INDIAN AIRLINES SECTOR

The Wings of Change

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EXECUTIVE SUMMARY

Indian airlines sector is currently experiencing explosive growth. In 2005-06, the passenger traffic grew by almost 24%. Further, domestic air travel is expected to grow by 20% over the next 5 years. Carriers, the government and aircraft manufacturers are working overtime to meet this increasing demand. The potential of the market is enormous and by 2010, India's fleet strength is expected to stand at 500-550. New airlines catering to Cargo, Regional and International Low cost sectors will herald the next phase of aviation development in the region.

The impact of liberalization of Air services has been dramatic paving the way for greater choice, increased capacity and cheaper fares to the discerning customer. Hundreds of new aircraft are being ordered, infrastructure at airports is improving and passenger numbers are growing faster in India than anywhere else.

While the aviation sector is growing rapidly there many factors which are hindering its development and growth. These include infrastructure bottlenecks, rising fuel costs, manpower shortage and rising losses of the players. Financially, the opening of the sector has been extremely challenging for the airlines sector, with combined industry losses reported in each of the last three years. As an outcome of the widening losses and rampant capacity growth, industry has witnessed consolidation recently with some of the major players merging.

The next pages provide a brief and summary overview of the Indian airlines sector. They provide information on key statistics, industry structure, key players, important trends, sector challenges and industry outlook.

INDUSTRY BACKGROUND

History of Indian airlines sector:

- **Origin**: The origin of Indian civil aviation industry can be traced back to 1912, when the first air flight between Karachi and Delhi was started by the Indian State Air Services in collaboration with the UK based Imperial Airways. In 1932, JRD Tata founded Tata Airline, the first Indian airline. At the time of independence, nine air transport companies were carrying both air cargo and passengers. These were Tata Airlines, Indian National Airways, Air Service of India, Deccan Airways, Ambica Airways, Bharat Airways, Orient Airways and Mistry Airways. After partition Orient Airways shifted to Pakistan.

  In early 1948, Government of India established a joint sector company, Air India International Ltd in collaboration with Air India (earlier Tata Airline) with a capital of Rs 2 crore and a fleet of three Lockheed constellation aircraft. The inaugural flight of Air India International Ltd took off on June 8, 1948 on the Mumbai-London air route. The Government nationalized nine airline companies vide the Air Corporations Act, 1953. Accordingly it established the Indian Airlines Corporation (IAC) to cater to domestic air travel passengers and Air India International (AI) for international air travel passengers. The assets of the existing airline companies were transferred to these two corporations. This Act ensured that IAC and AI had a monopoly over the Indian skies. A third government-owned airline, Vayudoot, which provided feeder services between smaller cities, was merged with IAC in 1994. These government-owned airlines dominated Indian airlines industry till the mid-1990s.

- **Adoption of Open Sky policy**: In April 1990, the Government adopted open-sky policy and allowed air taxi- operators to operate flights from any airport, both on a charter and a non charter basis and to decide their own flight schedules, cargo and passenger fares. In 1994, the Indian Government, as part of its open sky policy, ended the monopoly of IA and AI in the air transport services by repealing the Air Corporations Act of 1953 and replacing it with the Air Corporations (Transfer of Undertaking and Repeal) Act, 1994. Private operators were allowed to provide air transport services. Foreign direct investment (FDI) of up to 49 percent equity stake and NRI (Non Resident Indian) investment of up to 100 percent equity stake were permitted through the automatic FDI route in the domestic air transport services sector. However, no foreign airline could directly or indirectly hold equity in a domestic airline company.

- **Entry of private players**: Until 1994 Indian airlines industry comprised of only two state owned companies – Air India for catering to the international travel needs and Indian Airlines and its subsidiary Alliance Air catering to domestic travel needs. By 1995, several private airlines had ventured into the airlines business and accounted for more than 10 percent of the domestic air traffic. These included Jet Airways Sahara, NEPC Airlines, East West Airlines, ModiLuft Airlines, Jagsons Airlines, Continental Aviation, and Damania Airways. But only Jet Airways and Sahara managed to survive the competition. Meanwhile, Indian Airlines, which had dominated the Indian air travel industry, began to lose market share to Jet Airways and Sahara.

- **Entry of budget airlines**: Although not as developed as in many other countries around the globe, the budget sector of the Indian airlines industry has taken off. Air Deccan was the first company to start offering low cost, low fare flights; its first economy flight took off in August 2003. After witnessing Air Deccan's success, many other low-cost carriers have been established, including Spice Jet and Go Air. The popularity of low fares has not been lost on the industry's larger traditional airlines such as Indian Airlines, Jet Air, Air India and Sahara Airlines. These players were forced to slash prices and introduce advanced-purchases fares in order to compete.

Key characteristics of Indian Airlines industry

- In general, travel is a consumer and business discretionary expense, thereby making airline revenues highly cyclical.
- Airline traffic is highly price elastic, with even business travel influenced by price than is commonly perceived.
- High barriers to entry characterize the industry, as capital requirements are substantial, fortress hub access is extremely limited, and necessary investments in infrastructure are significant
- The government strictly regulates air traffic control, safety, maintenance, and labor issues but airlines are free to set their own fares.
- Passengers are increasingly booking tickets on the internet, which holds the potential to significantly lower distribution costs.

Demand for Domestic Air Travel

Low penetration of air travel, high proportion of business related air travel, predominance of rail travel and concentration of air traffic in a few cities are the key characteristics of the Indian air travel market.

- Air travel penetration among the lowest in the world.
- India is a business travelers market: Almost 80% of India's traffic is related to business travelers. High yields, and less price elasticity as compared to leisure travelers are the key characteristics of a business traveler. In good times, air traffic tends to boom irrespective of fare increases. When the tide turns, the business traveler tends to shy away regardless of fare cuts.
- Five Indian cities account for 67% of air traffic. Mumbai, Delhi Bangalore, Kolkata and Chennai together account for 67% of the domestic air traffic, the skew creates unique infrastructure challenges. No new entrant can afford to ignore the key cities. Capacities at these airports are, however, currently clogged, creating an entry barrier.

Key earnings drivers

The following variables are strong determinants of an airline's ability to expand earnings:

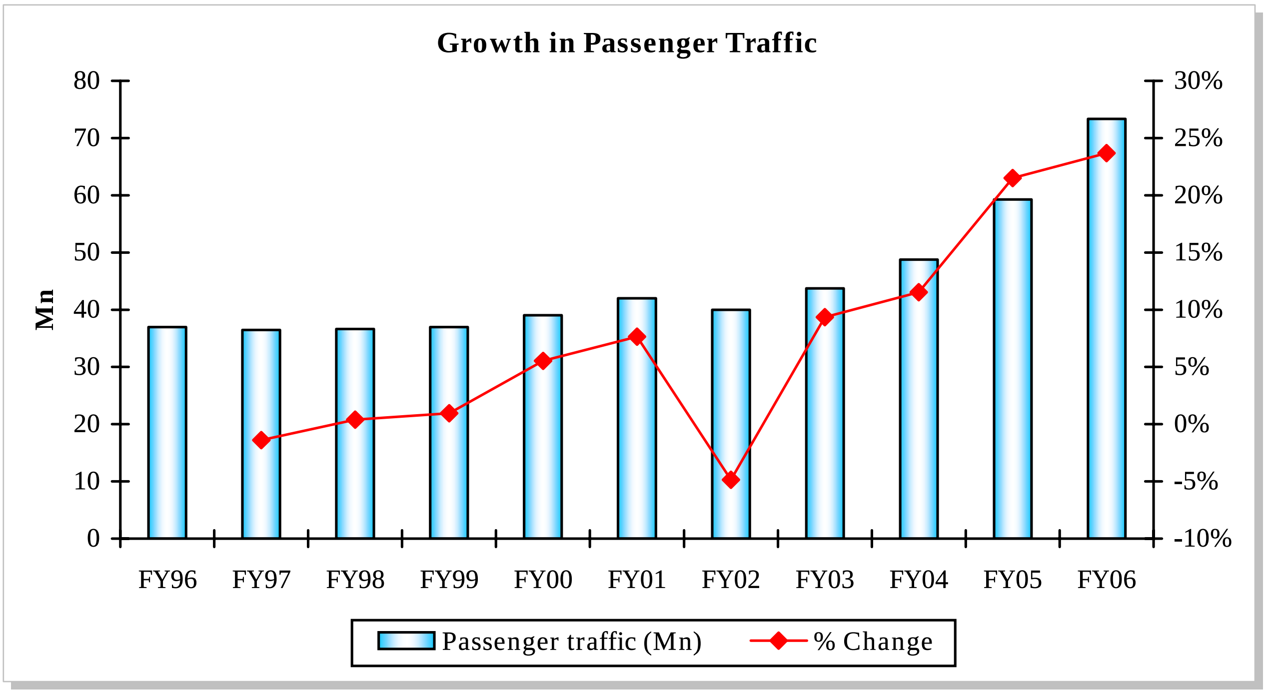
- **Load factor.** Due to intense low – fare competition high load factor tend to improve the overall yields.
- **Net work and quality of service.** Airlines that improve their network and services generally increase their share of high yield business traffic, which has a large impact on margin.
- **Unit costs.** A carrier who has strong control over its costs relative to the industry will have greater earnings momentum. Cost savings can occur from younger fleet, Internet reservation system, increasing asset and people utilization and better labor contracts.

- **Leverage.** An airline's degree of financial leverage can magnify earnings leverage, but typically operating leverage overwhelms financial leverage.

Traffic Growth

The following chart shows the growth in passenger traffic over the period between FY96- FY06. As evident the airlines sector has witnessed a surge in traffic during last two years. This growth has come about due to:

- Strong growth in business travelers, driven by significant improvements in corporate performance, investment climate and availability of low-priced tickets
- Increased personal travel driven by higher household income, entry of low cost carriers and launch of discount schemes, advance purchases incentives & Internet banking.



Domestic Capacity

The current national fleet comprised of 356 units. The total fleet size is expected to reach approximately 550 aircraft by the end of 2010. Boeing's 2007 annual current market outlook study projected that India would need 911 new commercial jet airplanes worth USD 86 billion for the next 20 years.

The fleet details of the Indian airlines companies are given below. As evidenced from above the legacy airline companies have an aging fleet whereas the new airline companies have relatively younger fleet.

	In service	Age of fleet
Jet Airways	72	4.6 years
Jet Lite	21	7.4 years
Air India	111	13.9 years
Air India Express	17	1.4 years
Alliance Air	11	18.9 years
Air Deccan	40	4.6 years
Kingfisher	40	1.3 years
SpiceJet	18	2.4 years
Indigo	15	0.8 years
Go Air	6	6.8 years
Paramount	5	2.9 years
Total	**356**	

Source: Airfleets

KEY PLAYERS

Size of the industry

India was the fastest growing aviation market in the world, ahead of China, Indonesia and Thailand, as of early 2007. The number of people traveling by air had been increasing rapidly in the country. The main reason for this was thought to be the advent of low cost airlines in the country in 2003-2004, which brought air travel within reach of India's large middle class. The entry of a number of new airlines had intensified the competition in the aviation sector. Total air transportation revenue for Indian operators was Rs.186 billion in 2005.

Industry Segmentation

1. **Full Service Carriers:** FSCs service the domestic and international markets and offer a number of amenities and convenience for passengers. These services include on board food and beverages, frequent flier program, interline arrangements, comfortable seating arrangement, business class seating, and airport lounges.

2. **Low Cost Carriers:** Low Cost Carriers (LCCs) provide short – haul (typically not more than 4.5 to 5 hours) low-fare service using web-based distribution actively encouraging direct sales. Their business model is characterized by point-to-point service, no baggage transfers, no interline traffic, one class configuration, no free frills (such as meals, frequent fliers etc.) and standardized aircraft fleet.

Competitive Landscape

Presently the domestic industry consist of 7 players namely National Aviation Company of India Limited (Indian Airlines, Alliance Air), Jet Airways (including JetLite), Kingfisher Airlines & Deccan Aviation, Spice Jet, GoAir, IndiGo and Paramount Airways.

Name	Type	In India since	Owner/ Promoter	Fleet Size	Fleet type	Domestic Market Share
National Aviation Company of India Limited	FSC	1933 (Air India); 1953 (Indian)	Govt. of India	139	Boeing 747, 757, 767, & 777, Airbus 310, Airbus 300, A320 Dornier D 228	21.0% (For Indian)
Jet Airways & Jet Lite	FSC / LCC	1994	Naresh Goyal	93	Airbus A340, Boeing 737 ATR 72, CL600	30.1%
Kingfisher Airlines & Air Deccan	FSC / LCC	2005 (Kingfisher) / 2003 (Deccan)	UB Group Cpt. Gopinath	80	Airbus 320, ATR 42 & 72	29.5%
Spice Jet	LCC	2005	Kansagra Family	18	Boeing 737	8.4%
Indigo	LCC	2006	Interglobe	15	Airbus 320	5.8%

Name	Type	In India since	Owner/ Promoter	Fleet Size	Fleet type	Domestic Market Share
Go Airways	LCC	2005	Bombay Dyeing	6	Airbus 320	3.4%
Paramount Airways	FSC	2005	Paramount Group	5	Embraer	1.9%

Source for market share: Center for Asia Pacific Aviation (week of 02-Jun-07)

Profile of Key Players

1. **National Aviation Company of India Limited (NACIL).** In May 2007, India's Ministry of Civil Aviation announced that Air India Limited (AI) and Indian Airlines Limited (IA) would be merged. The new airline formed by the merger will be called 'Air India' and would operate in both the domestic and international sectors. Subsequently, a new company called the National Aviation Company of India Ltd. (NACIL) was incorporated to facilitate the merger. The two airlines have a combined fleet of 139 aircraft and 34,000 employees including 1,315 pilots. The combined fleet size placed the merged entity among the top 10 airlines in Asia, and the top 30 in the world. It would also be India's first airline with more than 100 aircraft.

2. **Jet Airways Limited (JET).** JET, an 80% subsidiary of Tail Winds Limited (TWL), was incorporated on April 1, 1992 for the purpose of providing air taxi operations in the country. JET commenced operations in May 1993. Currently JET operates over 340 daily flights to 44 destinations in India as well as daily flights to six international destinations namely London, Kuala Lumpur, Singapore, Bangkok, Colombo and Kathmandu. The airlines registered total revenues of Rs. 74.01 billion with total international operations accounting for about 18% of total revenues. The net profit for FY07 was Rs. 279.4 million, 90 percent lower than in FY06.

3. **Kingfisher Airlines.** Kingfisher Airlines (Kingfisher) is a wholly owned subsidiary of UB General Investments Limited which in turn is a 100% subsidiary of UB Holdings Limited (UBHL), the parent company holding the stake in UB group companies. The airlines provides meals and has in-flight entertainment (personal entertainment system with video and music channels), a first in the domestic market. The airline commenced its operations in May 2005. As of date, the airline has a fleet of 40 aircrafts. The company currently operates 79 daily flights between 16 destinations in the domestic market and employs 1868 employees.

4. **Deccan Aviation.** Deccan Aviation Private Limited (DAPL), promoted by Captain Gopinath and Captain Samuel, was incorporated in 1995. It started operations in September 1997 as a helicopter charter service provider under the name Deccan Aviation. After the success of Deccan Aviation, Captain Gopinath started India's first Low Cost Carrier, (LCC). Air Deccan started operations in August 2003. The presence of DAPL in the charter business made the process of obtaining a scheduled operator license easy, which is the key reason for housing the Air Deccan business in DAPL. Air Deccan is operating 45 destinations with ATR & Airbus aircrafts. This has resulted in the company covering the major trunk routes along with the regional routes. The numbers of passengers ferried are around 7000 per day with 185 flights operating daily. The company was the first airlines company to introduce the concept of e-ticketing.

5. **SpiceJet Limited (SJL).** SpiceJet Limited (SJL), formerly known as Modiluft Limited, was originally promoted by the SK Modi group. It started its airline operations in May 1993 under technical partnership with Deutsche Lufthansa AG. After termination of various agreements by Lufthansa, the company had to suspend its airline operations in the last quarter of 1996. In October 2000, Royal Holding Services Ltd, USA (RHSL), an OCB owned by the London-based Kansagra family, acquired a 27.5% in the company and injected fresh capital of Rs 810.8 million (USD 17.5 million) into the company. Ajay Singh is the Indian based promoter who has bought a nearly 6.4% stake in the company by bringing in funds of Rs 120.0 million in November 2004. The company recorded a net profit of Rs. 707.4 million for the 10 month period ended March 31, 2007 on a total income of Rs. 7.48 billion.

6. **Go Airlines (India) Private Limited (GAPL).** Go Airlines (India) Pvt. Ltd. is a low cost airlines set up by the Wadia group. The airline began operations in End-October 2005 and currently focuses on the domestic non-trunk routes and operates mostly in the southern and western parts of the country. GAPL has Mr. Nusli Wadia and Mr. Jeh Wadia at the helm of affairs. Currently the fleet comprises of 6 aircrafts and the company plans to increase its fleet size to 18 by March 2009 and 34 to March 2011.

KEY SECTOR TRENDS

Beginning of Consolidation

Three major airline groups have emerged in India's new industry structure following the consolidation of 2007, each led by a full service airline with a value based / LCC subsidiary offering a single class service with lower costs. These include Jet Airways (with JetLite), Air India (with Air India Express) and Kingfisher (with Air Deccan).

- **JET Airways.** In January 2006, Jet airways agreed to acquire Sahara Airlines Limited at a Cost of Rs.20.00 billion by way of purchasing the shares (including preference shares) of Sahara. Jet Airways is expected to derive synergistic benefits arising out incremental market share, access to night parking bays, hangers and airports lounge, right to fly on international routes etc. Sahara Airlines has been renamed as JetLite and is being operated as Low Cost Carrier.
- **National Aviation Company of India Ltd. (NACIL).** In May 2007, India's Ministry of Civil Aviation announced that Air India Limited (AI), India's national flag carrier and Indian Airlines Limited (IA), the government owned domestic airline, would merge with effect from July 15, 2007.1 The new airline formed by the merger will be called 'Air India' and would operate in both the domestic and international sectors. A new company called the National Aviation Company of India Ltd. (NACIL) was incorporated on March 30, 2007 under Sections 391 and 394 of the Indian Companies Act, 1956 to facilitate the merger. Under the terms of the merger, all the undertakings, properties, and liabilities of AI and IA would be transferred to NACIL. The AI-IA merger is expected to create one of the biggest airlines in the world in terms of the fleet size. The two airlines had a combined fleet of 139 aircraft and 34,000 employees including 1,315 pilots. The combined fleet size placed the merged entity among the top 10 airlines in Asia, and the top 30 in the world. It would also be India's first airline with more than 100 aircraft.
- **Kingfisher Airlines & Air Deccan.** On May 31, 2007, United Breweries Holdings Limited (UBHL), the parent company of Kingfisher Airlines (Kingfisher), acquired a 26 percent stake in Deccan Aviation Private Limited (DAP), which owned Air Deccan (Deccan), the pioneer of low-cost airline in India. UBHL paid Rs. 5.5 billion to acquire the stake, which made it the largest shareholder in DAP. It subsequently made an open offer to all the shareholders of DAP, for an

additional 20 percent stake. The Kingfisher- Deccan combine would cover both low and premium fare segments. Deccan would continue with its low-cost business model. The airline would also focus mostly on Tier II and III city routes, while Kingfisher would operate on the high density metro routes. The combined entity offered 537 flights to 69 cities daily. In addition to this, the combined Kingfisher-Deccan positions them in the second place after Jet Airways, a full service private airline in terms of market share.

Rapid Fleet Additions

All the existing airlines are rapidly scaling up its fleet size. Many more players like Air Dravida, King Air, Indus Airways and Magic Air are expected to start operations soon. This will increase availability of seats. Fleet addition plans of key players are tabulated below.

Company	Fleet Addition plans
National Aviation Corporation of India Limited	Air India and Indian have a combined fleet strength of 131 aircraft, about a third of the national total. They have ordered 111 more aircraft.
Jet Airways	Jet Airways had entered into an agreement to buy 20 Boeing 737-800 aircraft for USD 1.5 billion based on list prices. The aircraft will be delivered between October 2012 and December 2014. The company has also taken an option to acquire an additional 10 aircraft between August 2012 and February 2015. Additionally it will be receiving 12 Airbus aircrafts ordered previously.
Kingfisher Airlines & Air Deccan	Plans to add 140 aircrafts (Including Airbus 320 & ATR aircrafts)
Indigo	Plans to add 85 aircrafts in next eight years
Spice Jet	Plans to add 13 aircrafts by 2011.
GoAir	GoAir placed a USD 1.2 billion order for 20 aircrafts with Airbus in February 2006. It has taken delivery of 2 aircrafts and will take delivery of 18 aircrafts over the next 18 months.

Airport modernization and expansion program of the Indian Government

India has 455 airports and airstrips. However, only 88 of them are currently operational. Of these 88 airports, 85 are managed by AAI. The balance three (Delhi, Kochi & Mumbai) are being managed by private operators.

The shortage of existing airports has led to rush for airport development. Massive plans for airport expansion and modernization has taken off, but likely results are at least two years away. The Public Private Partnership (PPP) is being followed for modernization of Delhi & Mumbai airports and Greenfield projects of Hyderabad and Bangalore airports. The Airports Authority of India (AAI) is undertaking the modernization of Kolkata & Chennai airports.

	Scope	Developer	Project Details	Investment planned (Rs. Billion)
Delhi International Airport	Modernization	Consortium of GMR Group, Fraport AG, Malaysia Airports & AAI	Modification cum extension of domestic private. terminal construction of parallel runaway, including taxiways to cater to A380 aircraft	86.0
Mumbai International Airport	Modernization	Consortium of Airports Company of South Africa & AAI	Modification cum extension of domestic private terminal and international terminal, Extension of taxi tracks	58.0
Bangalore International Airport	Greenfield project	Consortium of Siemens, Unique Zurich, L&T, Karnataka Govt. & AAI	4,050 acre international airport is being built to serve the city of Bangalore, India. The airport is located in Devanahalli, which is 30 km from the city. Construction of the airport began in July 2005. It is expected to be completed and operational by April 2, 2008.	19.30
Hyderabad International Airport	Greenfield project	Consortium of GMR Group, Malaysian Airports, AP Govt. & AAI	The new airport is under construction near Shamshabad about 22 km from the city of Hyderabad. The airport will replace the current airport, Begumpet Airport. Scheduled to open in 2008, it is the first public-private partnership in the Indian airport infrastructure sector.	24.78
Chennai	Modernization	AAI	The works include the creation of a parallel runway, taxiways, aprons and new passenger handling buildings.	20.0
Kolkata	Modernization	AAI	Runway extension, up gradation of navigation and communication facilities, Integrated Passenger Terminal	20.0

Increased connectivity to Tier I and Tier II cities has made it essential to revamp non- metro airports as well. The Airports Authority of India has chalked out a plan for modernization of 35 non metro airports at an estimated investment of Rs 61 billion. About Rs 15 billion is expected to come from the private sector for commercial development at these airports.

Liberalization of FDI norms

In January 2008, Government raised FDI cap to 74% on cargo and charter airlines and ground handling services. FDI limits on Maintenance, repair & Overhaul (MRO) companies, flying and technical training institutes have been increased to 100%. Select segments such as helicopter operations, seaplane companies, pilot training and maintenance, repair and overhaul (MRO) facilities which offer potential for huge growth but require substantial investment were getting hampered due to this ceiling.

The government has capped the FDI in air transport services to 49% on the automatic route and reclassified it as domestic scheduled passenger airline sector. This sector consists of all the domestic airlines that publish fares and transport passengers.

SECTOR CONCERNS

- **Rising losses of Airline**

As per industry sources, caught in the grip of rising jet fuel prices and rock-bottom fares, airlines in India have bled losses of around Rs 20 billion in 2006-07, despite a 30% growth in revenues. This is nearly seven times more than the previous year's Rs 3.02 billion losses. While their cost of operation has gone up considerably, growth in revenues has not been proportional.

The soaring cost of jet fuel, which accounts for 30-35% of an airline's operating cost, has been a major contributor to red ink on the balance sheet. ATF prices hit an all time high in the middle of 2006-07 on account of the sharp price in international oil prices. Similarly, salaries and other operational costs of Indian carriers have also saw a sharp increase in 2006-07. Industry estimates point out that the starting salaries of pilots have gone up by as much as 75% in the last one year thanks to the launch of more airlines. Similarly, the leasing and financing cost of aircraft has also shot up by almost 50% in the last year as a result of huge orders placed by Indian carriers.

- **Shortage of Manpower**

India's airlines sector is facing a critical shortage of skilled people. Most of Indian airlines are hiring pilots from abroad. Cabin crew finishing schools are growing, but training quality remains a concern because demand is rushing training. New airline entrants are poaching talent from existing airlines, and retention is becoming a problem.

In the US, airlines typically have 14 pilots per plane. India needs thousands of pilots for the hundreds of planes on order. According to Boeing, the number of pilots required will increase from about 3,000 today to more than 15,000 over the next 20 years. The majority of the manpower requirement is met through deployment of foreign pilots- there are already 500 foreign pilots on Indian carriers. Short term solutions such as increase in the retirement age of pilots, relaxing the process of foreign pilots (increasing permitted contract period from 1 to 3 years and allowing both the commander and co-pilot of an aircraft to be foreigners) can partially address this issue. However, the long term solution lies in increased investment in setting up training institutes.

- **Aviation Fuel**

A typical airline has 30-35% of its costs tied up in fuel. Domestic aircraft operators pay over eight times higher taxes on aviation turbine fuel (ATF). The fuel used by jetliners is loaded with various tax levies, as a result of which domestic airlines pay a total of 66-per cent tax on ATF, compared with the 8 per cent paid by international airlines that fill ATF in India. Domestic aircraft operators pay over eight times higher taxes on aviation turbine fuel (ATF). The fuel used by jetliners is loaded with various tax levies, as a result of which domestic airlines pay a total of 66-per cent tax on ATF, compared with the 8 per cent paid by international airlines that fill ATF in India. This erodes their profitability by an average of 10.5 per cent per annum for full service airlines, to as much as 15 per cent per annum for low cost carriers, says industry association Associated Chambers of Commerce and Industry of India (ASSOCHAM).

Higher tax incidence on ATF for domestic carriers includes sales tax, central excise, import duty and education cess. ASSOCHAM has stated that if the government reduces sales tax on ATF by about 10 per cent and customs duties by 4 to 5 per cent, the domestic aircraft industry can save about USD 1.25 billion in annual revenues. The aviation industry is impacted adversely by the multilayered indirect tax system, which includes value added tax (VAT), service tax, excise duties and customs duties.

- **Airport infrastructure bottlenecks could constrain effective supply**

India has one airport for every 7.7 million people; in China this ratio is 1:4.09 and in the US 1:0.16. Near saturation of airport facilities at prime cities has hampered effective seat supply and competition, especially during peak hours. Airport infrastructure includes;

1. space at the terminal for check-in, passenger, baggage screening etc
2. runway facilities for take-off and landing
3. parking slots for aircraft

Overnight parking slots at the top five airports are fully taken up at the moment. Stationing aircraft away from the main airports could result in higher logistics cost and sub-optimal utilization of available capacities.

- **Policy issues**

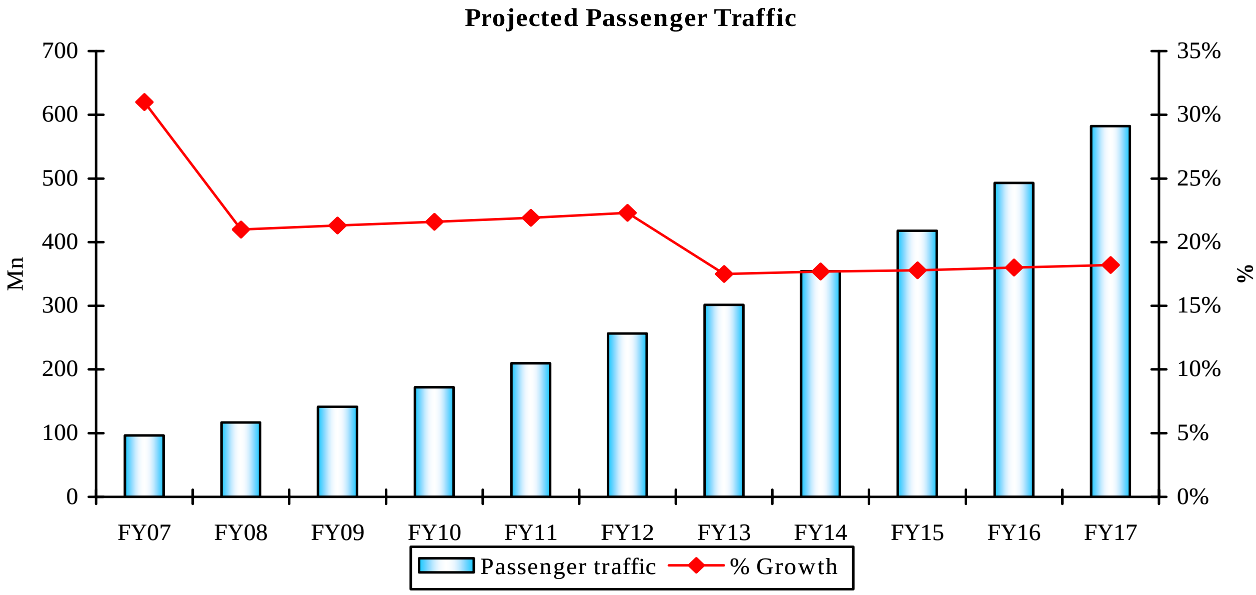
✓ One of the key policy issues is the level of investment by foreign airlines in Indian carriers, currently prohibited. Opening this up could bring in much-needed strategic investment and expertise. Similarly, increasing the overall foreign investment cap from 49 per cent to 74 per cent could ease the availability of capital generally.

✓ Most of the civil airports are presently controlled by the Airports Authority of India (Airports Authority) in the Ministry of Civil Aviation. At present, the Airports Authority performs the role of the airport operator as well as the regulator, which results in conflict of interest. The Naresh Chandra Committee set up by the Central Government to prepare the road map for civil aviation sector had recommended the setting up of an independent regulatory authority. The proposed regulator is to look into a host of issues including determining tariffs at the major airports and ensuring that there is a level playing field among all airports.

OUTLOOK

- **Explosive growth in domestic demand likely to continue**

Passenger traffic is expected to grow at a CAGR of 20% led by growing corporate revenues and profits, enhanced investment activity and increased product/service outsourcing from India (which creates travel needs), growing income and propensity to fly. The projected traffic estimates by Airports Authority of India is illustrated below:



- **Growth in seat supply expected to continue**

Goldman Sachs estimates that the Indian aviation market will see a 24% CAGR in seat supply over the next three years. However, airport capacity constraints will likely prevent newcomers from getting prime slots and schedules necessary to pose meaningful competition to incumbents. We believe significant airport modernization is at least two years away.

- **Who are the likely beneficiaries**

Rapid growth in the aviation sector has thrown open a plethora of opportunities. Development of Brown & Greenfield airports, cargo hubs, maintenance, repairs and overhauls (MRO) facilities and low cost terminals at airports present tremendous scope of investment for both domestic and foreign players.

- ✓ **Infrastructure companies.** The rapid growth in aviation space has resulted in significant amount of capacity constraints at the airports across the country. The shortage of existing airports has led to rush for airport development. The investment on airlines infrastructure necessary to upgrade it to handle the projected demand is about USD 370 billion. Construction being one of the largest components in civil aviation infrastructure, large infrastructure & construction companies with strong credentials will be the likely beneficiaries in the modernization of the existing airports and setting up of green field airports.
- ✓ **Regional Airlines.** The government has begun to promote companies willing to start regional operations. These regional airlines are expected to reduce traffic concentrations at the metros.

The minimum start-up capital for regional carriers that have three aircraft, with a take-off mass of over 40,000 kg, is Rs. 300 million. Those operating below this threshold need a paid-up capital of Rs 120 million, and have to add Rs 40 million into the paid-up capital for each additional aircraft, subject to a maximum of Rs 200 million. Aircraft with a take-off mass of less than 40,000 kg are not required to pay landing charges at airports. Five airlines are expected to get regional scheduled airlines operator permit. Of these five airlines, three are based out of South India and two will be based in North India. The South-based operators which are likely to get the go-ahead are Chennai-based Air Dravida promoted by Sheik Dawood, Star Aviation promoted by an NRI, based in Dubai and Bangalore-based Trans India Aviation of K Chandra Shekhar. In North India, the two operators which had applied and got their papers screened are MDLR of G K Goyal and King Air promoted by Subhash Gulati. Once the permission is granted, these airlines will take 8-10 months to start full-fledged operations.

- **Development of cargo hubs.** Most of the air freight movements in India happen from Delhi and Mumbai and the annual consolidated cargo export/import figure stands at 40,000 tonnes, less than 3 per cent of the 1.5 million tonnes the Frankfurt airport handles every year. One of the role model is Multi-modal International Cargo Hub and Airport or MIHAN project coming up at Nagpur. The project aims to exploit the central location of Nagpur and convert the present airport into a major freight hub with integrated road and rail connectivity along with a Special Economic Zone.

- **Maintenance, Repairs and Overhauls (MRO) facilities.** The estimated size of the MRO market in India is USD 800 million and is growing at 8% p.a. Many foreign MRO companies are eyeing India as a potential destination. These players include Singapore Airlines, AT Aerospace, Lufthansa Technik and El Al Israel Airlines Limited. A few engine players such as GE, Rolls Royce, Snecma and Pratt & Whitney are also looking at setting up facilities in India. Boeing plans to set up a USD 185 million MRO hub in Nagpur. Airbus also has plans of setting up an Engineering center in India. Development of cargo hubs is emerging as a big investment opportunity. A cargo hub is being set up in Nagpur by Maharashtra Airport Development Company as part of the MIHAN project. Private conglomerates like Reliance and Tata have shown their interest in providing dedicated cargo services. Setting up Low cost terminals at Airports and Merchant airports (developed fully by the private sector with no equity participation from the government) is also being explored.

- **Potential challenges**

  - **Financial**: Financially, the opening of the sector has been extremely challenging for the airlines sector, with combined industry losses reported in each of the last three years. The earning outlook for 2008/09 could have been much worse, but for some corrective action taken last year by Air India, Jet Airways and Kingfisher Airlines to take-over Indian Airlines, Sahara and Air Deccan respectively. Average fares have edged up in recent months, but are still well below the levels to offer a sustainable profit environment for the airlines. Centre for Asia Pacific Aviation has projected combined losses of USD 400-500 million for the 2008/09 financial year.

  - **Integration**: The benefits of consolidation are expected to emerge from the first quarter of 2008/09, although it is likely that all three groups may underestimate the challenges that they will face in terms of integration and coordination of within each group. A lack of experienced management with the skills for such an undertaking will be a key issue for these carriers.

INFRASTRUCTURE PRACTICE

YES BANK offers a complete range of financial services to the infrastructure sector, encompassing project conceptualization to financial closure to specialized banking. We bring with us tie-ups with international institutions to bring best of class business practices in the sector

Powered by in-depth knowledge and understanding of the infrastructure space, YES BANK has evolved from a pure provider of capital to a facilitator and arranger of capital and has assisted clients in obtaining superior financial returns in a risk mitigated manner

The YES BANK Advantage

- The Infrastructure Financial Services Group aims to make YES BANK a one stop shop for all financial needs of India's infrastructure players by complementing lending services with raising growth capital, Private Equity Placement and consortium formation, for focus sectors
- Focus on Sector Specialization across infrastructure spectrum to provide value based solutions to client

YES BANK LIMITED

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Infrastructure Banking – Airline Sector

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About YES BANK

YES BANK, India's new age private sector Bank, is the outcome of the professional commitment of its main Promoter, Rana Kapoor and his highly competent top management team, to establish a high quality, customer centric, service driven, private Indian Bank catering to "Emerging India".

YES BANK has adopted international best practices, the highest standards of service quality and operational excellence, and offers comprehensive banking and financial solutions to all its valued customers. A key strength and differentiating feature of YES BANK is its knowledge driven approach to banking and an unprecedented customer experience for its retail and wealth management clients.

YES BANK is steadily building corporate and institutional banking, financial markets, investment banking, business and transaction banking, retail and private banking business lines across the country. The Bank's constant endeavour is to provide a delightful banking experience expressed with simplicity, empathy and totality.