5% and is expected to increase over the next two years. The current account moved deeper into deficit from -0.8% in 2004-05 to -1.3% in 2005-06, and is expected to move further into deficit into 2008-09. Meanwhile, the fiscal deficit, currently at 6.7%, is expected to decrease slightly over time. Both short- and long-term interest rates are expected to increase. Table 24 below shows some economic forecasts for India.

Table 24: India - economic indicator forecasts

	2004-05	2005-06	2006-07	2007-08	2008-09
Inflation *(% change in GDP deflator)*	4.2	4.1	5.0	5.5	5.2
Consumer price index	3.2	4.4	6.1	5.8	5.5
Short-term interest rate	5.0	6.0	7.3	7.7	7.7
Long-term interest rate	6.5	7.2	7.7	7.9	7.9
Fiscal balance *(% of GDP)*	-7.7	-7.7	-6.7	-6.3	-6.0
Current account balance *(% of GDP)*	-0.8	-1.3	-1.7	-1.7	-1.8

Note: gross fiscal balance for central and state governments includes net lending

Source: OECD, *Economic Outlook* , No. 80 - India, 28 November 2006

In addition, experts caution that an overheated economy and the stalling of economic liberalisation could limit the potential of the Indian economy. Signs of overheating include 10% annual inflation for food, manufactured goods' price increases amounting to 7% annually, increases in wages and property prices, and a 30% increase in the lending rate to households and companies in the past year.[195] The recent release of the Indian budget raises concerns about the robustness of the Indian economy because the budget fails to implement structural reforms – changes to labour laws, barriers to inward investment and state regulation[196] – needed to sustain growth and control inflation.[197]

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193 *ibid*., p170.
194 OECD Economic Outlook No. 80: India, Preliminary Edition, 28 November 2006
195 "Something to cry about – inflation in India", *The Economist*, 17 February 2007
196 The ADB notes that entrepreneurs could expect to go through 11 steps to launch a business, taking more than 71 days, twice as long as the regional average (*Key Indicators, Measuring Policy Effectiveness in Health and Education*, 2006).

Shortcomings of the public sector and increasing inequality between regions are also cited as two key threats to future macroeconomic performance.[198] Both the IMF and the Asian Development Bank (ADB) have identified higher world oil prices, and how the Indian government responds to them, as a short-term threat due to increased inflation and a long-term threat to economic growth.[199]

197 Financial Times, "All too incredible India", 2 March 2007, p16 and The Economist, "One eye on the ballot box – India's budget", 3 March 2007

198 "Can India Fly?", *The Economist*, 1 June 2006 and "Light and shade", *The Economist*, 10 August 2006

199 IMF, *India*, Country Report No. 06/56, February 2006 and ADB, *Asian Development Outlook 2006 update*, 2006, p77

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A deposited paper lists projects funded by DFID in India in 2003/04 and 2005/06 with a value between £100,000 and £1,000,000 and projects with a value greater than £1,000,000. See DEP 06/2112 or HINF 2006/2104.

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Appendix 1
Table 9: Contribution to state GDP, by industry

		Production industries			Services							
	Agriculture, forestry and logging, fishing, mining and quarrying	Manufacturing	Construction, electricity, gas and water supply	Total production industries	Transport, storage and communications	Trade, hotels and restaurants	Banking & insurance	Real estate, ownership of dwelling and business services	Public administration	Other services	Total services	Indexed per capita net state domestic product 2004-05
Andhra Pradesh	27%	14%	9%	23%	11%	13%	6%	7%	4%	9%	51%	116
Arunachal Pradesh[c]	29%	3%	25%	28%	8%	4%	2%	2%	15%	13%	43%	99
Assam	33%	10%	7%	17%	7%	18%	6%	4%	7%	9%	50%	68
Bihar	37%	6%	7%	13%	8%	13%	5%	5%	10%	9%	51%	29
Chattisgarh[c]	32%	20%	10%	30%	10%	10%	3%	5%	3%	6%	38%	76
Goa[b]	12%	31%	9%	39%	14%	10%	8%	7%	5%	5%	49%	292
Gujarat[c]	18%	31%	8%	39%	10%	13%	6%	5%	3%	6%	42%	142
Haryana[c]	28%	21%	6%	27%	12%	19%	5%	3%	2%	4%	44%	164
Himachal Pradesh	22%	16%	20%	35%	5%	8%	7%	4%	8%	10%	42%	138
Jammu and Kashmir	32%	6%	11%	17%	7%	10%	4%	7%	13%	9%	51%	81
Jharkhand[c]	36%	27%	9%	36%	6%	8%	3%	4%	4%	3%	28%	65
Karnataka[c]	19%	19%	9%	28%	9%	14%	8%	9%	3%	9%	53%	120
Kerala[c]	15%	8%	12%	21%	18%	20%	7%	6%	6%	7%	65%	136
Madhya Pradesh	30%	13%	15%	28%	10%	9%	5%	7%	4%	8%	43%	71
Maharashtra[c]	12%	22%	7%	29%	14%	15%	13%	5%	4%	8%	59%	161
Manipur[c]	26%	9%	16%	25%	7%	9%	2%	4%	14%	12%	49%	75
Meghalaya[c]	32%	3%	13%	16%	7%	14%	3%	8%	12%	8%	52%	98
Mizoram[a]	18%	2%	15%	17%	3%	8%	3%	15%	22%	13%	65%	..
Nagaland[a]	35%	1%	11%	12%	18%	5%	1%	9%	13%	7%	53%	..
Orissa	35%	13%	7%	19%	13%	10%	6%	5%	5%	7%	46%	68
Punjab[c]	37%	14%	9%	23%	8%	12%	6%	4%	5%	4%	39%	154
Rajasthan	28%	13%	15%	28%	8%	13%	4%	6%	4%	9%	44%	81
Sikkim	21%	3%	25%	28%	5%	5%	3%	6%	18%	14%	51%	121
Tamil Nadu[c]	14%	21%	9%	30%	11%	18%	8%	7%	5%	7%	56%	130
Tripura[b]	21%	2%	23%	25%	10%	11%	2%	3%	14%	13%	54%	..
Uttar Pradesh[c]	33%	15%	9%	24%	9%	12%	5%	6%	5%	7%	43%	58
Uttranchal[c]	28%	11%	17%	28%	6%	7%	7%	6%	7%	11%	44%	99
West Bengal[c]	23%	14%	6%	20%	8%	14%	15%	10%	4%	6%	57%	113
Andaman & Nicobar Islands[a]	31%	3%	19%	22%	1%	11%	2%	4%	14%	14%	47%	..
Delhi[c]	1%	12%	8%	20%	18%	20%	20%	8%	4%	9%	79%	271
Pondicherry	3%	55%	2%	57%	10%	11%	3%	6%	3%	7%	39%	281
Chandigarh[c]	1%	14%	13%	27%	4%	27%	15%	11%	8%	7%	72%	338
India	23%	17%	9%	26%	11%	14%	8%	6%	5%	8%	51%	100

Notes: All data 2005-06 except as noted (2002-03[a]; 2003-04[b]; 2004-05[c]); .. = not available

Source : Government of India Central Statistical Organisation (CSO) website as at 20 March 2007