

## 1.1. Introduction

Air travel remains a large and growing industry. It facilitates economic growth, world trade, international investment and tourism and is therefore central to the globalization taking place in many other industries (1).

In the past decade, air travel has grown by 7% per year. Travel for both business and leisure purposes grew strongly worldwide. Scheduled airlines carried 1.5 billion passengers last year. In the leisure market, the availability of large aircraft such as the Boeing 747 made it convenient and affordable for people to travel further to new and exotic destinations. Governments in developing countries realized the benefits of tourism to their national economies and spurred the development of resorts and infrastructure to lure tourists from the prosperous countries in Western Europe and North America. As the economies of developing countries grow, their own citizens are already becoming the new international tourists of the future (2).

Business travel has also grown as companies become increasingly international in terms of their investments, their supply and production chains and their customers. The rapid growth of world trade in goods and services and international direct investment has also contributed to growth in business travel (3).

Worldwide, IATA, International Air Transport Association, forecasts international air travel to grow by an average 6.6% a year to the end of the decade. These rates are similar to those of the past ten years. In Europe and North America, where the air travel market is already highly developed, slower growth of 4%-6% is expected. The most dynamic growth is centered on the Asia/Pacific region, where fast-growing trade and investment are coupled with rising domestic prosperity. Air travel for the region has been rising by up to 9% a year and is forecast to continue to grow rapidly, although the Asian financial crisis in 1997 and 1998 will put the brakes on growth for a year or two. In terms of total passenger trips, however, the main air travel markets of the future will continue to be in and between Europe, North America and Asia.

Airlines' profitability is closely tied to economic growth and trade. During the first half of the 1990s, the industry suffered not only from world recession but travel was

further depressed by the Gulf War. In 1991 the number of international passengers dropped for the first time. The financial difficulties were exacerbated by airlines over-ordering aircraft in the boom years of the late 1980s, leading to significant excess capacity in the market. IATA's member airlines suffered cumulative net losses of \$20.4bn in the years from 1990 to 1994.

Since then, airlines have had to recognize the need for radical change to ensure their survival and prosperity. Many have tried to cut costs aggressively, to reduce capacity growth and to increase load factors. At a time of renewed economic growth, such actions have returned the industry as a whole to profitability: IATA airlines' profits were \$5bn in 1996, less than 2% of total revenues. This is below the level IATA believes is necessary for airlines to reduce their debt, build reserves and sustain investment levels. In addition, many airlines remain unprofitable (1).

To meet the needs of their rising discerning customers, some airlines have to invest heavily in the quality of service that they provide, either on the ground or in the air. Ticketless travel, modern and interactive entertainment systems, and better comfortable seating are just some of the product enhancements being introduced to attract and keep the customers.

A number of factors are forcing airlines to become more efficient. In Europe, the European Union (EU) has ruled that governments should not be allowed to subsidize their loss-making airlines. Elsewhere too, governments' concerns over their own finances and recognition of the benefits of privatization have led to a gradual transfer of ownership of airlines from the state to the private sector. In order to appeal to prospective shareholders, the airlines have to become more efficient and competitive.

Deregulation is also stimulating competition, such as that from small, low-cost carriers. The US led the way in 1978 and Europe is following suit. The EU's final stage of deregulation took effect in April 1997, allowing an airline from one member state to fly passengers within another member's domestic market. Beyond Europe too, 'open skies' agreements are beginning to dismantle some of the regulations governing which carriers can fly on certain routes. Nevertheless, the aviation industry is characterized by strong nationalist sentiments towards domestic 'flag carriers'. In

many parts of the world, airlines will therefore continue to face limitations on where they can fly and restrictions on their ownership of foreign carriers. Despite this, the airline industry has proceeded along the path towards globalization and consolidation, characteristics associated with the normal development of many other industries. It has done this through the establishment of alliances and partnerships between airlines, linking their networks to expand access to their customers. Hundreds of airlines have entered into alliances, ranging from marketing agreements and code-shares to franchises and equity transfers (2).

The outlook for the air travel industry is one of strong growth. For airlines, the future will hold many challenges. Successful airlines will be those that keep on to tackle their costs and improve their products, thereby securing a strong presence in the key world aviation markets.

## **1.2. Industry Trends**

The pattern of ownership has gone from government owned or supported to independent, for-profit public companies. This occurs as regulators permit greater freedom and non-government ownership, in steps that are usually decades apart. This pattern is not seen for all airlines in all regions (2).

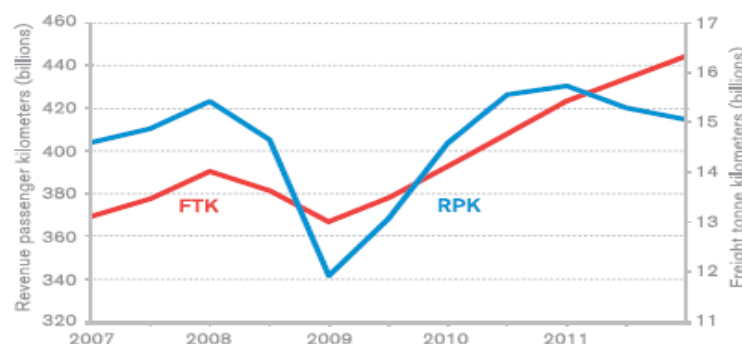
The overall trend of demand has been consistently increasing. In the 1950s and 1960s, annual growth rates of 15% or more were common. Annual growth of 5-6% persisted through the 1980s and 1990s. Growth rates are not consistent in all regions, but countries with a de-regulated airline industry have more competition and greater pricing freedom. This results in lower fares and sometimes dramatic spurts in traffic growth. The U.S., Australia, Canada, Japan, Brazil, Mexico, India and other markets exhibit this trend. The industry has been observed to be cyclical in its financial performance. Four or five years of poor earnings precede five or six years of improvement. But profitability even in the good years is generally low, in the range of 2-3% net profit after interest and tax. In times of profit, airlines lease new generations of airplanes and upgrade services in response to higher demand. Since 1980, the industry has not earned back the cost of capital during the best of times. Conversely, in bad times losses can be dramatically worse. Warren Buffett once said that despite

all the money that has been invested in all airlines, the net profit is less than zero. He believes it is one of the hardest businesses to manage (2).

As in many mature industries, consolidation is a trend. Airline groupings may consist of limited bilateral partnerships, long-term, multi-faceted alliances between carriers, equity arrangements, mergers, or takeovers. Since governments often restrict ownership and merger between companies in different countries, most consolidation takes place within a country. In the U.S., over 200 airlines have merged, been taken over, or gone out of business since deregulation in 1978. Many international airline managers are lobbying their governments to permit greater consolidation to achieve higher economy and efficiency (3).

Worldwide international and domestic revenue passenger kilometers flown increased to 5.9% to a new high of 5.2 trillion kilometers in 2011. The growth of the past two years compares favorably with the 4% to 5% trend of the past 20 to 30 years. Contributing to the surge in air travel was a rebound from the recession of 2008 and 2009. Clearly, air travel demand remains robust despite slow economic growth in many regions. Nevertheless, despite the increased passenger demand, airlines struggled to make significant profits. Although revenues rose 9.4% to \$598 billion, profits fell by almost half compared with 2010, to \$7.9 billion. This was largely due to a sharp increase in the cost of fuel; the average price of a barrel of oil rose from \$79 in 2010 to \$111 last year. Looking at 2012, rising oil prices and continued economic weakness, especially in Europe, appear to be the greatest threat to airline profitability (4).

Chart 1.1: Total Passenger and Air Freight Traffic (Seasonally Adjusted)

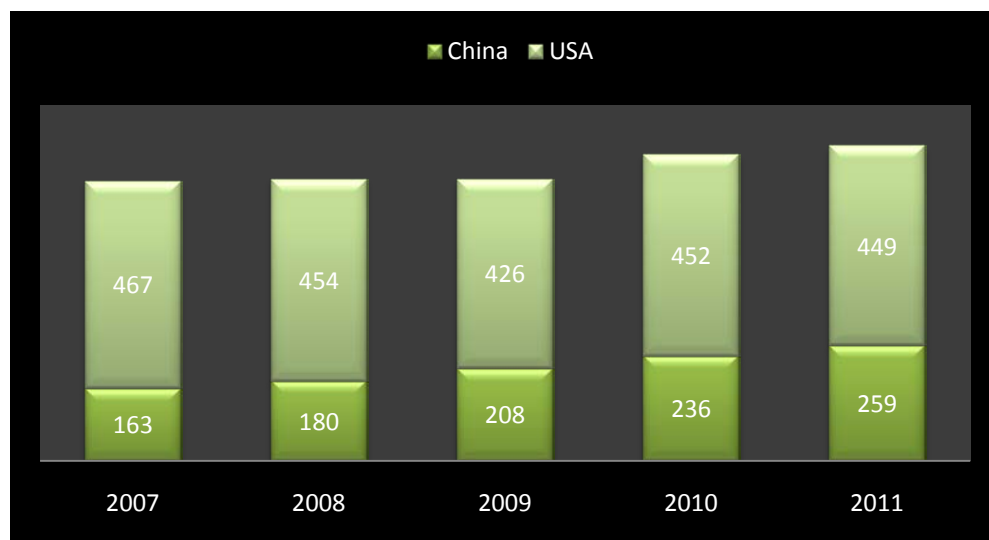


Source: IATA, Annual Report, 2011

In 2011, airlines added 865 direct services, bringing the total number of direct airport-pair connections to nearly 35,000 by the end of 2011, but there was substantial geographical variation in passenger market performance. Latin American airlines saw the fastest growth, with an expansion of over 11%. African airlines experienced the weakest performance, with barely positive growth, partly due to the impact of the Arab Spring on the north of the continent. Among airlines in the larger regions, North American carriers grew less than 3%, reflecting the maturity of their domestic markets and the lack of significant capacity growth. Growth for the Asia-Pacific airlines was over 5%, but down on the previous year's performance, due mostly to the impact on travel of the tsunami and earthquake in Japan. European airlines saw the strongest growth, at 9%, among airlines in the three largest regions (7).

Looking in isolation, the trends in domestic air travel have a different pattern. Representing just fewer than 40% of worldwide industry volumes, domestic aviation markets are dominated by the United States and China. The US market expanded just 1.3% in 2011. But the Chinese market grew almost 11%. The Indian market, which is one-twelfth the size of the US market, grew even faster at 16%. Brazil is another example of an emerging market with large potential. Growth there was almost 14% in 2011. Japan's domestic market, conversely, shrank 15% because of the tsunami and earthquake in early 2011.

Chart 1-2: Domestic Passenger Market China vs. USA



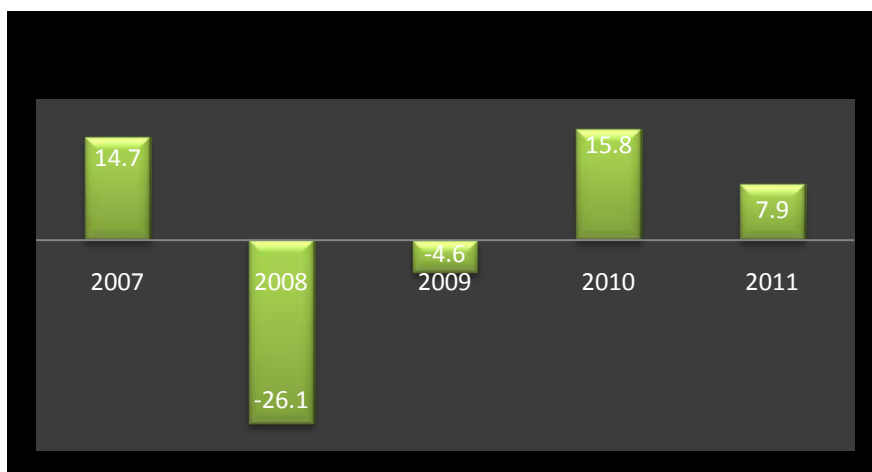
Source: IATA, 2012

### 1.2.1. Profit Analysis

According to IATA, 2011, annual report airline earnings before interest and tax (EBIT) declined from the highs of 2010 to \$16.2 billion (2.7% of revenues). Although this decline was not as severe as the 2008 experience, at the net post tax level the impact was more marked. After debt interest, tax, and financial transactions, industry profits were more than halved from 2010 to a total of \$7.9 billion, or 1.3% of revenues. Profits were squeezed by a combination of slower revenue growth and further large fuel cost increases. The regional experience continued to be diverse. Asia-Pacific airlines delivered the largest absolute net profits and the highest EBIT margins for the second consecutive year. But within this region there was much variation, with significant losses in Indian domestic markets and substantial profit in Chinese domestic markets. Next to Africa, the weakest performing region was Europe, where EBIT margins barely exceeded 1% on average. But again there is much variation, with the large quoted airlines in Europe delivering a similar performance to those in the United States. US airlines saw their profits reduced in 2011, but they continue to generate EBIT margins close to 3% despite little market growth as a result of limited additional capacity.

Profitability in the US domestic market has been particularly robust as a result. Elsewhere, the Latin American airlines continued to show reasonable profit, albeit at margins that were lower than in 2010.

Chart 1-3: Total Net Profits in \$ Billion



Source: IATA, Annual report, 2011

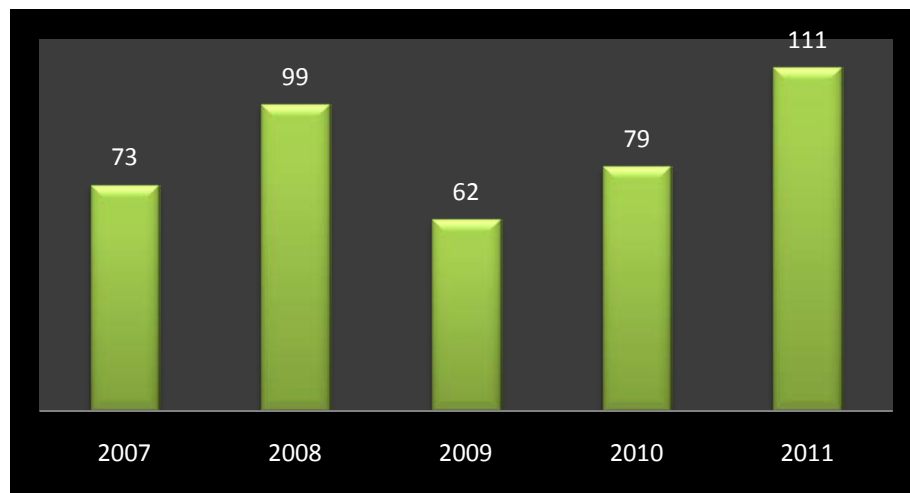
The Middle Eastern airlines saw only a minor reduction in profitability in 2011, as structural improvements at some airlines partly offset the rise in fuel costs. Airline industry revenues expanded 9.4% in 2011 to \$598 billion, driven in equal part by a rise in volumes and an improvement in yield. Passenger and cargo revenues rose above prerecession levels, but the industry has lost around two years of revenue growth since early 2008. In 2010, the network airlines had a strong boost relative to other airlines in the industry from the robust growth of long haul premium revenues and cargo. During 2011, there was further growth in the premium segment, but there was no longer the marked gain versus other segments. Cargo revenue growth slowed sharply in 2011 (8).

### **1.2.2. Fuel Costs**

The average price of a barrel of jet kerosene rose 40%, to \$127.50, in 2011. This took average fuel prices above the previous annual record of \$126.70 per barrel, set in 2008. In 2008, jet fuel prices spiked to over \$180 a barrel before falling sharply, whereas in 2011 the peak was \$143, 20% lower than in 2008. By the end of the year, prices were still high. The contrasting extreme volatility of fuel prices in 2008 caused billions of dollars of fuel hedging losses. A major problem for airline fuel hedging in 2011 was the distortion in the price of the West Texas Intermediate crude oil benchmark. Nonetheless, new industry-wide hedging practices and the stability of the crack spread with the Brent oil benchmark meant that the fuel hedging experience of airlines in 2011 was much better than it was in 2008.

Fuel prices were driven higher in 2011 by crude oil costs. The crack spread between jet fuel and crude remained at 15%. The upward pressure on oil prices came from a combination of continuing strong demand from emerging economies and a supply squeeze by producers, shown in the decline of oil inventories. More recently, concern about supply disruption caused by the situation in Iran has put further upward pressure on energy prices. The airline industry's fuel bill rose to \$177 billion in 2011, some 30% of costs (4).

Chart 1-4: Brent Oil Price \$/barrel

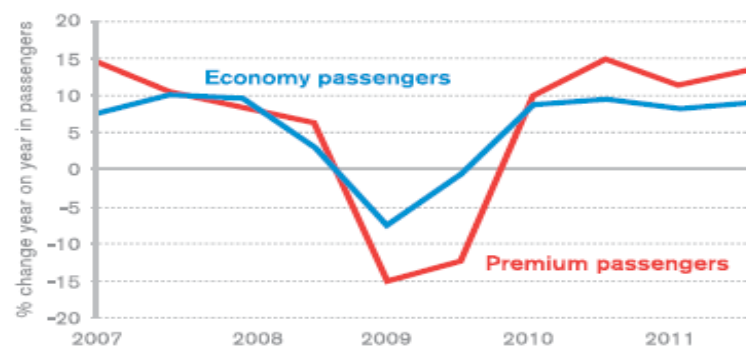


Source: Platts, 2011

### 1.2.3. Seat-Class Analysis

A sign of buoyant air travel markets in 2011 was the growth in the sale of first- and business-class seats, which expanded 5.5% on international markets compared with the growth in economy seat sales of 5.1%. This, however, was not apparent in all markets. Within Europe, where distances are relatively short, there has been a structural shift away from premium seats, resulting in the faster growth of economy travel. On the important transatlantic and transpacific markets, though, premium travel continued to grow substantially faster than economy travel. This reflected the continuation of business travel growth in most regions and the lull in leisure travel in many developed economies because of weak consumer confidence (Chart 1-5) (9).

Chart 1-5: International Passengers by Seat -Class



Source: IATA, 2011



#### **1.2.4. Goods Transportation**

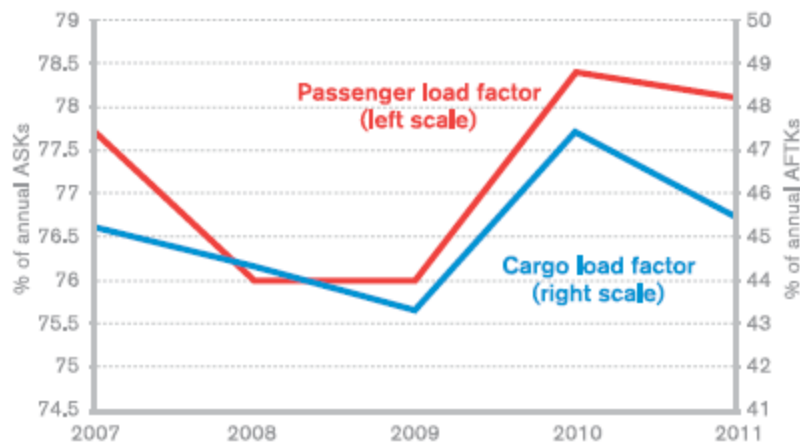
After an exceptionally strong rebound in 2010, air freight metric ton kilometers flown fell 0.4% worldwide in 2011. The air freight market is no bigger than it was four years ago. Since air freight volumes have on average grown from 5% to 6% a year over the past 20 to 30 years, growth in the past four years has been exceptionally weak (See graph1-6). Even so, with the estimated value of world trade at more than \$16 trillion in 2011 airlines were still responsible for carrying more than \$5 trillion worth of the world economy's internationally traded goods (9).

#### **1.2.5. Airline Load Factors**

In addition, according to IATA annual report, 2011, worldwide passenger capacity accelerated in 2011, growing 6.6% as measured by available passenger kilometers in international and domestic markets. That exceeds the expansion of 4% in 2010. There was a substantial difference between domestic and international markets. In domestic markets, slightly less capacity was added than growth in the market: 4.0% versus 4.1%. The opposite prevailed in international markets, where the pace of capacity expansion was in excess of the expansion of demand: 8.1% versus 6.9%.

In the same report it is mentioned that the excess of capacity growth was not too large, and so load factors remained close to historic highs in 2011, with a worldwide average of 78.3%. Domestic markets saw load factors rise even further, to a new high of 79.6%. This was an important factor leading to stronger airline profitability in the US and Chinese domestic markets in 2011. The delivery of new aircraft picked up in 2011, with 1,268 new aircraft delivered to airlines. Taking into account aircraft retirements, which typically involve around 400 to 500 aircraft, hull losses because of accidents, and movements in and out of storage, the in-service fleet of the commercial airline industry expanded 763 aircraft to 24,605 aircraft by year-end 2011.

Chart 1-6: Passenger and Cargo Load Factors

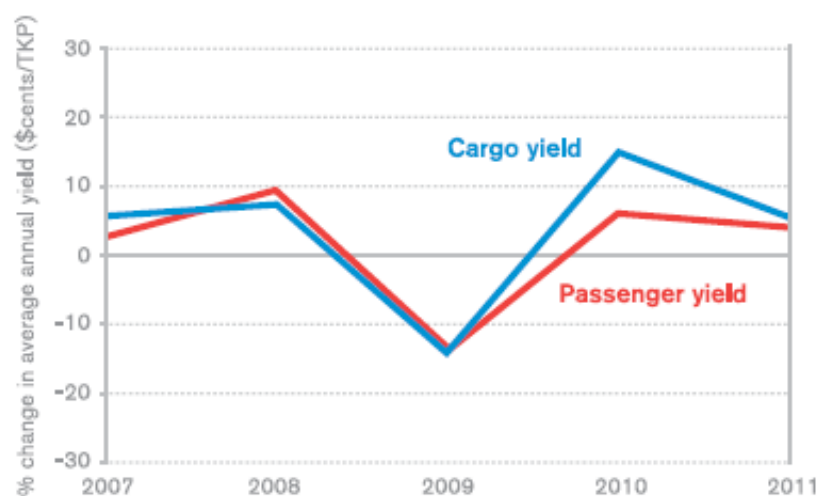


Source: IATA, 2012

### 1.2.6. Yields Analysis

According to annual report of IATA in 2012, passenger yields worldwide rose 4% in 2011, following an increase of more than 6% in 2010. Much of the 2011 yield increase was as a result of airlines attempting to recoup costs associated with the rise in the price of oil. Airlines managed to improve fuel efficiency and reduce other unit costs, but they still faced an increase in overall unit costs of 5%. High load factors in the passenger business allowed airlines to recover part of this cost increase. (See Chart 1-7).

Chart 1-7: Passenger and Cargo Yields

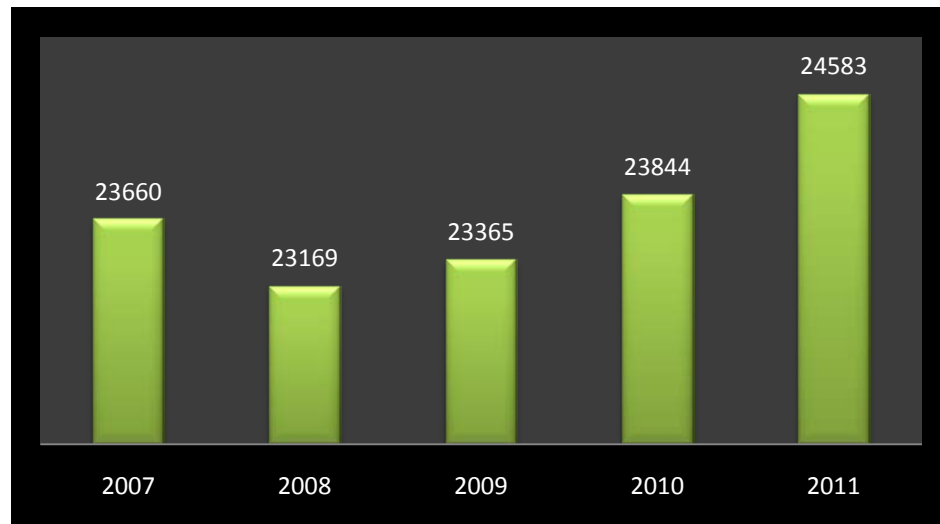


Source: IATA, 2012

### 1.2.7. Airline Fleet Numbers

Number of the airlines has increased from 2008 onwards. In 2011 with 739 addition to previous year it reached 24583. The following graph demonstrated the last 5 years changes in number of fleet(See Chart1-8) (5).

Chart 1-8: Airline Feet Numbers



Source: Ascend, 2012

## 1.3. Air Transport Market Analysis

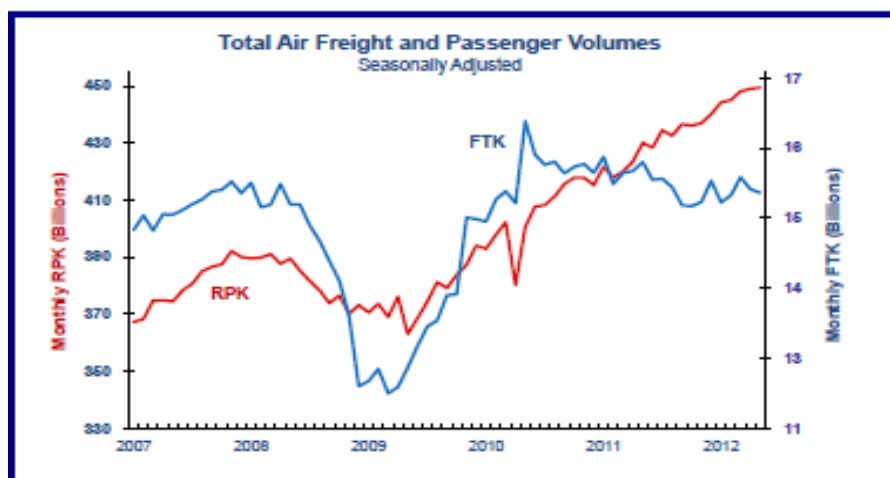
Air travel markets fell in May, after a period of above-trend growth, weakened by recent declines in business confidence and growth in world trade. Global RPKs were 4.5% higher in May than in the previous year, compared to 6% in April. Removing the seasonal ups and downs from the data in the first graph 1-10 shows that, after a strong upward trend in RPKs, there was little further advance in air travel during May, which is consistent with recent weakness of economic developments in several regions of the world (11).

Air freight was also soft in May, although the recent trend shows that seasonally adjusted levels of FTKs are still above the lows of late 2011. But the recovery so far has been minor, with May air freight traffic only 1.5% above Q4 2011 levels. Compared to the same month a year ago air freight was still down by 1.9% in May. Moreover, the gain in air freight since end 2011 has been narrowly based, with

Middle Eastern airlines responsible for the majority of the increase. For airlines in other regions, such as Asia/Pacific, over the past 6-9 months the market has been flat at best. On international passenger markets, all regions except for the Middle East have shown declines in year-on-year growth rates in May compared to April. The strong performance of Middle Eastern airlines is a notable acceleration on the single figure growth rates seen in 2011, and is supported by an increased growth in capacity (See Chart 1-9). Domestic passenger markets are weaker, reflecting local economic slowdowns. China's domestic travel has grown little in recent months, with the size of the market now just 4.4% higher than May last year. In India, domestic travel has been shrinking and in May was only 0.1% higher than last year (12).

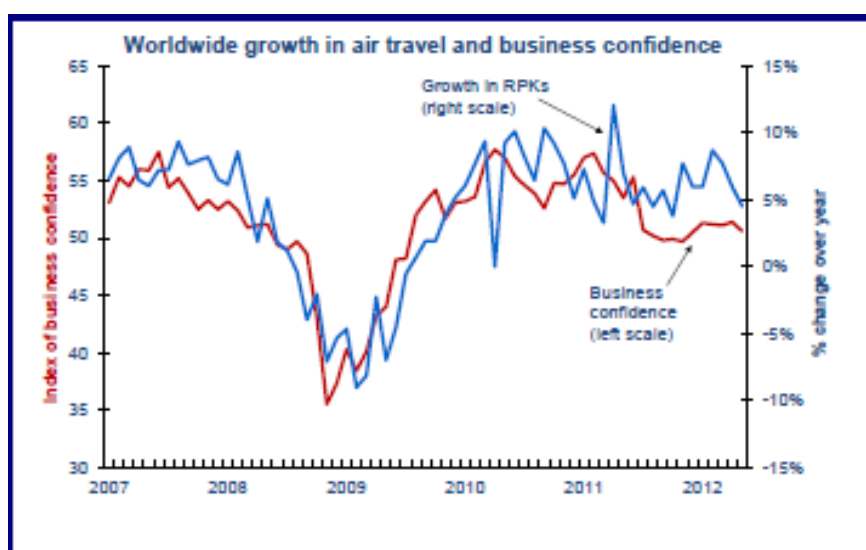
According to IATA, 2012 market report, passenger load factors in May fell compared to the previous month, as capacity growth exceeded softer demand. A record high (seasonally adjusted) had been reached in April. Air freight load factors were almost flat in May compared to April, with the levels only just above the 2011 year-end lows. Recent renewed weakness in business and consumer confidence is likely to undermine both air travel and freight volumes in the coming months. Softer demand and weaker passenger load factors will dilute the benefits to airline profits arising from the recent falls in fuel prices during the second quarter.

Chart 1-9: Total Freight and Passenger Volumes 2007-2012



Source: IATA, 2012

Chart 1-10: Worldwide Growth in Air Travel and Business Confidence



Source: IATA, 2012

Table 1-1: 2012 Analysis and Comparison with 2011

Y- o- Y Comparison	May 2012 vs. May 2011- %						YTD 2012 vs. YTD 2011-%					
	RPK	ASK	PLF	FTK	AFTK	FLF	RPK	ASK	PLF	FTK	AFTK	FLF
<b>Inter.</b>	5.6	4.1	77.0	-2.2	1.2	49.7	7.5	4.9	77.1	-1.9	2.0	49.7
<b>Domestic</b>	2.7	3.8	78.8	0.0	-1.5	28.3	4.9	4.3	78.2	0.1	-1.4	28.3
<b>Tot. Market</b>	4.5	4.0	77.6	-1.9	0.7	45.3	6.5	4.7	77.5	-1.6	1.3	45.2

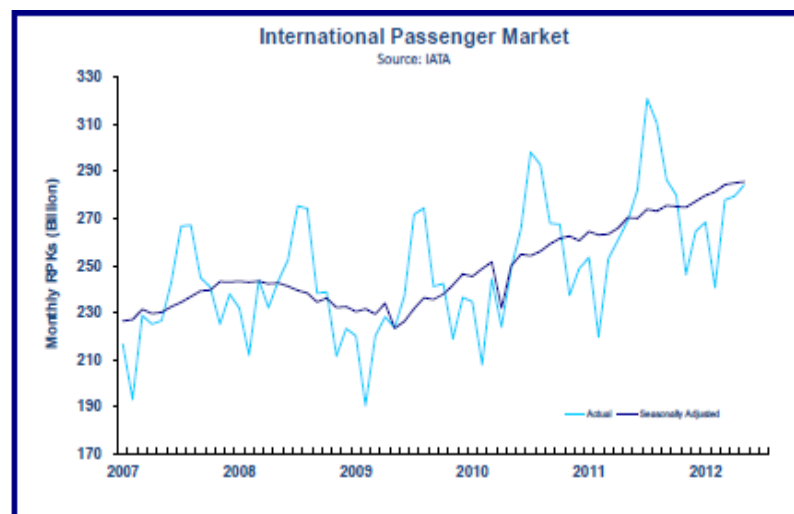
Source: IATA, 2012

After adjusting the May traffic data for seasonal factors, passenger markets were almost flat, increasing only 0.1% in May compared to April. The increase in capacity was greater than the growth in demand, so passenger load factors in May fell on the previous month, by 0.3% points. Freight markets softened slightly over the month, contracting by 0.4% compared to April. Although capacity also contracted over the month, it was less than the fall in demand, pushing freight load factors down slightly, by 0.1% points in May.

The trend in international passenger travel slowed in May, increasing only 0.2% over the prior month. Compared to a year ago, the market grew by 5.6%, but that was down on the April growth rate. International passenger travel on North American

airlines increased by 1.5% in May, year-on-year, almost flat on the April result of 1.6%. However, the seasonally adjusted levels indicate a clear improvement in the trend for international passenger travel in the region, which is consistent with better economic conditions in the US. The market gained 1% in May compared to April. (See Chart 1-11).

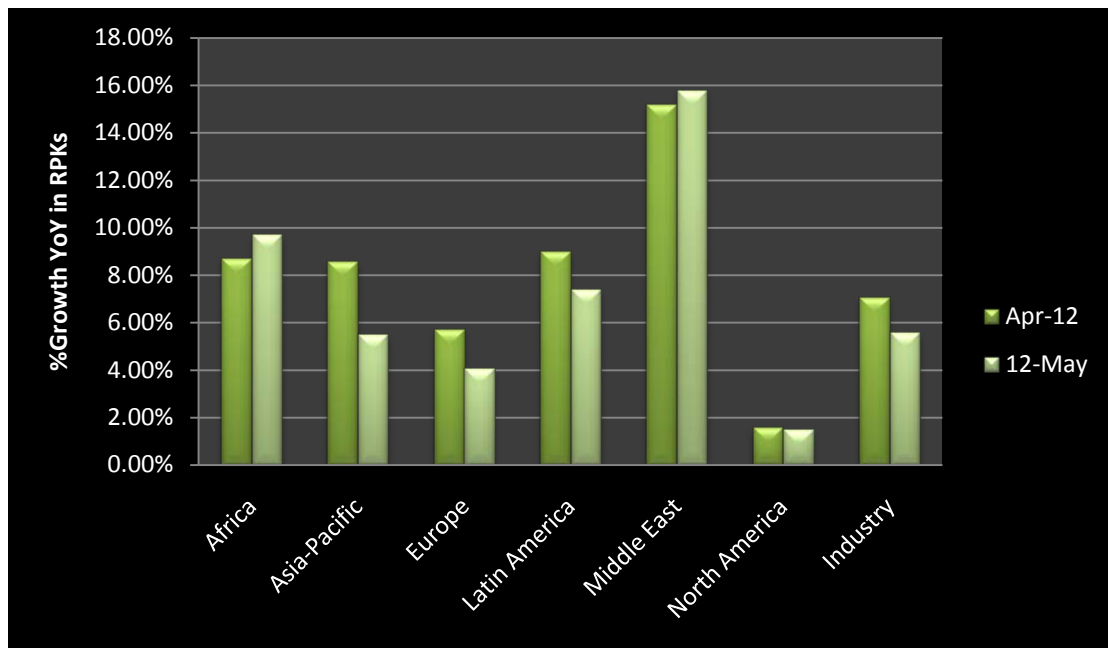
Chart 1-11: International Passenger Market till 2012



Source: IATA, Air Transport Market Analysis, 2012

Performance on international markets by Asia/Pacific airlines was down in May compared to April, when year-on-year growth rates were significantly exaggerated by the Japan earthquake a year ago. Although the growth on a year ago was still solid, at 5.5%, the month-on-month result was down significantly, by 0.8%. The series of monthly adjusted levels for Asia-Pacific international travel, however, still indicates the continuation of the positive trend that started toward the end of 2011.

Chart 1-12: International Passenger Growth by Region May vs. Apr 2012



Source: IATA, 2012

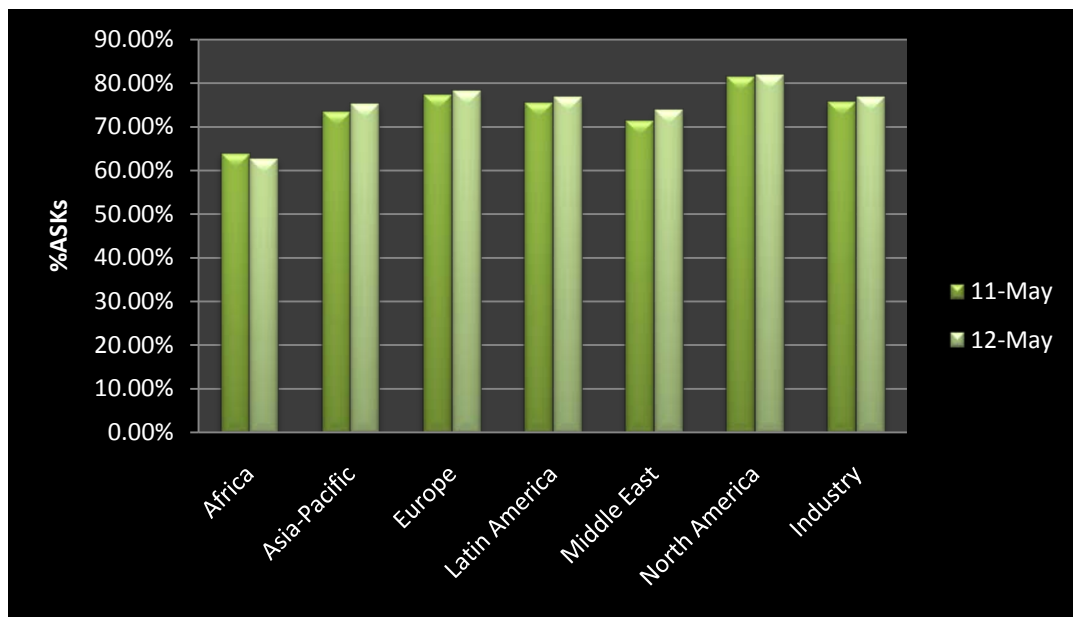
International load factors fell in May, after strong demand had pushed the seasonally adjusted levels to pre-recession highs in April. In May, growth in capacity was larger than the slight increase in demand over the month, forcing load factors to retract on the recent highs. Asia-Pacific and Latin American international load factors declined most over the month, by 0.4% and 0.3%, respectively (See Chart 1-12).

Chart 1-13: Passenger Load Factor on International Market



Source: IATA, 2012

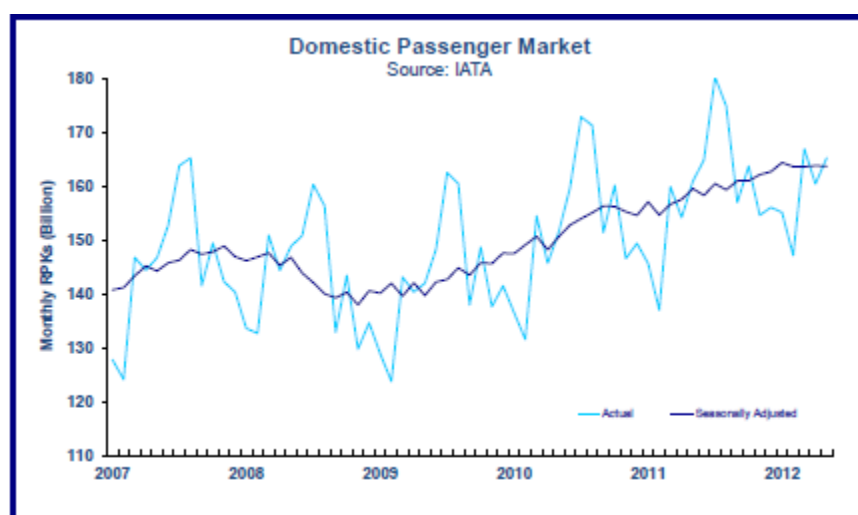
Chart 1-14: International Passenger Load Factor May 2011 vs. 2012



Source: IATA, 2012

In India, domestic travel fell sharply in May compared to April, with the market staying at almost the same size with 0.1% growth year-on-year. The trend in India's domestic air travel flattened at the start of 2012, and over the last month has shown notable decline (See Chart 1-15 & 1-16).

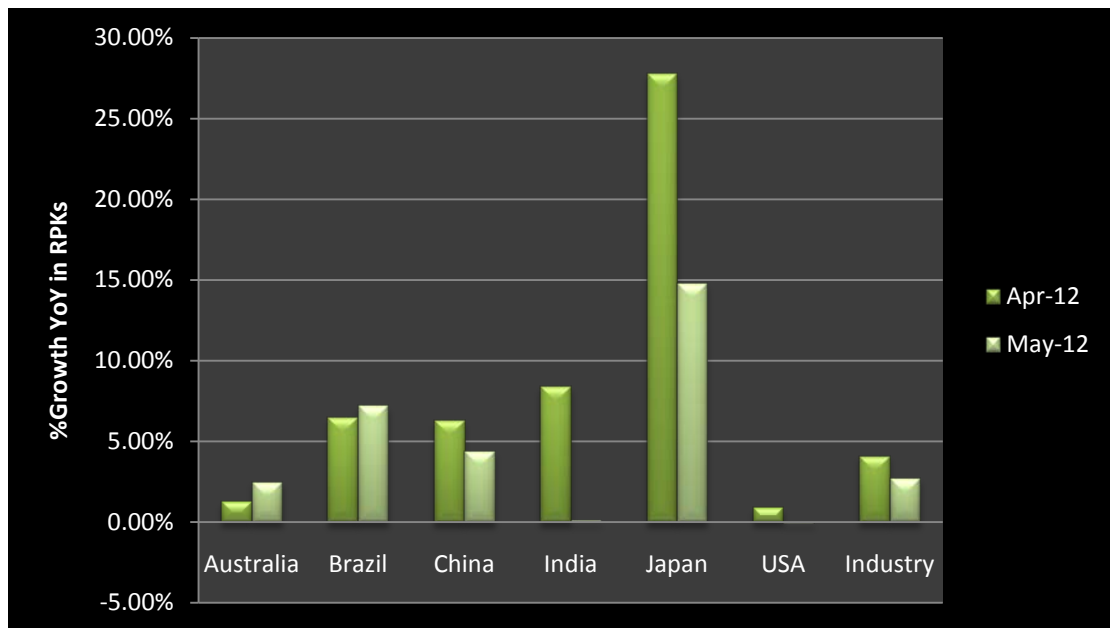
Chart1-15: Domestic Passenger Market 2012



Source: IATA



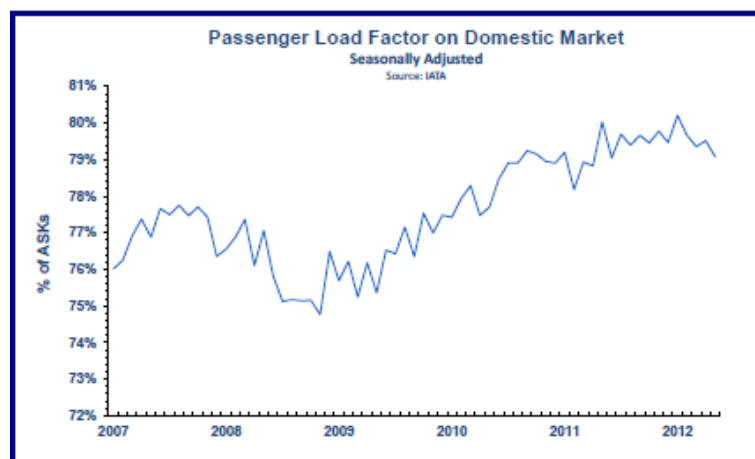
Chart 1-16: Domestic Passenger Growth by Country



Source: IATA, 2012

Domestic load factor has declined after March 2011, and was gradual till November 2011, but later on showed slight increase in 2012, and experiencing another decline in early 2012 (See Chart 1-17).

Chart 1-17: Passenger Load Factor on Domestic Market till 2012



Source: IATA, 2012

Table1-2: Figures in 2012 vs.2011

Year on Year Comparison	May 2012 vs. May 2011						YTD 2012 vs. YTD 2011					
	RPK	ASK	PLF	FTK	AFTK	FLF	RPK	ASK	PLF	FTK	AFTK	FLF
Africa	9.7%	11.8%	62.9%				10.4%	9.5%	64.9%			
Asia/Pacific	5.5%	3.1%	75.4%	-4.9%	-2.2%	61.7%	7.3%	4.9%	76.8%	-4.4%	-1.6%	61.0%
Europe	4.1%	2.9%	78.5%	-5.9%	0.9%	47.5%	6.1%	3.4%	77.7%	-4.9%	0.8%	48.3%
Latin America	7.4%	5.5%	77.1%	0.6%	-1.4%	41.2%	9.8%	7.8%	78.4%	0.0%	5.4%	38.8%
Middle East	15.8%	11.9%	74.0%	12.5%	11.7%	45.5%	17.6%	12.5%	77.2%	14.0%	13.7%	45.2%
North America	1.5%	1.1%	82.1%	-1.9%	-0.2%	40.5%	2.7%	0.9%	78.7%	-2.6%	0.7%	41.0%
<b>International</b>	<b>5.6%</b>	<b>4.1%</b>	<b>77.0%</b>	<b>-2.2%</b>	<b>1.2%</b>	<b>49.7%</b>	<b>7.5%</b>	<b>4.9%</b>	<b>77.1%</b>	<b>-1.9%</b>	<b>2.0%</b>	<b>49.7%</b>
Australia	2.5%	5.4%	74.4%				3.1%	3.6%	76.5%			
Brazil	7.2%	6.7%	65.0%				8.7%	12.1%	68.2%			
China P.R.	4.4%	8.3%	78.6%				9.5%	11.2%	80.3%			
India	0.1%	5.8%	76.8%				5.8%	6.9%	75.2%			
Japan	14.8%	11.9%	58.4%				6.4%	0.2%	59.6%			
US	-0.1%	0.3%	84.3%				1.4%	0.3%	82.0%			
<b>Domestic</b>	<b>2.7%</b>	<b>3.8%</b>	<b>78.8%</b>	<b>0.0%</b>	<b>-1.5%</b>	<b>28.3%</b>	<b>4.9%</b>	<b>4.3%</b>	<b>78.2%</b>	<b>0.1%</b>	<b>-1.4%</b>	<b>28.3%</b>
Africa	9.5%	11.3%	63.5%				9.0%	8.2%	65.6%			Africa
Asia/Pacific	5.3%	5.2%	75.4%	-4.1%	-1.7%	57.4%	7.7%	6.4%	76.7%	-4.0%	-1.2%	56.5%
Europe	4.1%	2.8%	77.8%	-5.7%	1.0%	46.6%	6.1%	3.2%	76.9%	-4.6%	0.9%	47.4%
Latin America	8.0%	6.8%	72.9%	0.2%	0.5%	39.8%	9.9%	9.9%	75.1%	-0.3%	7.2%	36.6%
Middle East	16.1%	12.4%	74.4%	12.4%	11.7%	44.8%	18.0%	12.9%	77.3%	13.9%	13.6%	44.4%
North America	0.5%	0.5%	83.4%	-1.9%	-1.6%	34.2%	1.9%	0.5%	80.9%	-1.7%	-1.1%	34.7%
<b>Total Market</b>	<b>4.5%</b>	<b>4.0%</b>	<b>77.6%</b>	<b>-1.9%</b>	<b>0.7%</b>	<b>45.3%</b>	<b>6.5%</b>	<b>4.7%</b>	<b>77.5%</b>	<b>-1.6%</b>	<b>1.3%</b>	<b>45.2%</b>

RPK: Revenue-Passenger-Kilometers; ASK: Available-Seat-Kilometers; PLF: Passenger-Load-Factor; FTK: Freight-Tonne-Kilometers; AFTK: Available Freight Tonne Kilometers; FLF: Freight Load Factor;  
 All Figures are expressed in % change Year on Year except PLF and FLF which are the load factors for the specific month.

Source: IATA, 2012

## 1.4. History of Indian Aviation Industry

### 1.4.1. Indian Aviation Sector (till 1986)

In December 1912, the first domestic air route was unwrapped between Delhi and Karachi by the Indian State Air Services (in collaboration with Imperial Airways of the UK). This marked a new beginning in India. Then countries' first air mail service was started by the Tata Airlines in 1912. Although Tata Airlines was started as an air mail service but later it endeavored in carrying scheduled passenger traffic. Tata

Airlines was renamed as Air India in 1946. In early 1948, a joint sector company, Air India International Ltd., was established by the Government of India and Air India (earlier Tata Airline). There were eight companies were in service within and outside the country at the time of independence, namely Tata Airlines, Indian National Airways, Air service of India, Deccan Airways, Ambica Airways, Bharat Airways and Mistry Airways. In 1950, the Government formed an Air Traffic Enquiry Committee to consider the problems of the airlines industry. Some problems faced by the airline industry at that time included, the towering prices of aviation fuel, mounting salary bills and disproportionately large fleets. The financial health of companies declined even with liberal Government support, particularly from 1949, and an upward trend in air cargo and passenger traffic. The Committee, although found no justification for nationalization of airlines, it supported their voluntary merge. So, Government in the wake of vanishing financial conditions of the Airlines decided to take some actions and nationalize the air transport industry. Accordingly, two self-governing corporations were created on August 1, 1953. In 1953, the government nationalized the airlines via the Air Corporations Act, 1953, which gave birth to Indian Airlines and Air India. Indian Airlines came into being with the merger of eight domestic airlines to operate domestic services, while Air India International was to operate the overseas services. Furthermore, the Act gave monopoly power to Indian Airlines to operate on domestic scheduled services ruling out any other operator. Air India became the single Indian carrier to operate on international itinerary excluding some routes to the neighboring countries which were given to Indian Airlines (6).

#### **1.4.2.. Indian Aviation Sector (1986-2003)**

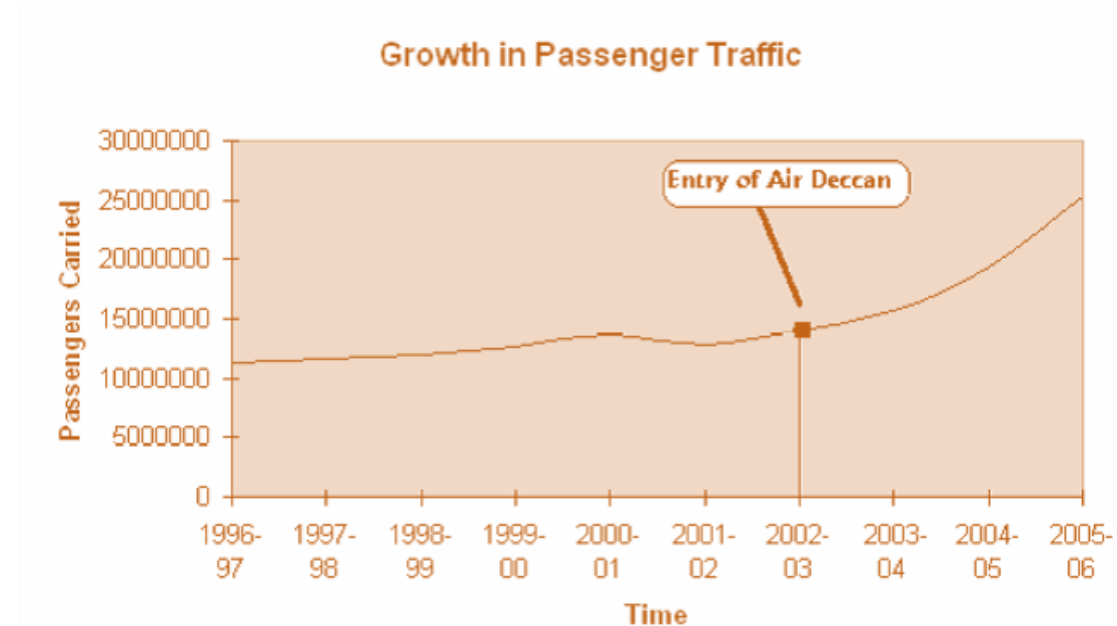
The second phase of the sector began in the year 1986. In this period, the private sector players were granted permission to operate as air taxi operators. These private players who were allowed to operate as air taxi operators included Air Sahara, Jet Airways, Damania Airways, East West Airlines, Modiluft and NEPC Airways. In 1994, government of India revoked the Air Corporation Act. Consequently, in 1995, government granted scheduled carrier status to six private air taxi operators. But only four operators Jet Airways; Air Sahara; Jagsons and Spicejet (previously operated as

Modiluft) started operations by 1997 and continued to operate. Eventually, by 1998, at least six private airlines, East- West, Modi-Luft, NEPC, Damania, Gujarat Airways and Span Air were closed and according to an estimate, the capital losses implicated after these closures were to the tune of Rs 10 billion (21).

#### 1.4.3. Indian Aviation Sector (2003 – 2006)

By 2003, only two private carriers survived to see the sunrise of the new century, i.e. Jet and Sahara. But the duopoly of Jet and Sahara as private carrier was challenged in 2003 by Air Deccan. Air Deccan gave India its first Low Cost Carrier (LCC) or no frills Airline which was a turning point in the history of Indian Aviation Sector. It marked a shift from the stereo type economy fares & business fares to the era of check fares ; web fares ; APEX fares ; internet auctions ; Special discounts ; Corporate plans ; last day fares; promotional fares etc. With the arrival of Deccan, reformation and innovation began in the aviation sector. Air traffic since then had tremendous growth rates (6). The graph shown below indicates the growth in passenger volumes (13).

Chart 1-18: Growth in Passenger Traffic; Impact of LCC Entrance



Source: Airport Authority of India Limited, 2012

On witnessing the success of LCC Model, other airlines also started to operate in the sector and opted for No-Frill Model. These airlines included; Kingfisher; Indigo; Paramount; Go Air which began operations in India. Some new carriers such as Star Airlines, Skylark, Magic Air, Air One and some others were given license to operate in the sector (22).

#### 1.4.4. Aviation Industry (2006 onwards)

Another landmark in the history of the Indian Aviation industry came in the year 2007. This was the year of mergers and collaborations in the Indian skies. In the year 2006, the merger of Jet-Sahara & IA-AI was announced but it materialized only in 2007. After this, the Indian aviation sector has witnessed a series of M&A of airlines namely: Indian-Air India; the Jet-Sahara Deal; the Kingfisher-Deccan Deal. Table shows the major milestones of the industry (13).

Table1-3: Industry Evolution

Industry Evolution Year	Major Milestones
1953	Nine Airlines existed including Indian Airlines & Air India
1953	Nationalization of all private airlines through Air Corporations Act;
1986	Private players permitted to operate as air taxi operators
1994	Air Corporation act repealed; Private players can operate schedule services
1995	Jet, Sahara, Modiluft, Damania, East West granted scheduled carrier status
1997	4 out of 6 operators shut down; Jet & Sahara continue
2001	Aviation Turbine Fuel (ATF) prices decontrolled
2003	Air Deccan starts operations as India's first LCC
2005	Kingfisher, SpiceJet, Indigo, Go Air, Paramount start operations
2007	Industry consolidates; Jet acquired Sahara; Kingfisher acquired Air Deccan
2010	SpiceJet starts international operations
2011	Indigo starts international operations, Kingfisher exits LCC segment
2012	Government allows direct ATF imports, FDI proposal for allowing foreign carriers to pick up to 49% stake under consideration

Source: ICRA, 2012

Table 1-3, shows the industry evolution in summary with reference to important incidents happened to Indian aviation industry.

## 1.5. Airline Industry of India

Aviation plays an essential role in economic progress of a nation as it is viewed as a necessary link not only for international voyage and trade but also for providing connectivity to different parts of the country. It is a one of the vital part of the infrastructure of the country and has outcome for the development of tourism and trade, the opening up of inaccessible areas of the country and for providing stimulus to business activity and economic growth (6).

In decade of 1990, India's airline industry was liberalized, leading to host of new entrants while the Indian economy was still growing slowly. Also, the private airlines were under capitalized. Among the many airlines which entered to the market only Jet Airways managed to survive the challenging decade. In 2003/04 India's civil airline industry was liberalized for the second time. Once again, lot of new entrants unleashed huge capacities. This coincided with a leap in India's GDP, growth in average incomes, on back of service industries like IT. As a result the domestic air market grew at CAGR of 29.5% for the next four years. However, the Indian domestic air market was not immune from global slowdown in 2008/09; Indian air market shrank by 11% (7).

Air Deccan the pioneer of LCC (Low Cost Carrier) of India went in oblivion. In 2010/11 growth is back at 18%. In spite of such impressive growth, India's airline industry has never been consistently profitable, as supply of seat always ran ahead of demand (ibid).

Airline industry's capital intensive nature demand huge capital investment that too, in foreign exchange. Thus, the airlines are vulnerable to weaker domestic currency. This industry is labor intensive as well. Ironically, unlike other India based global industries like IT, the airline industry doesn't enjoy low wage arbitrage. The expatriate pilots and AME's are paid in dollar indexed salaries. In addition, shorter domestic block time of less than two hours; higher cost of ATF (Air Turbine Fuel); additional state imposed sales tax; high cost of capital; aircraft lease or ownership costs are major concerns (7).

As a result airlines in India have 20-30% higher operating costs per ASKM (available seats KMs). On international routes, India's airlines do not have level playing field as they are up against better endowed competitors with strategic base in Middle East and Europe. Faced with stiff competition from internal LCC competitors as well as global airlines, India's airlines in India have stretched balance sheets; an accumulated mountain debt of US\$ 13 Billion. The double digit market growth hasn't been translated into sustainable profits, as capacity increased at faster clip than demand growth. So, airlines struggle to apply different strategies to break out from mentioned situation. Enhancing fleet utilization per day, raising employee productivity, improving overall weight load factors to industry benchmark level of 78%, applying marketing strategies to attract and retain the customers; improvement in passenger yields are essential to offset the higher operating costs. Global airline industry recovered in 2010, after a horrible year in 2008 and 2009. India's airlines can embark profitable growth in the new decade with applying right strategies (7).

The Indian Aviation Industry has been going through a turbulent phase over the past several years facing multiple headwinds – high oil prices and limited pricing power contributed by industry wide over capacity and periods of subdued demand growth. Over the near term the challenges facing the airline operators are related to high debt burden and liquidity constraints - most operators need significant equity infusion to effect a meaningful improvement in balance sheet. Improved financial profile would also allow these players to focus on steps to improve long term viability and brand building through differentiated customer service. Over the long term the operators need to focus on improving cost structure, through rationalization at all levels including mix of fleet and routes, aimed at cost efficiency. At the industry level, long term viability also requires return of pricing power through better alignment of capacity to the underlying demand growth (8).

While in the beginning of 2008-09, the sector was impacted by sharp rise in crude oil prices, it was the decline in passenger traffic growth which led to severe underperformance during H2, 2008-09 to H1 2009-10. The operating environment improved for a brief period in 2010-11 on back of recovery in passenger traffic, industry-wide capacity discipline and relatively stable fuel prices. However, elevated fuel prices over the last three quarters coupled with intense competition and



unfavorable foreign exchange environment has again deteriorated the financial performance of airlines. During this period, while the passenger traffic growth has been steady (averaging 14% in 9m 2011-12), intense competition has impacted yields and forced airlines back into losses in an inflated cost base scenario. To address the concerns surrounding the operating viability of Indian carriers, the Government on its part has recently initiated a series of measures including (a) proposal to allow foreign carriers to make strategic investments (up to 49% stake) in Indian Carriers (b) proposal to allow airlines to directly import ATF (c) lifting the freeze on international expansions of private airlines and (d) financial assistance to the national carrier. However, these steps alone may not be adequate to address the fundamental problems affecting the industry (8).

While the domestic airlines have not been able to attract foreign investors (up to 49% FDI is allowed, though foreign airlines are currently not allowed any stake), foreign airlines may be interested in taking strategic stakes due to their deeper business understanding, longer investment horizons and overall longer term commitment towards the global aviation industry. Healthy passenger traffic growth on account of favorable demographics, rising disposable incomes and low air travel penetration could attract long-term strategic investments in the sector. However, there are two key challenges: i) aviation economics is currently not favorable in India resulting in weak financial performance of airlines and ii) Internationally, too airlines are going through period of stress which could possibly dissuade their investment plans in newer markets. Besides, foreign carriers already enjoy significant market share of profitable international routes and have wide access to Indian market through code-sharing arrangements with domestic players (16).

Foreign direct investment (FDI) is not allowed in airlines but carriers which have been posting losses in the past few financial quarters have been looking at foreign investors for a turnaround. In volatile market condition it is very difficult for airlines to raise money, hence if international carriers are allowed to invest in Indian airlines; it will help to improve operating and financial position. Civil Aviation Ministry is expected to give its nod for up to 24% foreign direct investment (FDI) in domestic carriers. As per current aviation norms, FDI in aviation is allowed up to 24%, but it is



for companies, other than airline companies. This hasn't helped much because nobody wants to invest in a sector that has been bleeding and posting losses. So, this will be a big game changer for the entire Indian aviation space. This move will particularly aid Indian carriers who are cash trap and will be very happy to generate funds by equity stake sale. Currently banks are quite reluctant to give loans to airlines. Even oil marketing companies are not too keen to give supply fuel on credit. Given these considerations, we believe, foreign airlines are likely to be more cautious in their investment decisions and strategies are likely to be long drawn rather than focused on short-term valuations. On the proposal to allow import of ATF, we feel that the duty differential between sales tax (averaging around 22-26% for domestic fuel uplifts) being currently paid by airlines on domestic routes and import duty (8.5%-10.0%) is an attractive proposition for airlines. However the challenges in importing, storing and transporting jet fuel will be a considerable roadblock for airlines due to OMCs monopoly on infrastructure at most Indian airports. From the working capital standpoint too, airlines will need to deploy significant amount of resources in sourcing fuel which may not be easy given the stretched balance sheets and tight liquidity profile of most airlines (8).

Historically, the Indian aviation sector has been a laggard relative to its growth potential due to excessive regulations and taxations, government ownership of airlines and resulting high cost of air travel. However, this has changed rapidly over the last decade with the sector showing explosive growth supported by structural reforms, airport modernizations, entry of private airlines, adoption of low fare - no frills models and improvement in service standards. Like elsewhere in the world, air travel has been transformed into a mode of mass transportation and is gradually shedding its elitist image (17).

Also, according to reports released by ICRA, 2011, Indian aviation industry promises huge growth potential due to large and growing middle class population, favorable demographics, rapid economic growth, higher disposable incomes, rising aspirations of the middle class, and overall low penetration levels (less than 3%). The industry has grown at a 16% CAGR in passenger traffic terms over the past decade. With advent of LCCs and resultant decline in yields, passenger traffic growth which

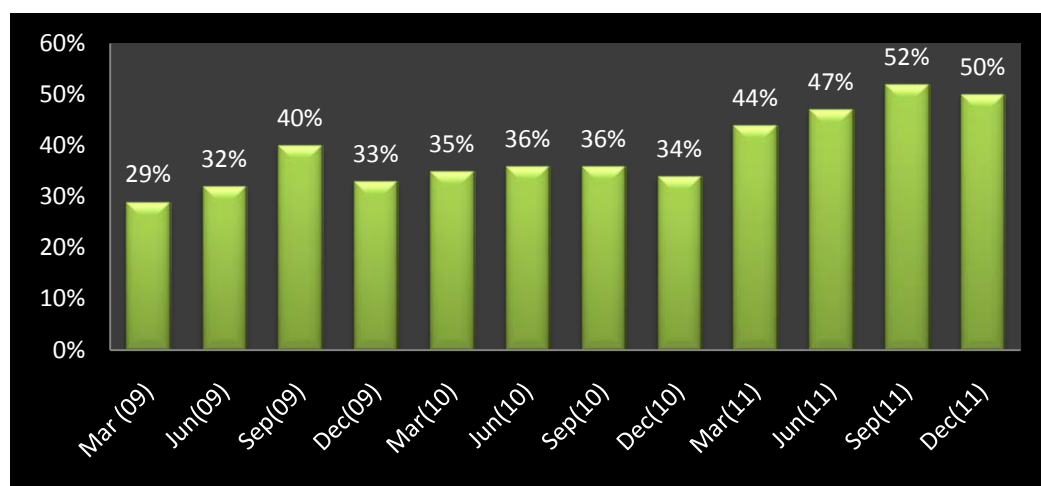
averaged 13% in the first half has increased substantially to 19% CAGR during 2006-2011. Despite strong growth, air travel penetration in India remains among the lowest in the world. In fact, air travel penetration in India is less than half of that in China where people take 0.2 trips per person per year; indicating strong long term growth potential. A comparative statistic in United States, the world's largest domestic aviation market stands at 2 trips per person per year. We expect passenger demand to remain stable and grow between 12-15% in the medium term, assuming a no major weakness in GDP growth going forward.

However domestic airlines operate under high cost environment and intense competition has constrained yields besides aggressive fleet expansions have impacted profitability and capital structures. Despite reforms, the domestic aviation sector continues to operate under high cost environment due to high taxes on Aviation Turbine Fuel (ATF), high airport charges, significant congestion at major airports, dearth of experienced commercial pilots, inflexible labor laws and overall higher cost of capital. While most of these factors are not under direct control of airline operators, the problems have compounded due to industry-wide capacity additions, much in excess of actual demand. Intense competitive pressure from Low cost carriers (focusing on maximizing load factors) and national carrier (looking to regain lost market share) have constrained yields from rising in-sync with the elevated cost base. Besides, aggressive fleet expansions (LCCs have added aircrafts mainly on long-term operating leases; FSC's have purchased aircrafts – debt financed, most often backed by guarantees from the US EXIM Bank or Europe's ECA) to leverage upon the anticipated robust growth and to support international operations have significantly impacted the capital structure and weakened the credit profile of most domestic airlines (8).

Internationally the LCC model came into existence when the US Congress passed the Airline Deregulation Act in 1978 easing the entry of new companies into the business and giving them freedom to set their own fares and choose routes (Prior to this routes and fares were fixed by a Government Agency). This was followed by entry of carriers like Southwest, which pioneered the LCC concept. Majority (~60-65%) of an airline cost are dependent on external factors, which can't be managed by

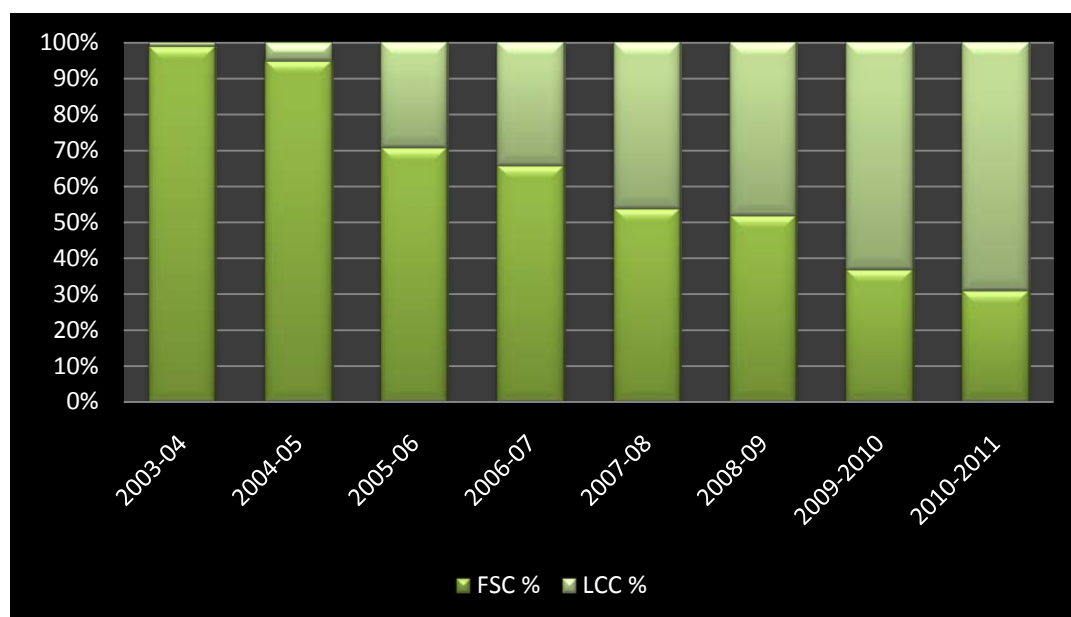
an LCC. This includes the fuel cost (~40%), maintenance cost (~12%) and ownership cost (~12-15%). LCCs try to achieve a cost advantage in other ways by avoiding the in-flight services, operating from secondary airports, selling tickets through the internet, higher number of seats in the aircraft, inventory reduction through use of similar aircraft and lower employees per aircraft (18). The Indian aviation sector was exposed to intense competition with the advent of a low-cost airline - Air Deccan back in 2003. The success of Air Deccan spurred the entry of other LCCs like SpiceJet, Indigo, Go Air and subsequently low fare offerings from Jet airways and Kingfisher airlines. As a result, the sector which was completely dominated by full-service airlines till a decade ago is now dominated by low-cost airlines (See Chart 1-19). However, longer term viability of LCCs models in India remains to be seen (Kingfisher exited the segment recently) as airport charges are same for FSCs and LCCs in India. Besides, the fuel costs forms a larger proportion of overall costs as compared to international standards due to higher central and state government levies (viability of direct ATF imports remains to be seen due to lack of supporting infrastructure) and high congestion at major airports (half an hour hovering at major airport could increase fuel costs by Rs.60, 000 to Rs. 115,000 depending on aircraft). These constraint can be resolved only if there significant improvement in infrastructure such that LCCs could operate on secondary airports (8). The domestic airlines industry is facing significant operating (slowing growth, rising fuel costs) and non-operating (interest costs, rupee depreciation) challenges as evident in the quarterly performance trends of listed airline companies (See Chart1-18) (9)

Chart 1-19: Domestic Airlines- Fuel Costs (% of Gross Sales)



Source: Capitaline, 2012

Chart 1-20: Growing Market Share of Low-Cost Carriers

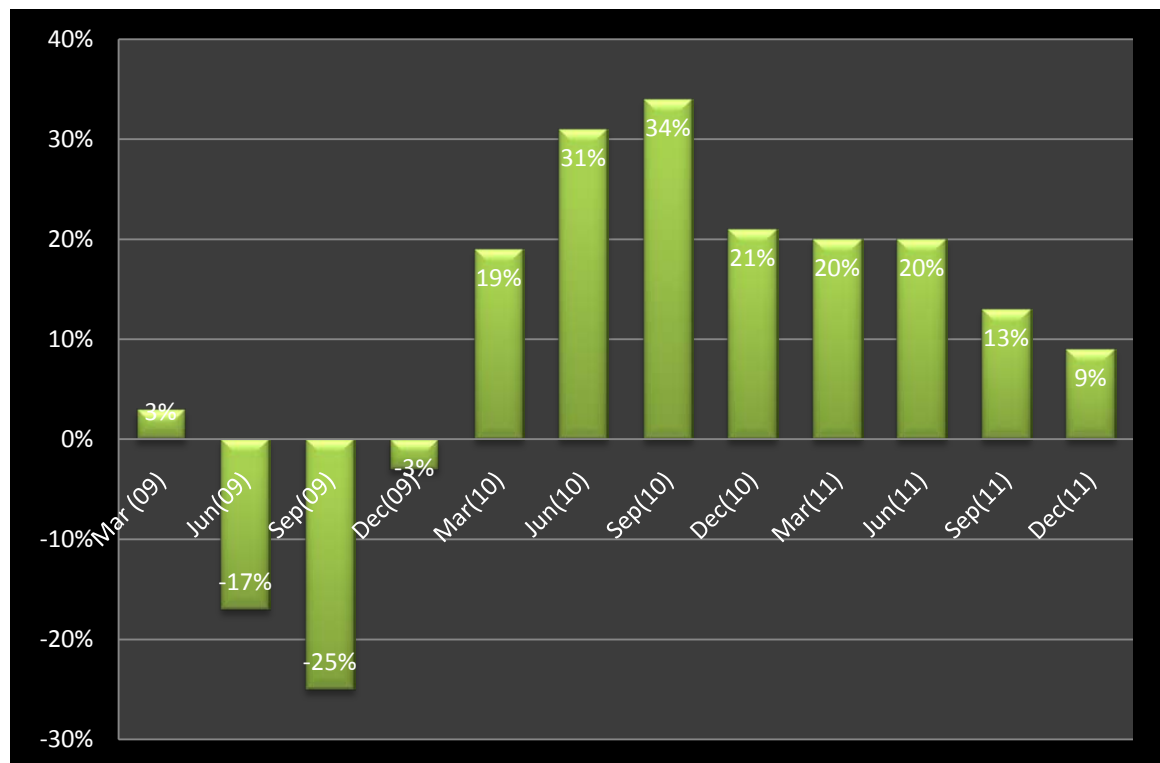


Source: Company Filings, Bloomberg, ICRA research, 2012

**1.5.1. Sales Growth:** After a strong rebound in 2010, the passenger growth has been moderating over the last few quarters due to moderating economic growth and weak industrial activity. Besides, severe competitive pressure from domestic LCC players (rapidly gaining market share) and Air India (trying to maintain market share) have resulted in price wars (at times below cost pricing), lowered yields and moderated sales growth for the airlines. Even on international routes, the yields have remained weak due to weaker economic conditions and severe competition from global airlines (See Chart 1-20) (9).

**1.5.2. Rising ATF Prices & Steep Rupee Depreciation:** The airlines industry had been severely impacted by the significant increase in ATF prices (up 57% in last 18 months) as Indian Carriers do not hedge fuel prices and have exhibited limited ability to charge fuel surcharges due to irrational and undisciplined pricing dictated by competition rather than costs / demand. Besides, the steep rupee depreciation (~18.7% depreciation in CY11, although partly reversed through 7.3% YTD appreciation in CY12) acts double whammy as apart from fuel costs, substantial portion of other operating costs like lease rentals, maintenance, expat salaries and a portion of sales commissions are USD-linked or USD-denominated (See Chart 1-18) (8).

Chart 1-21: Domestic Airlines Gross Sales Growth



Source: Capitaline, 2012

**1.5.3. Profit Margins:** With combined impact of 1) moderating pax growth 2) lower yields due to excessive competitive 3) rising ATF prices 4) steep rupee depreciation and 5) rising debt levels and interest costs, the profitability margins of the airlines industry have been severely impacted. As per Centre for Asia Pacific Aviation (CAPA), Indian carriers could be posting staggering losses of \$2.5 billion (~Rs 12,500 crore) in 2011-12, worse than the losses of 2008-09 when traffic was declining and crude oil prices spiked to \$150 per barrel (8).

Overall, the industry has been marred by cost inefficiencies and is bearing the brunt of aggressive price cuts, rising costs, expensive jet fuel, a weaker rupee, high interest payments and hence mounting losses. The government support required to bailout the loss making Air India has increased substantially; while the leading private players like Kingfisher Airlines, Jet Airways and SpiceJet are making significant losses. With Banks unwilling to enhance their exposure to the industry, recast their loans or pick up equity stakes without viable business plans, industry needs to come out with strong equity infusion plans. Hence, the government is mulling allowing foreign carriers to

pick strategic stakes in domestic airlines to help them stay afloat in these difficult times, besides bringing global expertise and best industry practices over the medium term (20) .

## **1.6. Airline Industry Specificities**

Until the mid-1980s, the highly-regulated airline industry was dominated by international airlines which were fully or at least majority-owned by their national governments. This was primarily because governments recognized that air transport would be of major importance for economic and social development, as well as for trade (10). To promote their country's power, status, and prestige (11) ,each state designated one airline, the country's 'flag carrier', to operate flights on bilateral routes between those countries with which air traffic rights had been exchanged (23) .Since the mid-1980s, the successive liberalization of traffic rights and regulations has facilitated the privatization of state-owned airlines. Today, most are either fully or partially privatized, or are in the process of being privatized (24).

However, a large number of formerly state-owned carriers continue to commemorate their historical heritage in their names and in the colors of their corporate design (e.g.,British Airways, Air France). While liberalization initially spurred the privatization of airlines, it also triggered the entry of new carriers in the market. Faced with increasing competition and, simultaneously, decreasing government subsidies traditional carriers were forced to 10 abandon old market practices and become more competitive and customer-oriented (23). At the end of the 1990s, traditional flag carriers faced new challenges from the emergence of low-cost, low-fare carriers to entering the market and altering the competitive landscape. Again, traditional carriers had to rethink their strategies and increase their flexibility in order to adapt to the changes in the marketplace.

The airline industry has been characterized by heavy regulations which limit airlines' room for maneuver. While other industries have paved the way for companies to transform into global players, the principle that airlines should be

‘substantially owned and effectively controlled’ by nationals from the given state in which the airline is registered, has prevented airlines from becoming truly global businesses by obstructing cross-border merger and acquisition activities (25) (24). To overcome the restrictions imposed by this nationality rule, airlines formed global alliances as a means to secure some of the benefits a larger size and scope offer (e.g. greater purchasing power, better distribution of maintenance costs, etc). While the 1990s witnessed outright alliance-building frenzy, three major alliances, namely Star Alliance, Oneworld, and SkyTeam3, now dominate the competitive landscape (23).

Shaw (2007) asserts that the formation of alliances was not a means in itself; rather, it was an indispensable ‘detour’, since cross-border consolidation activities continue to be restricted by regulations. Moreover, Hanlon (2007) argues that the existing airline alliances may prove to be precursors to actual cross-border mergers, considering that government-imposed constraints and regulations on foreign ownership are progressively being relaxed.

The cyclical nature of the airline industry, with its growth cycles closely linked to changes in the world economy, is one of its major economic idiosyncrasies (23) (26). However, this direct relationship between economic growth and air travel demand seems to have weakened, mainly as a result of low-cost airlines that offer lower fares and thus stimulate demand irrespective of the economic situation (23). Airlines furthermore have to cope with marginal profitability (24).

The airline industry’s cost structure with high fixed costs relative to variable costs makes volume a crucial factor for securing profits (27). While the constant emergence of new competitors and the simultaneous pullout or failure of others intensify the industry’s dynamics, additional pressure is exerted by the customer, who is gaining power in an increasingly transparent market made possible by the easily accessible information on the Internet on prices, conditions, and consumer rights (28) (29).

## 1.7. Passenger Airlines

A passenger airline is an airline dedicated to the transport of passengers. Cf. cargo airline. Passenger airlines usually operate a fleet of passenger aircraft which, rather than being owned outright, are usually leased from commercial aircraft sales and leasing companies such as GECAS and ILFC (12).

There are several types of passenger airlines, mainly

- Charter airlines, operating outside of regular schedule intervals
- Commuter airlines, servicing smaller communities; sometimes known as feeder airlines (and no longer air taxis due the advent of VLJs)
- Legacy airline, Legacy carrier
- Low-cost airlines, giving a "basic", "no-frills" and perceived inexpensive service
- Mainline airlines, the major "trunk" international airlines
- Pseudo airlines, airline marketing brands such as American Connection or US Airways Express, often mistaken for independent and fully certificated airlines
- Regional airlines, non-"mainline" airlines with aircraft seating up to 100 passengers and operating over shorter non-intercontinental distances.

## 1.8. Air Market in India

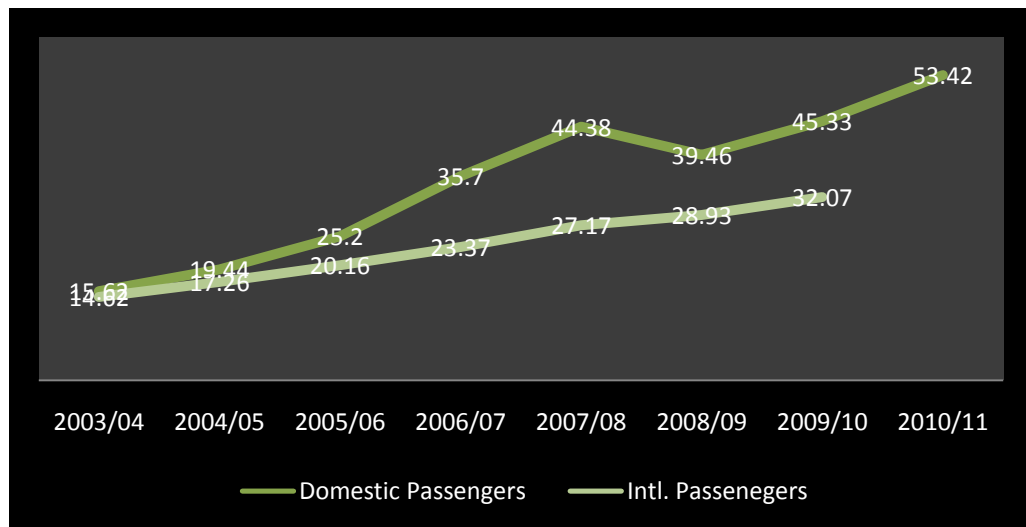
After liberalization of India's civil aviation, the new entrants entered to domestic scene, and the bilateral entitlements on international markets were liberalized as well. Both these developments attracted fresh capacities to cater to pent up demand. Post liberalization, the Indian aviation capacity grew at CAGR of 24%. Private as well as the national airlines in India ordered enviable brand new fleet of fuel efficient aircraft. Most dramatic has been the jump in domestic passenger carriage, as can be seen in the following graph.

In 2003, both domestic and international carriages were practically at same point, about 15 mill figure. Since then, domestic carriage has increased at faster clip than the international carriage. In 2011, the domestic market is almost 50% higher than the international carriage. New Greenfield private airports have come up at Kochi,



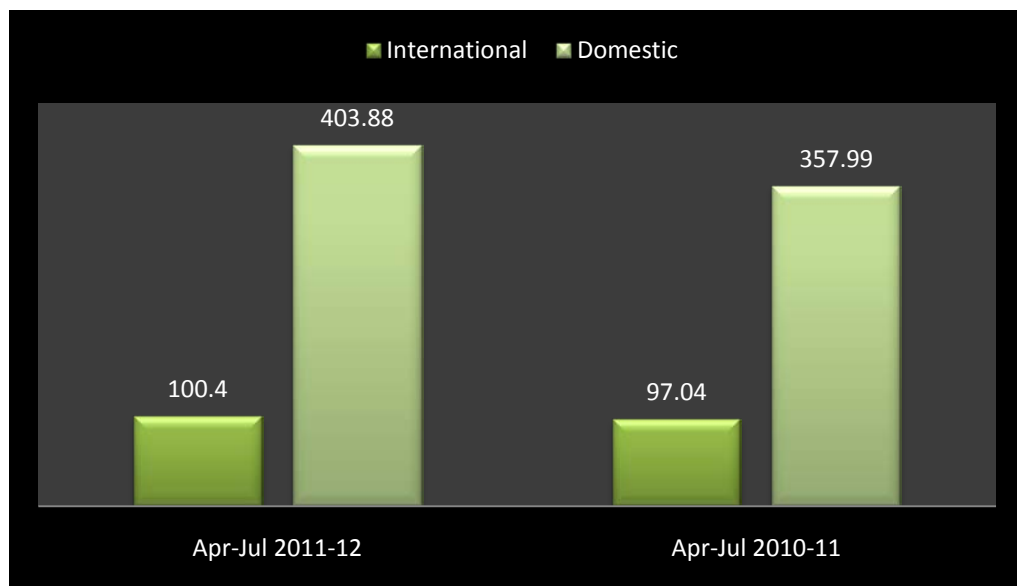
Bangaluru and Hyderabad. Newdelhi and Mumbai airports are modernized (See Chart 1-22) (7).

Chart 1-22: Domestic and International Passengers



Source: DGCA, referred in Tapasya, 2011

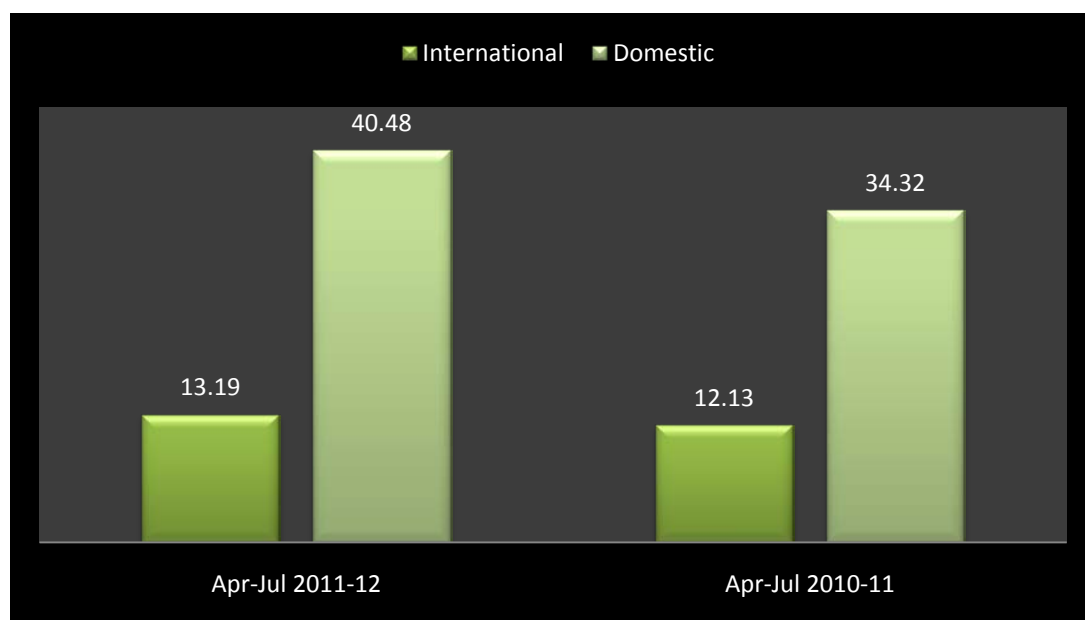
Chart 1-23: Aircraft Movements



Source: Airport Authority of India Limited

The following Chart (1-24) & Table (1-4) show the international and domestic passengers in 2010-2012, comparing April 2011 to July 2012 with April 2010 to July 2011. The analysis shows increase in domestic passengers as well as international.

Chart 1-24: Number of Passengers (in Million)



Source: Airport Authority of India Limited

Table 1-4: Statistics of 2010 -2012

Category	Apr-Jul 2011-12	Apr-Jul 2010-11	% Change
<b>Aircraft Movements (in '000)</b>			
International	100.40	97.04	3.5
Domestic	403.88	357.99	12.8
Total	504.28	455.03	10.8
<b>Passengers (in millions)</b>			
International	13.19	12.13	8.8
Domestic	40.48	34.32	17.9
Total	53.67	46.45	15.6
<b>Freight (in '000 tones)</b>			
International	515.22	495.76	3.9
Domestic	259.7	274.09	-5.3
Total	774.92	769.85	0.7

Source: Airport Authority of India Limited

## **1.9. Drivers of Growth of the Indian Aviation Sector**

There are some major factors that support growth in Indian aviation sector as followings:

- Increase in Consumerism
- Increasing Tourists Travel
- Increasing Business Travel
- Entry of Low Cost Carriers
- Untapped Market
- Rising Disposable incomes
- Rising Middle Class Population
- Increasing Competition
- Government Reform Measures
- There is a strong correlation with air traffic and economic growth
- Aviation sector in India has been transformed from an over regulated and under managed sector to a more open, liberal and investment friendly sector since new government reforms came into existence. The Ministry of Civil Aviation has been following a very liberal policy in the exchange of capacity entitlements / traffic rights.
- Indian aviation space offers promising opportunities in the areas of aircraft manufacturing, airport infrastructure, airport and ground support equipment, MRO facilities, ground handling services, trained manpower, air cargo, fuel hedging, aerotropolis along with tapping the potential stream of non aeronautical revenues (13).

### **1.9.1. Issues to be Concerned**

- With the rise in the number of airlines and growing passenger there is a need for Indian airports to have their infrastructure in place, which unfortunately at present is the weakest link in the chain.
- Mounting losses of the airlines
- The new Ground Handling policy
- High Aviation Turbine Fuel (ATF) prices

- High airport charges
- Shortage of qualified pilots and technical manpower
- Safety and security issues
- Closure of old airports
- Congestion at airports
- High taxation etc.

## **1.10. Major Loss Resulting Factors**

### **1.10.1. Rising Fuel Prices**

Aviation Turbine Fuel (ATF) prices in India are higher than the global market. The ATF price accounts for almost 45% of the operational expenses. The industry's operational cost component is dominated by the cost of the ATF. A 10% increase in fuel price would push up costs by at least 4%, thus affecting the financial health of an airline business. Until April 2001 ATF prices in India were determined by Government through an Administered Price Mechanism (APM). This was based on a system of cross-subsidy – for socio-economic reasons prices of some petroleum products such as kerosene and diesel were “subsidized” by setting higher prices for ATF. In April 2001, the APM was dismantled and the Oil Companies given freedom to price ATF based on input costs and world market prices. Thereafter ATF prices in India have fluctuated widely depending on movements in world prices (6).

### **1.10.2. Congestion**

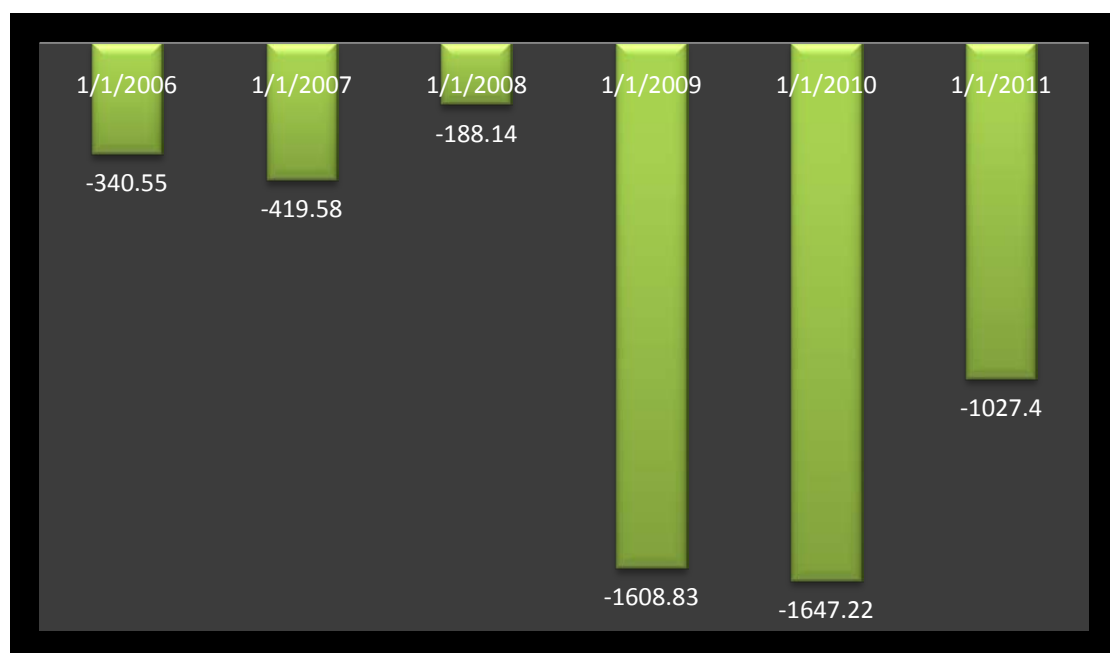
Presently capacity limitations are there at many airports like Delhi and Mumbai airports. Overcrowding leads to a huge wastage of fuel. It is estimated that if a flight hang around in the sky for an additional half an hour due to delay in allocation of landing slot, it can consume between 25 to 30 percent extra fuel thereby increasing the operational cost of the airline. Half an hour of hovering costs an airline anywhere over Rs. 50,000 /-. Suppose, all the flights coming on Mumbai and Delhi have an average circling time of 30 minutes each, around Rs 40 lakhs of fuel is wasted in a day. The congestion also influences the turnaround time of the aircraft and reduces the average aircraft utilization. Hence there is a need to address the congestion issue to facilitate savings on fuel and higher utilization of the aircraft. The importance of time

is at a premium, the delays caused to passengers due to congestion issues not only cause a trouble but also upset the passengers' time schedules. Wastage of man-time has a huge cost and is almost incalculable (6).

### 1.10.3. High Airport Charges

The airport charges payable at the International airports are higher than those payable at the airports nominated as Domestic airports for domestic flights. As an outcome, the domestic airlines in India are incurring additional costs at the international designated airports without benefiting any additional facilities. The airport charges levied by the Indian airports are amongst the highest in the Asian and the Gulf countries. India at present does not have any secondary airports for LCCs and the Indian LCCs have to shell out comparatively higher airport charges than its international peers (6). Following graphs show financial overview of some of domestic airlines till 2011.

Chart 1-25: Financial Overview of Kingfisher Airlines Ltd.



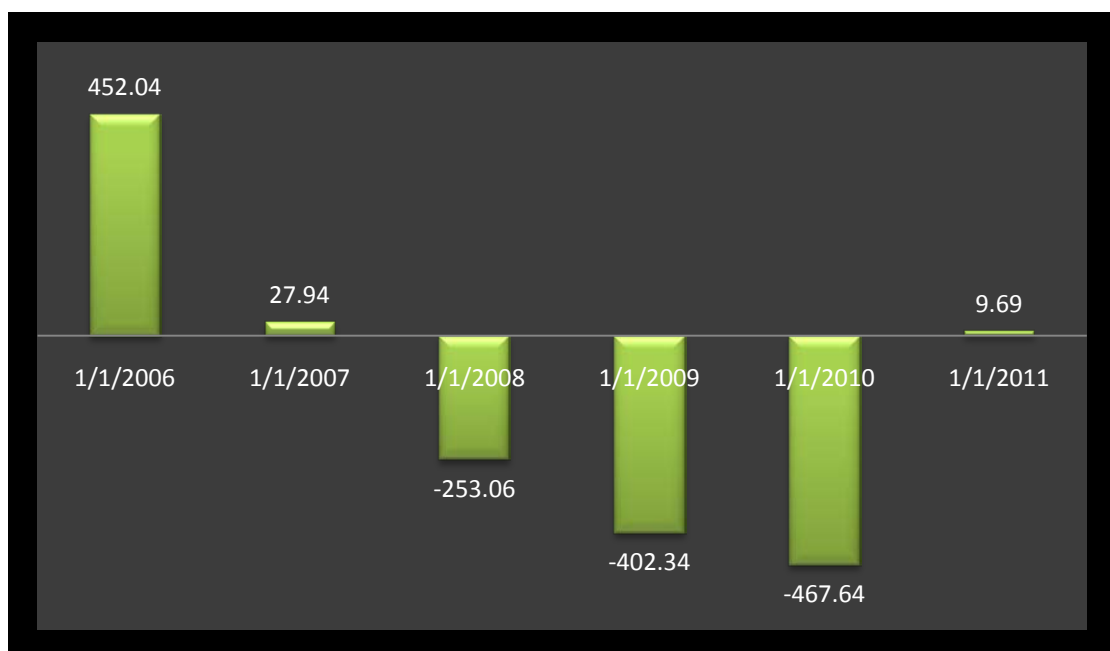
Source: Capitaline, 2012

Chart 1-26: Financial Overview of SpiceJet Ltd.



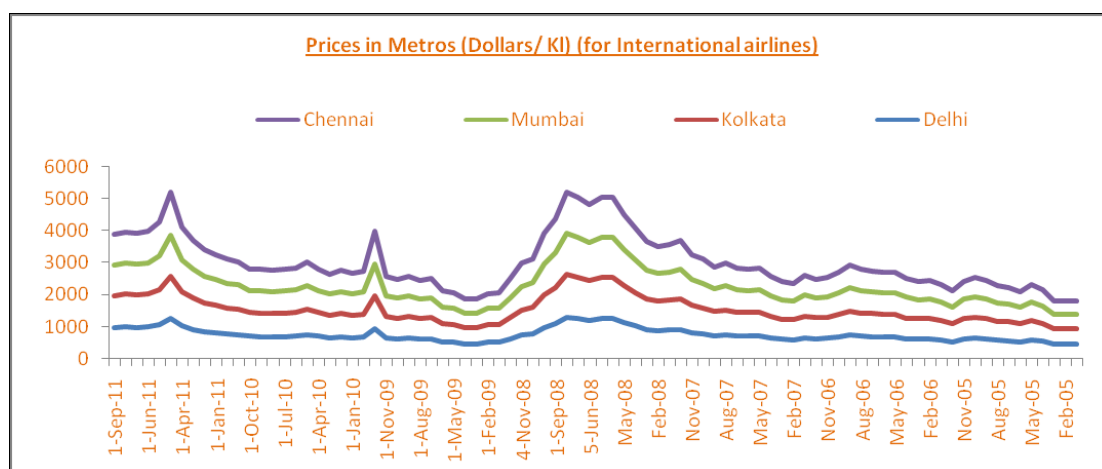
Source: Capitaline, 2012

Chart 1-27: Financial Overview of Jet Airways Ltd.



Source: Capitaline, 2012

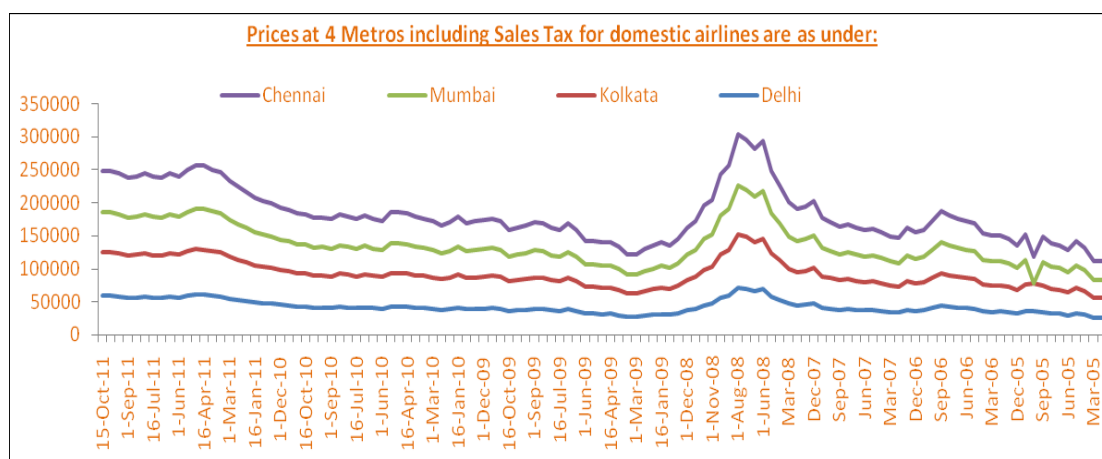
Chart 1-28: Prices in Metros for International Airlines



Source: Indian Oil, 2011

Chart 1-28 shows the trend in fuel prices in four metros of India namely; Mumbai, Delhi, Kolkata and Chennai. The trend reflects the rising fuel prices from 2005 till 2012. Also it is shown that in April 2011 and December 2009 there were sharp increase in fuel prices. Similarly Chart 1-29 shows the fuel prices in same metros including sales tax.

Chart 1-29: Prices in Metros for Domestic Airlines



Source: Indian Oil, 2011

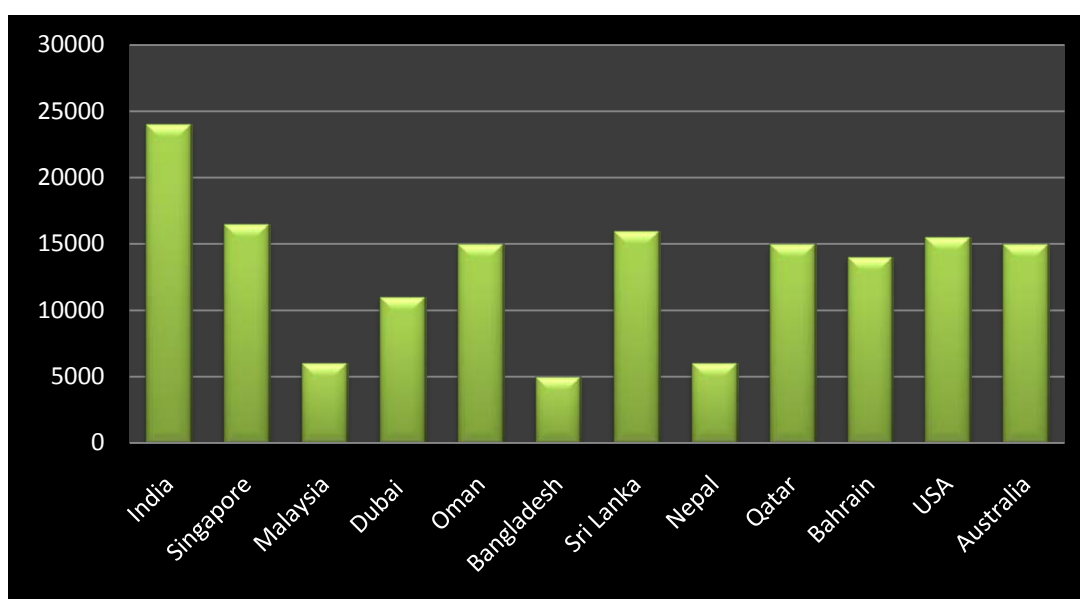
Table 1-5 shows the charges levied on airlines classifying to two main categories of Aeronautical and non-aeronautical revenues.

Table 1-5: Aeronautical vs. Non-Aeronautical Revenues of Airlines

Aeronautical or traffic revenues	Non-aeronautical or commercial revenues
Landing, Housing and Packing Charges	Rents or lease income (from airlines and other tenants)
Airport traffic control charges	Recharges to tenants (for electricity, water, cleaning etc)
Airport parking, hangerage and picketing	Concession income (from shops, catering, duty-free shops, banks, car parks, hotels etc)
Passenger charges	Direct sales (shops etc operated by air authority)
Freight charges	Car park revenue (if operated by airport authority)
Apron services and aircraft handling (if provided by airport authority)	Miscellaneous (e.g interest earned)
Route Navigation Facility Charges (RNFC)	Non airport related activities (e.g land Development)

Source: Airport Authority of India Limited, 2012

Chart 1-30: Airport Charges Levied in Various Countries

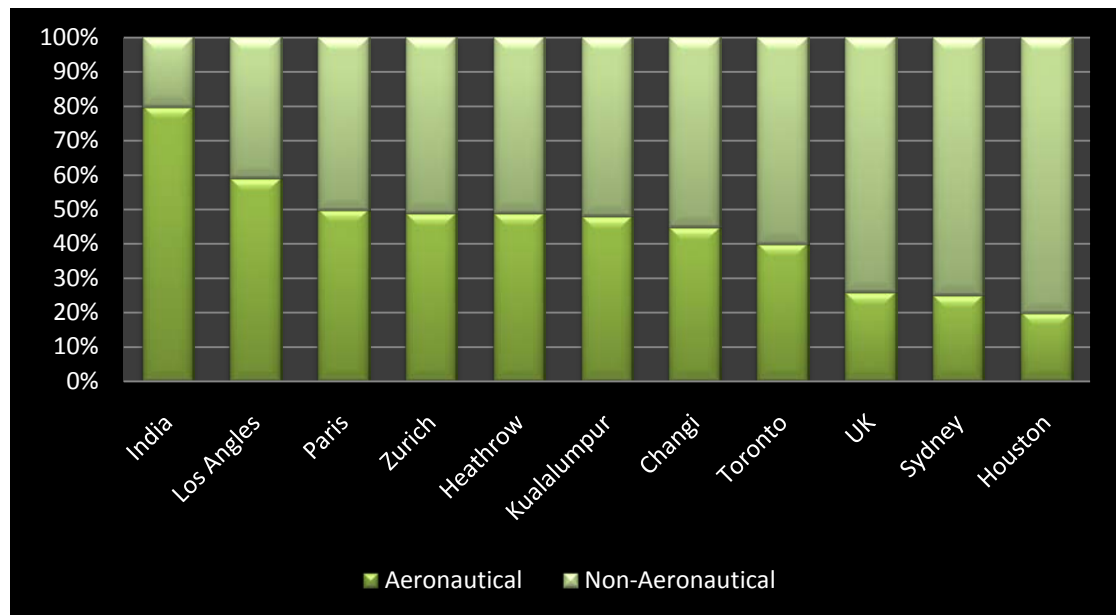


Source: Capitaline, 2011

The above Chart (1-30) shows the airport charges in various countries. And graph 1-31 illustrates the combined airport charges (landing charges, route navigation facility charges, terminal navigation landing charges) levied by airports in India vis-a-vis some of its international peers.



Chart 1-31: Share of Revenues in Different Countries



Source: Capitaline, 2011

Non-aeronautical revenue stream has not yet been fully explored by the Indian aviation sector. Internationally non aeronautical revenues contribute 50 to 70 percent of the total airport revenues, whereas in India these contribute to a mere 20 percent of total revenues. With the share of non-aeronautical revenue being very small, the airport operators are enforced to impose higher aeronautical related charges. Consequently, there is a need to look for avenues for non-aeronautical revenues that would provide a means to increase airport profitability (9).

### 1.11. Passenger Airlines of India

As of 30 October 2007 the total fleet size of commercial airlines in India was 439. In 1994 the Air Corporation Act of 1953 was repealed with a view to remove monopoly of air corporations on scheduled services, enable private airlines to operate scheduled service, convert Indian Airlines and Air India to limited company and enable private participation in the national carriers. However, beginning 1990 private airline companies were allowed to operate air taxi services, resulting in the establishment of Jet Airways and Air Sahara. These changes in the Indian aviation

policies resulted in the increase of the share of private airline operators in domestic passenger carriage to 68.5% in 2005 from 0.4 of 1991 (12).

In the recent past, Indian civil aviation sector has grown manifold. Several new players have entered the industry and many more are about to enter the arena. Apart from the state-owned airline, a number of private companies have entered the arena, thereby providing more choices to the passenger. Today, air travel is no more the monopoly of the rich and the mighty. With the arrival of cheap airline carriers in India, air traveling has become simpler and cheaper. Private players including Spice Jet, Jetlite, Indigo etc. are coming up with attractive rates for their passengers, thereby making civil aviation lucrative.

Now, airline has become a common man's vehicle and revolutionized the way a common Indian traveler used to travel. The airlines are adding more and more cities to their list of destinations covered throughout the country. Therefore, it can be said that the domestic airlines of India have made traveling easier for the masses. More and more people are opting for traveling by air, because they save a lot of time in traveling, as compared to other means of transportation. Here is a brief preview of domestic airlines in India. This includes private airlines as well as low cost airlines in India.

#### **1.11.1. Air India**

Air India is the flag carrier airline of India. It is part of the government of India owned Air India Limited (AIL). The airline operates a fleet of Airbus and Boeing aircraft serving Asia, Europe and North America. Its corporate office is located at the *Air India Building* at Nariman Point in South Mumbai. Air India has two major domestic hubs at Indira Gandhi International Airport and Chhatrapati Shivaji International Airport. An international hub at Dubai International Airport is currently being planned. Air India has the fourth largest share in India's domestic air travel market, behind Jet Airways, IndiGo and SpiceJet, as of May 2012. Following its merger with Indian Airlines, Air India has faced multiple problems, including escalating financial losses, discontent amongst employees, and poor customer service. Between September 2007 and May 2011, Air India's domestic

market share declined from 19.2% to 14%, primarily due to stiff competition from private Indian carriers. In August 2011, Air India's invitation to join Star Alliance was suspended due to its failure to meet the minimum standards for the membership. In October 2011, talks between the airline and Star Alliance have resumed. In April 2012, the Indian government granted another bailout package to Air India, including Rs300 billion (\$5.8 billion) of subsidies (12).

Currently, Air India offers a total of 610 weekly flights and 105,600 weekly seats from Delhi to 21 international destinations and 44 domestic destinations. The Hub at T-3 provides for a flawless integration of international and domestic operations so as to provide passengers with a seamless, integrated experience. The Hub operations at Delhi have given rise to about 3000 transfer passengers per day which include sixth freedom traffic generated notably between Bangkok/Kathmandu and Europe/UK (13).

#### **1.11.1.1. Air India Services**

##### **A) Premier Cubs:**

The flying returns program has four levels of membership viz. Base, the Silver Edge Club, The Golden Edge and the Maharajah Club. Currently the club memberships are open to members globally (13).

**1. Maharajah Club:** The Maharajah Club is an exclusive tier of discerning travelers, who enjoy range of special services from Air India. Maharajah members enjoy a host of benefits, including:

- 30% mileage point bonus over and above the normal accrual on AI designated flights.
- Excess baggage allowance of 20 Kgs. (over ticketed Free Baggage Allowance) on AI operated flights.
- 1 additional piece (up to 23kgs) additional free baggage allowed on India – USA/ Canada and VV and India-Japan and VV routes.
- Three upgrade vouchers at the time of invitation to the Club.
- Use of Lounge for self + 1 guest at select domestic and international airports traveling on AI designated flights

- Dedicated check-in counters at select airports.
- Priority Check In and Boarding.
- Priority delivery of baggage.
- Lifestyle privileges / tie-ups with non airline partners.
- Fixed cancellation/refund/rebooking fee will be Rs 200/- for tickets on all fare types issued on domestic sectors on AI flights

**2. Golden Edge Club:** The Golden edge Club is the second Flying return Program with the benefits including:

- 25 % mileage point bonus over and above the normal accrual on AI designated flights.
- Excess baggage allowance of 15 Kgs. (over ticketed Free Baggage Allowance) on AI operated flights.
- 1 additional piece (up to 23kgs) additional free baggage allowed on India – USA/ Canada and VV and India-Japan and VV routes.
- Two upgrade vouchers at the time of invitation to the Club.
- Use of Lounge at select domestic and international airports traveling on AI designated flights
- Dedicated check-in counters at select airports.
- Priority Check In and Boarding.
- Priority delivery of baggage.
- Lifestyle privileges / tie-ups with non airline partners.
- Fixed cancellation/refund/rebooking fee will be Rs 200/- for tickets on all fare types issued on domestic sectors on AI flights

**3. Sliver Edge Club:** the third program includes:

- 10% mileage point bonus over and above the normal accrual on AI designated flights.

- Excess baggage allowance of 10 Kgs. (over ticketed Free Baggage Allowance) on AI operated flights.
- 1 additional piece (up to 23kgs) additional free baggage allowed on India – USA/ Canada and VV and India-Japan and VV routes.
- Dedicated check-in counters at select airports.
- Priority Check In and Boarding.
- One upgrade voucher at the time of invitation to the Club.
- Priority delivery of baggage.
- Lifestyle privileges / tie-ups with non airline partners.

**B) Flying Returns Program:** Flying Returns Program is designed to recognize and reward frequent flyers of Air India. The benefits and privileges of Flying Returns include:

- Increased check in baggage allowance, tele- check-in, personalized check-in counters at select airports, priority for confirmation from waitlist, priority baggage handling, pooling of mileage points and wide array of special offers.
- Apart from earning and redeeming on Air India, members can also earn and redeem on our airline partners-Lufthansa German Airlines and Singapore Airlines.
- Members can accrue miles while traveling on select flights of Air India code share partner airlines.
- Members can transfer reward points from Air India non-airline partners to Flying Returns.
- Non-airline partners are American Express, Standard Chartered, HDFC Bank, Hong Kong Shanghai Banking Corporation, ITC Welcome Group, Emirates bank Group, Barclays Bank, SBI Cards, Citibank, Kotak Bank and ING Vysya Bank (13).

### 1.11.2. Go Air

GoAir is an Indian low-fare airline based in Mumbai, India. It operates domestic passenger services to 21 cities with 156 daily flights and approximately 1092 weekly flights. Its main base is Chhatrapati Shivaji International Airport, Mumbai. Go Airlines (India) Ltd. is the aviation foray of the Wadia Group. The airline operates its services under the brand GoAir. The airline uses Airbus A320 aircraft. Being a no-frills airline, GoAir does not offer a complimentary meal service to its passengers. However, it does offer a buy-on-board in-flight meal program. Café Coffee Day Snacks, sandwiches, parathas, cookies, nuts, soft drinks, Mineral water and other beverages are available on board. Passengers can buy these products by cash, credit card, or cheque. Other duty free products are also available on-board. GoAir has a premium service known as Go Business in which the passengers, at a higher fare, get seats in the first two rows of the aircraft. Perks include more space with the middle seat remaining empty, as well as free meals and an increased luggage allowance. GoAir also offers a frequent flyer service known as GoClub (12).

### 1.11.3. Indigo Airlines

IndiGo is a private, low-cost airline based in Gurgaon, Haryana, India. Since commencing operations in August 2006, it has established itself as one of India's leading airlines using its model of efficient, low-cost operations and by attracting customers with low fares. Based on market share, IndiGo is the second largest airline in India, only behind Jet Airways (14), and is the largest low cost carrier in India (15). As of March 2012 it is the only airline in India making profits. IndiGo has grown faster than any other low cost carrier in the world (16).

By early 2012, IndiGo had taken the delivery of its 50<sup>th</sup> aircraft in less than 6 years. IndiGo is known to have placed the largest order in commercial aviation history during 2011, when Airbus won the US\$ 15 billion deal for 180 aircraft. This deal pushed up the percentage of Airbus aircraft in India to 73% (17).

As of February 2012, IndiGo was expanding rapidly and was making solid profits, the only airline in India to do so. It had replaced Kingfisher as the second largest

airline in India in terms of market share. IndiGo's strong adherence to the low cost model, buying only one type of aircraft and keeping operational costs as low as possible along with heavy emphasis on punctuality are said to be some of the reasons for its success even when the airline industry in India is currently going through a bad patch. IndiGo focuses on adding a new plane every six weeks and sometimes even faster. However, this rapid expansion had led to a scathing report by the DGCA in December 2011, which highlighted problems in the airline which could impact safety due to rapid expansion (18).

SriLankan Engineering, a subsidiary of the Sri Lankan flag carrier SriLankan Airlines recently won the contract of performing heavy maintenance checks on 26 of the 50 Airbus A320-200 operated by IndiGo. SriLankan has been receiving contracts for the past 4 years to perform maintenance checks on IndiGo aircraft. IndiGo is believed to outsource its aircraft to SriLankan because of the unbearable tax imposed on the local MRO providers making them unfavorable when compared to the MRO providers in Sri Lanka (12).

#### **1.11.3.1. On Board Service**

Being a low-cost carrier, all of IndiGo's flights have no Business class or First class sections. It offers only Economy class seating. Snacks, meals and drinks (even mineral water) are available as a buy-on-board option. IndiGo's domestic flights allow only one piece of free check-in baggage per paying passenger, while they might charge for more. No in-flight entertainment systems are made available. There is an in-flight catalogue, *Hello 6E*, which provides information about various items which can be bought on board (12).

#### **1.11.3.2. Pricing**

IndiGo offers a simple fare scheme, such as charging one-way tickets half that of round-trips. Typically fares increase as the plane fills up, which rewards early reservations. The price policy of IndiGo is usually very dynamic, with discounts and tickets in promotion. Like other carriers, even if the advertised price may be very low, it often does not include charges & taxes. Perhaps as many (or as few) as ten percent of the seats on any flight are offered at the lowest price, are the first to sell. The prices

steadily rise thereafter to a point where they can be comparable to a flight on a full-service carrier (12).

#### 1.11.4. Jet Airways

Jet Airways is the largest Indian airline based out of Mumbai, Maharashtra. It operates over 400 flights daily to 76 destinations worldwide. Its main hub is Mumbai, with secondary hubs at Delhi, Kolkata, Chennai, Cochin, Ahmedabad, and Bengaluru. It has an international hub at Brussels Airport, Belgium. Jet Airways is owned by Naresh Goyal (12).

The following table shows the services offered by Jet Airways to 5 category of customers:

Table1-6: Jet Airways Loyalty Scheme

Jet Privilege tier benefits at a glance	Blue	Blue +	Silver	Gold	Platinum
<b>Promotional offer</b>					
Redeem JPMiles online at jetairways.com for an award travel (within India) - at a 20% discount on JPMiles redeemed	✓	✓	✓	✓	✓
<b>Before you travel</b>					
<b>Booking</b>					
<b>Bonus JP Miles for e-services - Online / IVR</b>					
Jet Airways e-booking services - 500 Bonus JP Miles	✓	✓	✓	✓	✓
JetKonnnect e-booking services - 250 Bonus JP Miles	✓	✓	✓	✓	✓
<b>Check-in</b>					
<b>Bonus JPMiles for Web / Kiosk / SMS Check-in</b>					
Jet Airways e-check-in services - 250 Bonus JPMiles	✓	✓	✓	✓	✓
JetKonnnect e-check-in services - 125 Bonus JPMiles	✓	✓	✓	✓	✓
<b>Tele Check-in</b>			✓	✓	✓
<b>Reservations and cancellations</b>					
Guaranteed reservations up to 24 hours prior to departure on a full-fare Economy ticket - Y / M class (9W code) and W / Y class (S2 code)				✓	✓
<b>Pre-reserve seat(s)</b> (331 days in advance and up to 48 hours prior to flight departure)					
International	✓	✓	✓	✓	✓
Within India for Jet Airways and JetKonnnect flights (9W code) booked at jetairways.com					✓



Cancellation fees waived on fares (flights within India)					✓
<b>At the airport</b>					
Check-in at Première counters			✓	✓	✓
Priority Stand-by at airport			✓	✓	✓
Priority Baggage Tagging				✓	✓
<b>Additional baggage allowance kg</b>					
Within India (not applicable on ATR flights)			10	15	20
				5	10
<b>International</b>					
To / from USA and Canada to / from any destination			23	23	23
To / from India to Europe and UK and Vice Versa			1 23	23	23
All other sectors			10	15	20
International (wherever applicable)				5	10
<b>Lounge Access within India (Self only)</b>					
Première	✓	✓	✓	✓	✓
Economy			✓	✓	✓
Economy				✓	✓
<b>Lounge Access International (Self only)</b>					
Première / First Class	✓	✓	✓	✓	✓
Economy				✓	✓
<b>Earning of JPMiles</b>					
Tier Points and Tier JPMiles on eligible classes	✓	✓	✓	✓	✓
100% Base JPMiles across all Economy revenue fare types on Jet Airways (except G class - 75%) and in Première and First Class	✓	✓	✓	✓	✓
75% Base JPMiles across all Economy revenue fare types (except G / V class - 50%) and 100% JPMiles in Première	✓	✓	✓	✓	✓
Cabin Bonus JPMiles	First Class %	100	100	100	125
	Première %	50	50	50	60
Tier Bonus JPMiles			10	20	30
Claim missing JPMiles online through jetairways.com	✓	✓	✓	✓	✓
Claim missing JPMiles by contacting the JetPrivilege Service Centre	✓	✓	✓	✓	✓
Purchase JPMiles (Rs. 1.25 per JPMile)	✓	✓	✓	✓	✓
<b>Redemption of JPMiles</b>					
<b>Eligibility criteria: on accumulating 3500 JPMiles and 2 activities</b>					
Online / Offline / Redeem at JetPrivilege Service centre / IVR / online request form*	✓	✓	✓	✓	✓
Transfer JPMiles (Rs. 200 per block of 500 JPMiles)	✓	✓	✓	✓	✓
JPMiles Upgrade	✓	✓	✓	✓	✓
Cash N Miles for Jet Airways and JetKonnnect for select flights within India booked at jetairways.com	✓	✓	✓	✓	✓

Cash Upgrade on award travel (within India)	✓	✓	✓	✓	✓
<b>Other Benefits</b>					
First flight bonus: 250 Bonus JPMiles	✓				
Blue Plus tier attainment bonus: 750 Bonus JPMiles		✓			
Non-expiry of JPMiles					✓
Upgrade vouchers**			1	3	5
JetPrivilege account updates - online / SMS	✓	✓	✓	✓	✓
Baggage Tags			2	2	2
<b>With Partners</b>					
Earn JPMiles on over 100 air and non-air programme partners	✓	✓	✓	✓	✓
Redeem at JetPrivilege Service Centre / request online (on accumulating 3500 JPMiles + 2 activities)	✓	✓	✓	✓	✓
Additional Baggage Allowance/Kg			10	15	20
Waiver of JACC Platinum annual fee (Valid for residents of India only)					✓

Source: Official Website of Jet Airways, 2012

#### 1.11.5. Kingfisher Airlines

Kingfisher Airlines Limited is an airline group based in India. Its head office is in Andheri (East), Mumbai and Registered Office in UB City, Bangalore. Kingfisher Airlines, through its parent company United Breweries Group, has a 50% stake in low-cost carrier Kingfisher Red. The airline has been facing financial issues for many years (19). Until December 2011, Kingfisher Airlines had the second largest share in India's domestic air travel market. However due to the severe financial crisis faced by the airline, it has the lowest market share currently (20).

In May 2009, Kingfisher Airlines carried more than 1 million passengers, giving it the highest market share among airlines in India. Kingfisher also won the Skytrax award for India's best airline of the year 2011. Kingfisher Airlines is also the sponsor of F1 racing outfit, Force India, which Vijay Mallya also owns (12).

### 1.11.5.1. Kingfisher Services

#### A) Domestic

##### 1. Kingfisher First

The domestic Kingfisher First seats have a 48 inch seat pitch and a 126 degree seat recline. There are laptop and mobile phone chargers on every seat. Passengers can avail of the latest international newspapers and magazines. There is also a steam ironing service on board Kingfisher First cabins. Every seat is equipped with a personalized IFE system with AVOD which offers a wide range of Hollywood and Bollywood movies, English and Hindi TV programs, 16 live TV channels and 10 channels of Kingfisher Radio. Passengers also get BOSE noise cancellation headphones. Domestic Kingfisher First is only available on selected Airbus A320 family aircraft.

##### 2. Kingfisher Class

The domestic Kingfisher Class has 32-34 inch seat pitch. Every seat is equipped with personal IFE systems with AVOD on-board the Airbus A320 family aircraft. As in Kingfisher First, passengers can access movies, English and Hindi TV programs, a few live TV channels powered by DishTV, and Kingfisher Radio. The screen is controlled by a controller-console on the seat armrest. Ear- cup headphones are provided free of cost to all passengers. The default channel shows, alternating every few seconds, the airplane's ground speed, outside temperature, altitude, distance and time to destination, the position of the aircraft on a graphical map, and one or more advertisements. Passengers are served meals on most flights. Before take-off, passengers are served bottled lemonade (12).

##### 3. Kingfisher Red

After Kingfisher Airlines acquired Air Deccan, its name was changed to Simplify Deccan and subsequently to Kingfisher Red. Kingfisher Red is Kingfisher Airline's low-cost class on domestic routes. A special edition of *Cine Blitz* magazine is the only reading material provided. Kingfisher Airlines is the first airline in India to extend its King Club frequent flyer program to its low-cost carrier as well. Passengers can earn King Miles even when they fly Kingfisher Red, which they can redeem for free tickets to travel on Kingfisher Airlines or partner airlines (12).

**B) International****1. Kingfisher First**

The international Kingfisher First has full flat-bed seats with a 180 degree recline, with a seat pitch of 78 inches, and a seat width of 20-24.54 inches.<sup>[31]</sup> Passengers are given Merino wool blankets, a Salvatore Ferragamo toiletry kit, a pajama to change into, five-course meals and alcoholic beverages. Also available are in-seat massagers, chargers and USB connectors. Every Kingfisher First seat has a 17 inch widescreen personal television with AVOD touch screen controls and offers 357 hours of programming content spread over 36 channels, including Hollywood and Bollywood movies along with 16 channels of live TV, so passengers can watch their favorite TV programs live. There is also a collection of interactive games, a jukebox with customizable playlists and Kingfisher Radio. Passengers are given BOSE noise cancellation headphones. The service on board the Kingfisher First cabins includes a social area comprising a full-fledged bar staffed with a bartender, a break-out seating area just nearby fitted with two couches and bar stools, a full-fledged chef on board the aircraft and any-time dining. A turn-down service includes the conversion of the seat into a fully flat bed and an air-hostess making the bed when the passenger is ready to sleep. Both Kingfisher First and Kingfisher classes feature mood lighting on the Airbus A330-200 with light schemes corresponding to the time of day and flight position (12).

**2. Kingfisher Class**

The international Kingfisher Class seats offer a seat pitch of 34 inches, a seat width of 18 inches and a seat recline of 25 degrees (6 inches). Passengers get full length modacrylic blankets, full size pillows and meals. Each Kingfisher Class seat has a 10.6 inch widescreen personal television with AVOD touch screen controls. The IFE is similar to that of the international Kingfisher First class. It can also be controlled by a detachable remote-control console fitted in the armrest. This device can be used to control the IFE, reading-lights, play games and even has a credit-card swipe for shopping on Kingfisher's 'Air Boutique'. It also has a facility for sending text-messages, though the service isn't provided by Kingfisher (12).

#### 1.11.5.2. In-flight Entertainment

Kingfisher's IFE system is the Thales TopSeries i3000/i4000 on-board the Airbus A320 family aircraft, and Thales TopSeries i5000 on-board the Airbus A330 family aircraft provided by the France-based Thales Group. Kingfisher was the first Indian airline to have in-flight entertainment (IFE) systems on every seat even on domestic flights. All passengers were given a "welcome kit" consisting of goodies such as a pen, facial tissue and headphones to use with the IFE system. Now, passengers of Kingfisher class are not given "welcome kits" but, as mentioned earlier, a complimentary bottle of lemonade and earphones for use with the IFE are still given. The inflight magazines are special editions of magazines owned by Mallya's media publishing house (VJM Media) viz. *Hi! Blitz* for domestic flights and *Hi! Living* for international flights. Initially, passengers were able to watch only recorded TV programming on the IFE system, but later an alliance was formed with Dish TV to provide live TV in-flight. And in a marked departure from tradition, Kingfisher Airlines decided to have an on-screen safety demonstration using the IFE system, however the conventional safety briefing by the flight attendants still exists on many flights (21).

#### 1.11.5.3. Kingfisher Club

The Frequent-flyer program of Kingfisher Airlines is called the *King Club* in which members earn *King Miles* every time they fly with Kingfisher or its partner airlines, hotels, car rental, finance and lifestyle businesses. There are four levels in the scheme: Red, Silver, Gold and Platinum levels. Members can redeem points for over a number of schemes. Platinum, Gold and Silver members enjoy access to the *Kingfisher Lounge*, priority check-in, excess baggage allowance, bonus miles, and 3 Kingfisher First upgrade vouchers for Gold membership. Platinum members get 5 upgrade vouchers (12).

#### 1.11.6. SpiceJet

SpiceJet is a low-cost airline headquartered in Chennai, India (22). It began service in May 2005 and by 2008, it was India's second-largest low-cost airline in terms of market share (23).

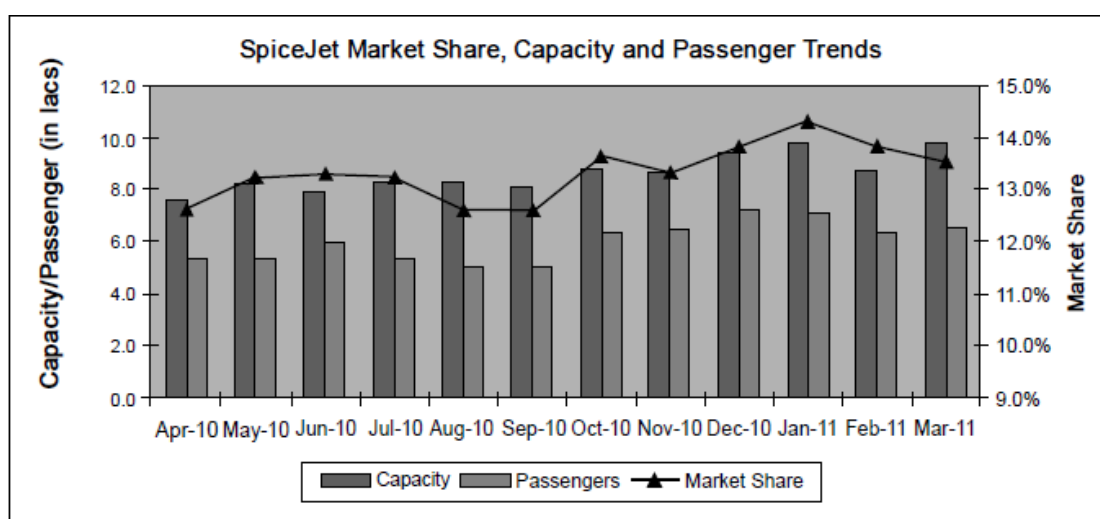
Table1-7: SpiceJet Revenue Trend

Year	Trend	Total Income
2000	—	₹5.37 million (US\$97,197)
2001	▲	₹16.32 million (US\$295,392)
2002	▲	₹37.6 million (US\$680,560)
2003	▼	₹16.08 million (US\$291,048)
2004	▲	₹41.46 million (US\$750,426)
2005	▼	₹38.7 million (US\$700,470)
2006	▲	₹4,531.47 million (US\$82.02 million)
2007	▲	₹7,482.79 million (US\$135.44 million)
2008	▲	₹14,385.79 million (US\$260.38 million)
2009	▲	₹18,819.79 million (US\$340.64 million)
2010	▲	₹22,420.91 million (US\$405.82 million)
2011	▲	₹29,606.04 million (US\$535.87 million)

Source: SpiceJet Annual Reports

SpiceJet increased its market share during FY2010-11 to 13.4% from 12.4% in the previous financial year and touched a historic high of 14.3% during January 2011 (24). Continuing the trend from the previous fiscal, the only market-share gainers in the domestic market were the Low Cost Airlines including SpiceJet gained 1.0 point to reach an annual market share of 13.4% (24). The following graph shows the passenger trend, capacity and SpiceJet Market share changes till 2011, according to annual report of SpiceJet.

Chart 1-32: SpiceJet Capacity-Passenger Trend



Source: DGCA Traffic Data, in SpiceJet Annual Report, 2011

#### **1.11.6.1. Service Improvement**

At SpiceJet, the customer continues to be the core of the business and all attempts were made to ensure the highest level of customer satisfaction. Based on customer feedback, SpiceJet implemented the following in 2010 (23):

- New menu comprising of hot Indian delicacies
- Pre-ordering refreshment at the time of booking at a discount
- Revamped in-flight magazine
- SpiceJet Privilege Pass program wherein passengers could use the SpiceJet boarding pass and gain great value offerings from hotels, online retail, insurance and wellness partners.
- Roving check-in facility at airports
- In-flight music while boarding and deplaning composed in-house
- Gift bags for kids on board.

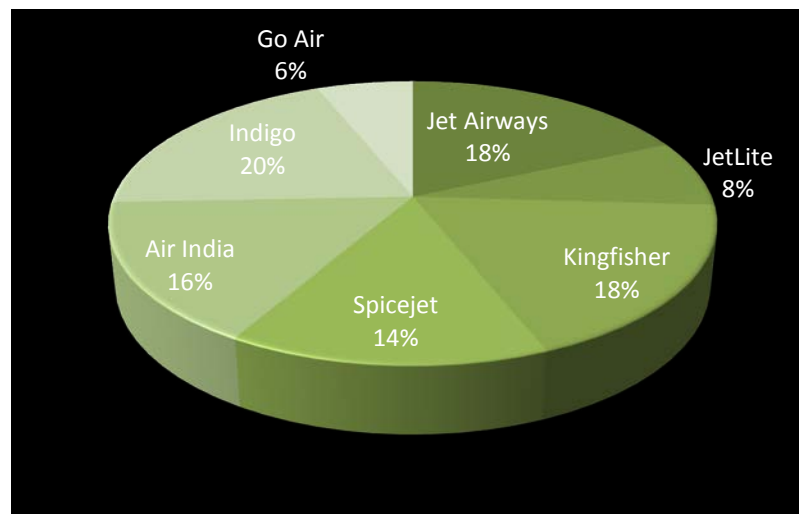
### **1.12. Domestic Air Traffic Trends and Analysis in India**

#### **1.12.1. In the year 2011**

India's domestic air passenger growth slowed to 8% in Dec-2011 to less than half the pace of growth experienced in calendar 2011 and down from the 17-22% growth rates seen between Jun-2011 and Oct-2011. While passenger numbers in India's domestic market have seen growth now for 31 consecutive months, the result for Dec-2011 marks the end of 16 consecutive months of double-digit growth. This single-digit growth in the peak month of Dec-2011 (to 5.63 million passengers) is a sign that slowing economic growth is affecting air travel and reflects impending capacity caution by some of the nation's largest players (25).

India's domestic passenger numbers increased 16.6% to 60.7 million passengers in 2011, averaging out at 5.1 million passengers per month, and up 74% from 2006 levels. The largest stand-alone carrier was IndiGo with a 19.5% market share, with IndiGo also the fastest growing carrier in 2011. Behind IndiGo, Jet Airways was the second largest carrier in the domestic market in 2011, with an 18.3% market share, followed by Kingfisher Airlines (18%) and Air India (16%), with JetLite (7.6%) and GoAir (6.1%) the smallest carriers in the market with single-digit market share (25).

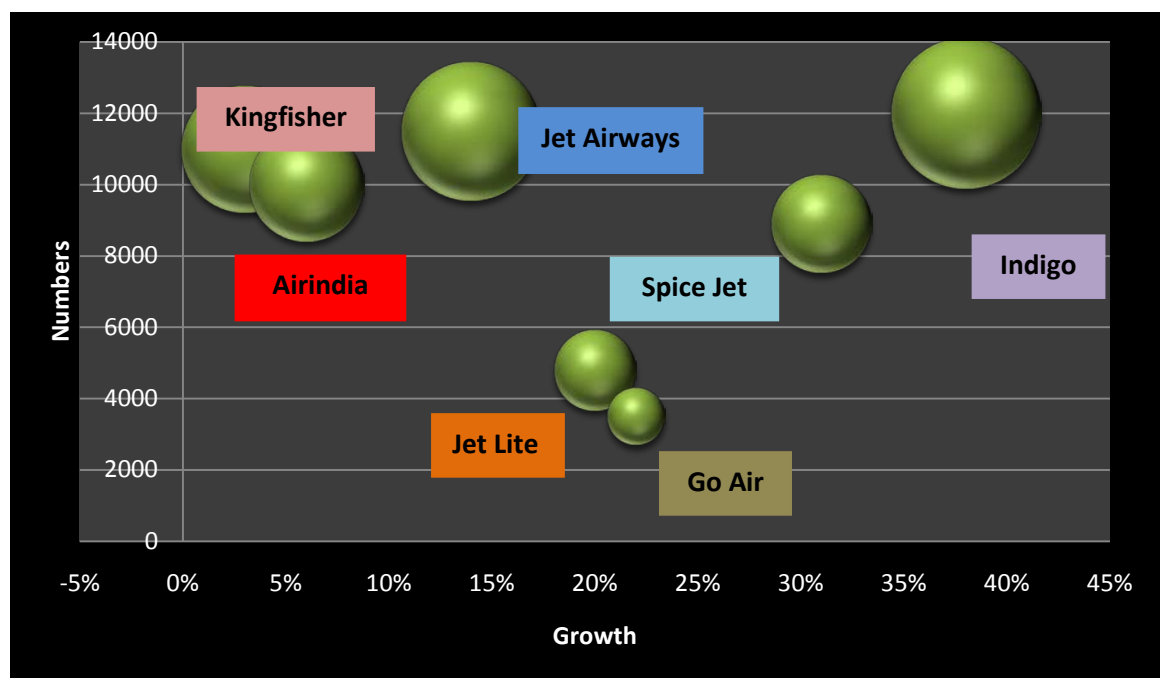
Chart 1-33: Indian Domestic Airlines' Market Share in 2011



Source: CAPA – Centre for Aviation & Indian DGCA

Passenger growth was clearly driven by the LCC segment in 2011, led by IndiGo, although all the carriers in the domestic market reported growth in 2011. At the other end of the spectrum, Kingfisher Airlines was the slowest growing carrier, with Air India also reporting single-digit growth across the 12-month period and Jet Airways reporting growth of below 15 %.( See Chart 1-34).

Chart 1-34: Indian Domestic Passenger Numbers and Growth by Carrier: 2011



Source: CAPA; Centre for Aviation & Indian DGCA



### 1.12.2. In the year 2010

According to Aviation Center of Excellence (ACEXC), 29.87 million domestic passengers carried in the first seven months of 2010, registering 20.7% growth. Passengers carried by domestic airlines from January-July, 2010 were 29.871 million as against 24.748 million in the corresponding period of year 2009 thereby registering a growth of 20.7%. The total domestic passengers carried by the Scheduled Airlines of India in the second quarter of 2010 – April to June 2010 - was 13.477 million against 11.853 million carried in the first quarter of 2010 January – March 2010. The total domestic passengers carried by the Scheduled Airlines of India in the month of July, 2010 were 4.084 million against 4.504 million in June 2009.

Table 1-8: Comparison of 2010 and 2009 Domestic Passengers

Domestic Passengers Carried (mln)	
January -July	
2010	2009
29.871	24.748

Source: ACEXC, 2010

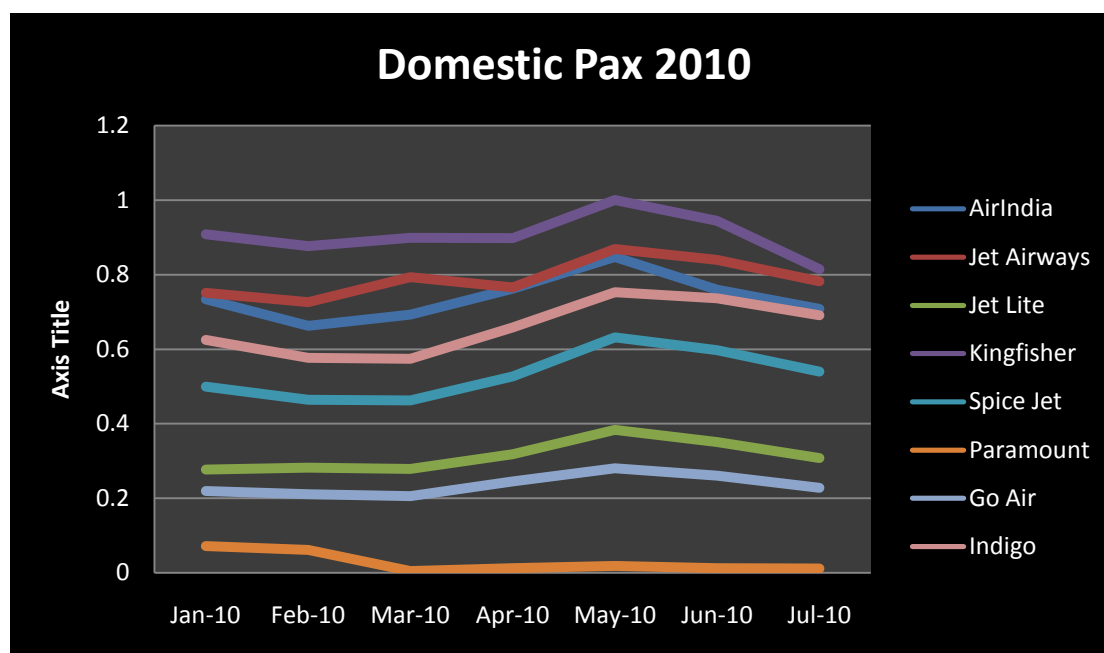
Table 1-9: Airline-Wise Break of Scheduled Domestic Pax Carried

Airline-wise break of Scheduled Domestic Pax carried							
	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	July-10
<b>AirIndia</b>	0.734	0.663	0.693	0.762	0.847	0.76	0.708
<b>Jet Airways</b>	0.751	0.726	0.793	0.766	0.869	0.84	0.782
<b>Jet Lite</b>	0.277	0.282	0.279	0.318	0.384	0.351	0.308
<b>Kingfisher</b>	0.908	0.877	0.899	0.898	1.000	0.944	0.815
<b>Spice Jet</b>	0.500	0.465	0.463	0.527	0.632	0.598	0.540
<b>Paramount</b>	0.072	0.062	0.005	0.013	0.019	0.013	0.012
<b>Go Air</b>	0.220	0.211	0.206	0.246	0.281	0.261	0.228
<b>IndiGo</b>	0.625	0.577	0.574	0.658	0.753	0.737	0.691
<b>Total mln</b>	4.087	3.863	3.957	4.188	4.188	4.785	4.084

Source: ACEXC, 2010

Table 1-9 shows the airline-wise break of domestic passengers carried in 2010 and according to this data in seven months of 2010; Kingfisher has carried the highest number of passengers. (See Chart 1-35).

Chart 1-35: Airline-Wise Break of Domestic Pax Carried in 2010



Source: ACEXC, 2011

The following table reflects the airline-wise break of passengers carried in 2009 and 2010 with growth rate in percentage.

Table1-10: Domestic Scheduled Air Traffic: July (2010 versus 2009)

Figs in mln	Airline-wise break of Dom Pax carried		
	July-10	July-09	% Y-O-Y Growth
<b>Air India</b>	0.708	0.582	21.65
<b>Jet Airways</b>	0.782	0.681	14.83
<b>Jet Lite</b>	0.308	0.266	15.79
<b>Kingfisher</b>	0.815	0.829	-1.69
<b>Spice Jet</b>	0.540	0.447	20.81
<b>Paramount</b>	0.012	0.074	-83.78
<b>Go Air</b>	0.228	0.201	13.43
<b>IndiGo</b>	0.691	0.505	36.88
<b>Total mln</b>	<b>4.084</b>	<b>3.600</b>	<b>13.44</b>

Source: ACEXC, 2011

The below table shows the market share of the domestic airlines with reference to July, 2010 and July 2009 comparison, and second quarter of 2010.

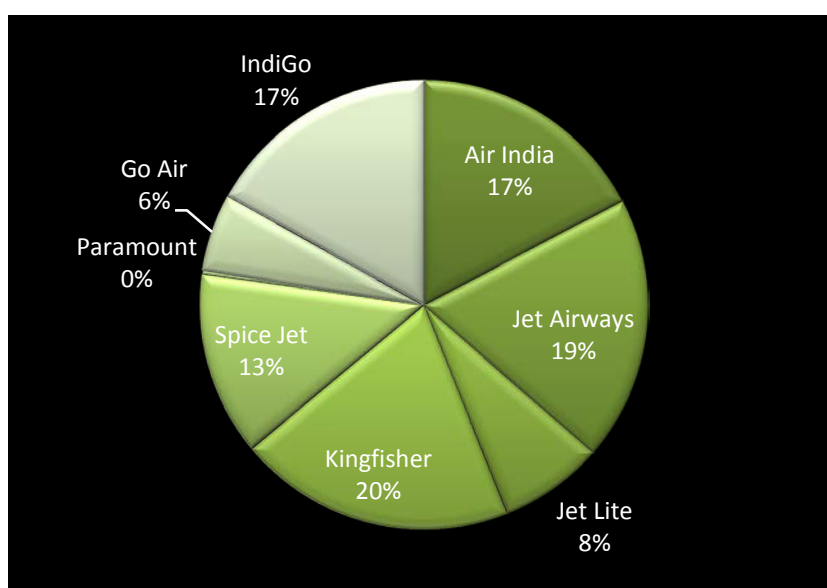
Table1-11: Airline-Wise Break up of Market Share (%)

<b>Airline-wise break up of Market Share (%): July (2010 vs 2009) and Q2 2010</b>			
<b>%</b>	<b>July-10</b>	<b>July-09</b>	<b>Q2-2010</b>
<b>Air India</b>	17.3	16.2	17.6
<b>Jet Airways</b>	19.1	18.9	18.4
<b>Jet Lite</b>	7.5	7.4	7.8
<b>Kingfisher</b>	20.0	23.0	21.1
<b>Spice Jet</b>	13.2	12.5	13
<b>Paramount</b>	0.3	2.0	0.3
<b>Go Air</b>	5.6	2.0	5.8
<b>IndiGo</b>	16.9	13.60	15.9

Source: ACEXC, 2011

Chart 1-36 shows 2010 market share of domestic airlines in India as 20% for Kingfisher, 19% for Jet Airways, 17% for Air India, 17% for Indigo, 13% for SpiceJet, and 6% for Go Air.

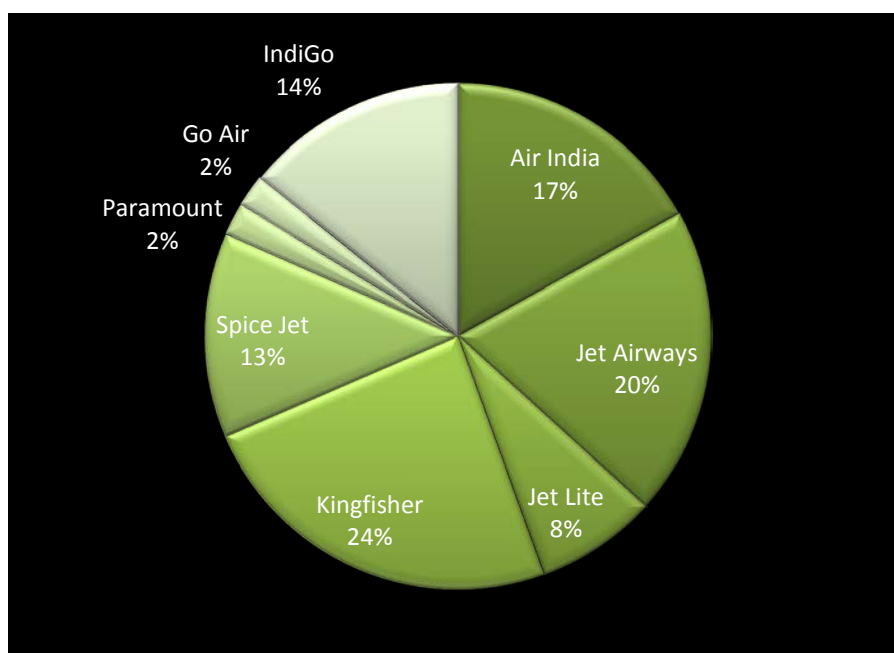
Chart 1-36: Airline-Wise Break of Market Share % in July 2010



Source: ACEXC, 2011

Similarly, graph 1-37 reflects the market share of domestic airlines in India in the year 2009 with 24% Kingfisher, 20% Jet Airways, 8% JetLite, 17% Air India, 14% IndiGo, 13% Spice Jet, 2 % Paramount same as Go Air.

Chart 1-37: Airline-Wise Break of Market Share % in July 2009



Source: ACEXC, 2011

Table 1-12 shows the seat factor airline-wise in 2010 and on average IndiGo has highest percentage.

Table1-12: Airline-Wise Break up of Seat Factors

Airline-wise break up of seat factors in seven months of 2010							
Figs in mln	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10
<b>Air India</b>	73.6	72.0	66.5	72.9	77.8	72.3	62.5
<b>Jet Airways</b>	73.7	75.0	70.3	74.2	82.5	80.5	73.8
<b>Jet Lite</b>	74.9	79.5	72.9	78.1	85.4	83.6	76.8
<b>Kingfisher</b>	76.4	75.9	70.1	75.8	83.2	85.1	79.3
<b>Spice Jet</b>	82.1	81.3	73.5	81.0	90.4	88.5	13.2
<b>Paramount</b>	87.8	85.2	84.7	85.5	86.6	86.8	86.9
<b>Go Air</b>	77.1	78.0	70.0	78.0	86.0	84.0	71.3
<b>IndiGo</b>	83.2	83.0	74.0	82.0	92.3	90.7	80.2

Source: ACEXC, 2011

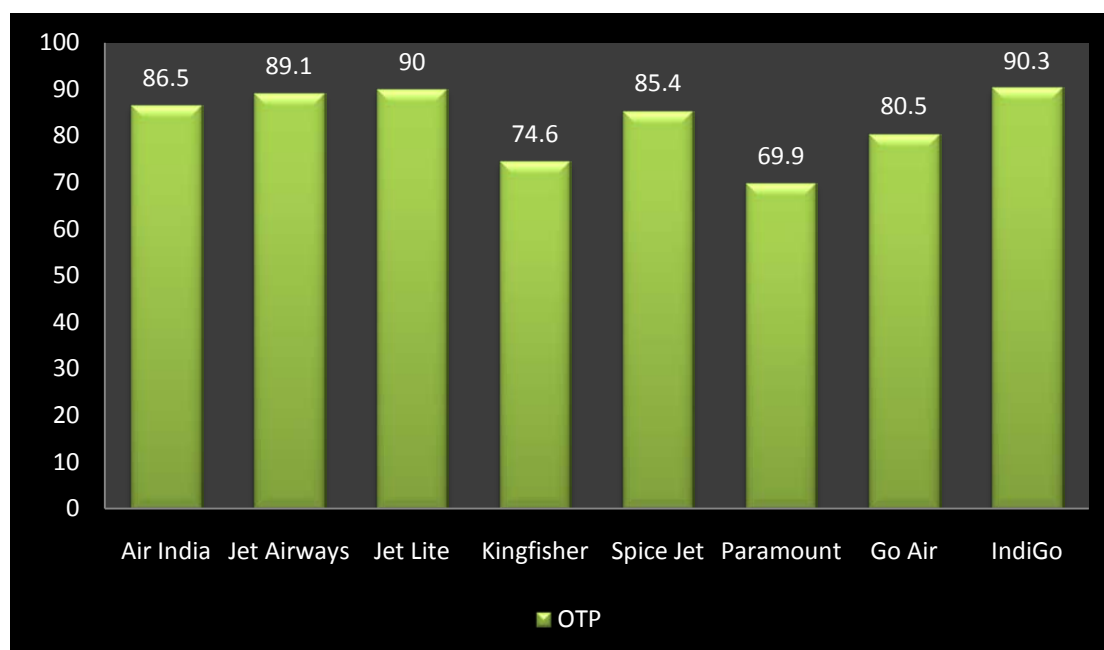
The overall On-Time Performance (OTP) of scheduled domestic airlines for 2010 has been 82.7%. The following table and graph demonstrate the figures for the year 2010.

Table 1-13: On-Time Performance

On-time Performance		
Airline	% of Total	OTP %
Air India	23.8	86.5
Jet Airways	20.4	89.1
Jet Lite	7.1	90.0
Kingfisher	22.1	74.6
Spice Jet	12.4	85.4
Paramount	9.6	69.9
Go Air	4.2	80.5
IndiGo	0.5	90.3

Source: ACEX, 2011

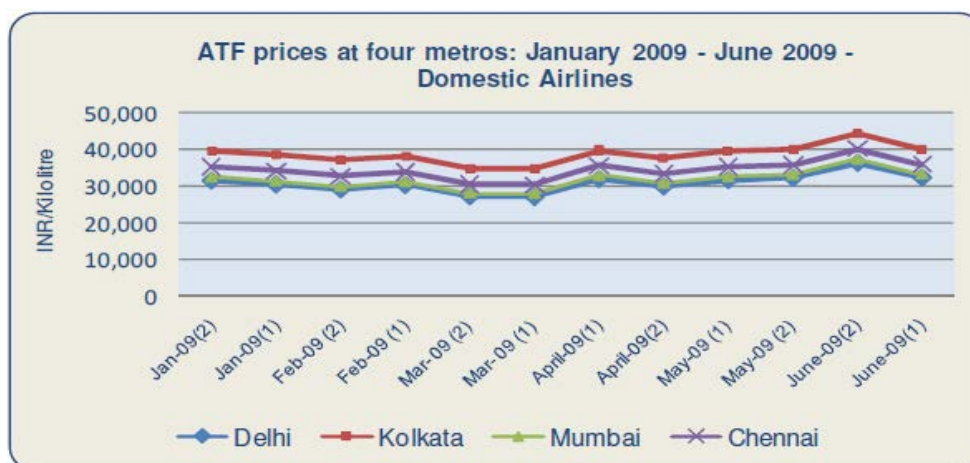
Chart 1-38: OTP, Domestic Airlines in 2010



Source: ACEX, 2011

Further more analysis of ATF prices reveals 50% increase in ATF fuel price from January 2009 to January 2011. The following graph shows the six months trend of ATF price at four metros regarding domestic airlines comparing 2010 vs.2009.

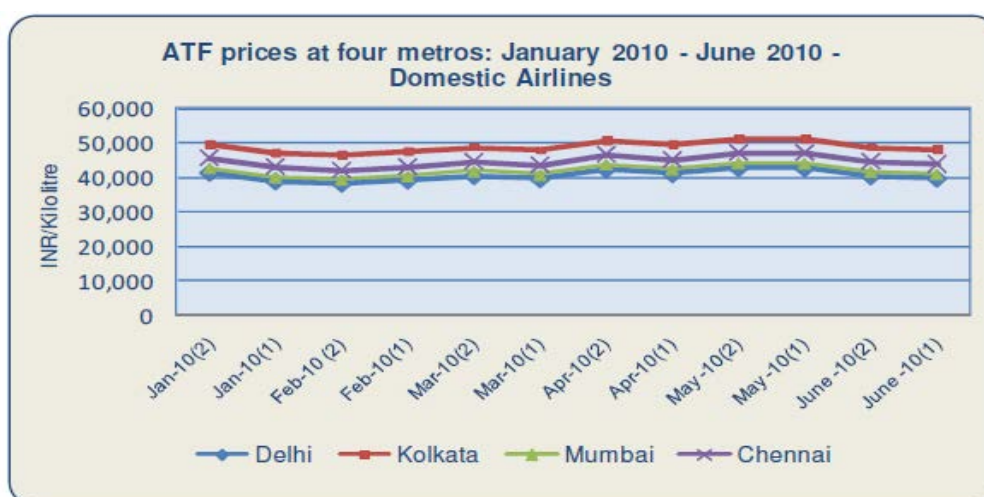
Chart 1-39: ATF Prices at Four Metros



Source: ACEX, 2011

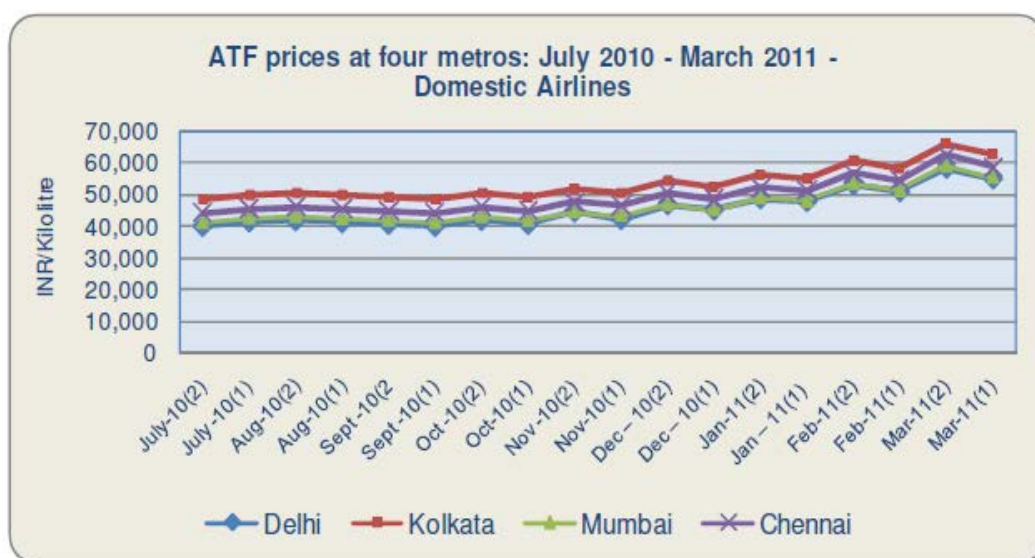
There is 30% y-o-y increase in ATF fuel prices from January 2009 to January 2010 and also 16% y-o-y increase in ATF fuel process from January 2010 to January 2011.

Chart 1-40: ATF Prices at Four Metros Jan 2010-June 2010



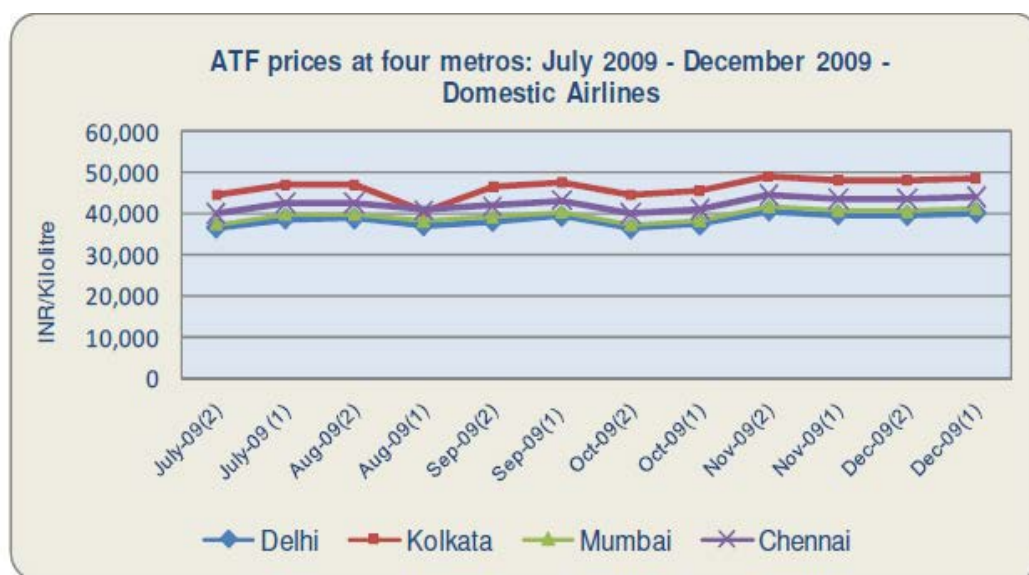
Source: ACEXC, 2011

Chart 1-41: Six Months Trend 2010 vs. 2009 and First Three Months of 2011



Source: ACEXC, 2011

Chart 1-42: ATF Prices at Four Metros, July 2009-Dec 2009



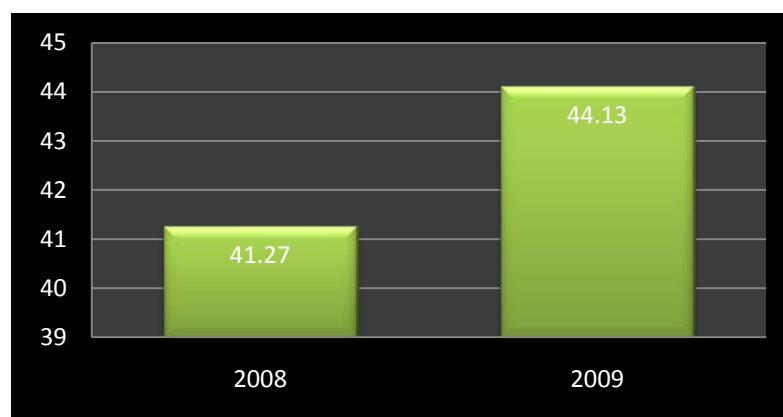
Source: ACEX, 2011

It can be concluded that there was 41% y-o-y increase in ATF fuel prices from July 2010 to March 2010.

### 1.12.3. In the year 2009

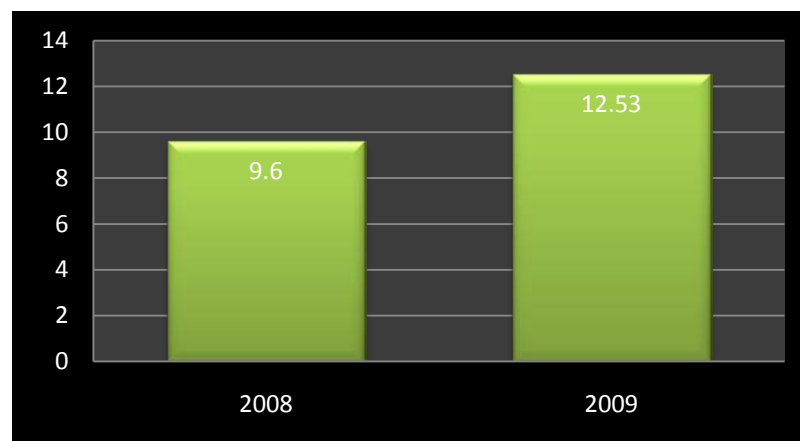
The total passengers flown by the domestic carriers in 2009 were 44.51 million compared to 41.27 million in the last year, recording a 7.9% increase, the Ministry of Civil Aviation reported yesterday. India's airlines flew 43.85 million passengers on domestic routes in 2009. Domestic air traffic witness strong growth trends in December 2009, with 30.5% increase in passenger traffic in 2008. Q4 2009 over Q4 2008 displayed strong passenger growth trends with 30.5% increase flying about 12.5 million passengers. December 2009 over December 2008 was also strong with 34.80% increase in domestic passenger traffic growth (See the Chart 1-43).

Chart 1-43 : Total Domestic Pax(in mln), 2008-2009



Source: ACEXC,2011

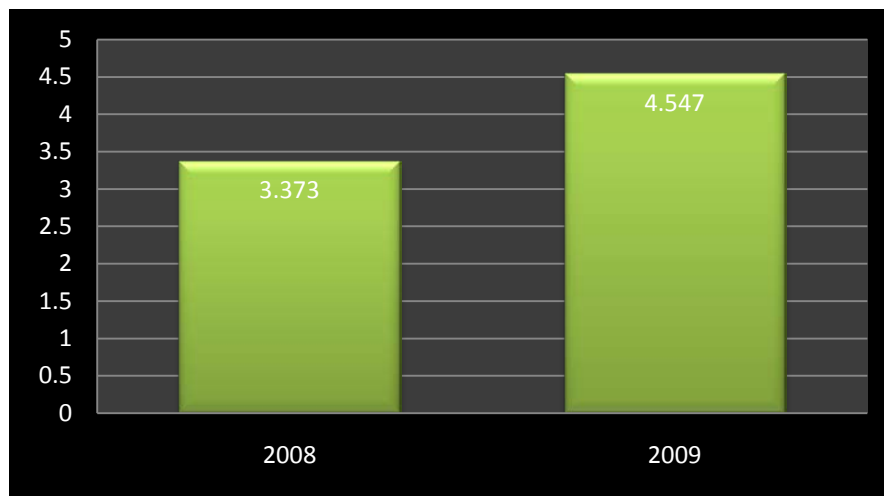
Chart 1-44: Domestic Pax(in mln) in 4<sup>th</sup> Q, 2008-2009



Source: ACEXC,2011



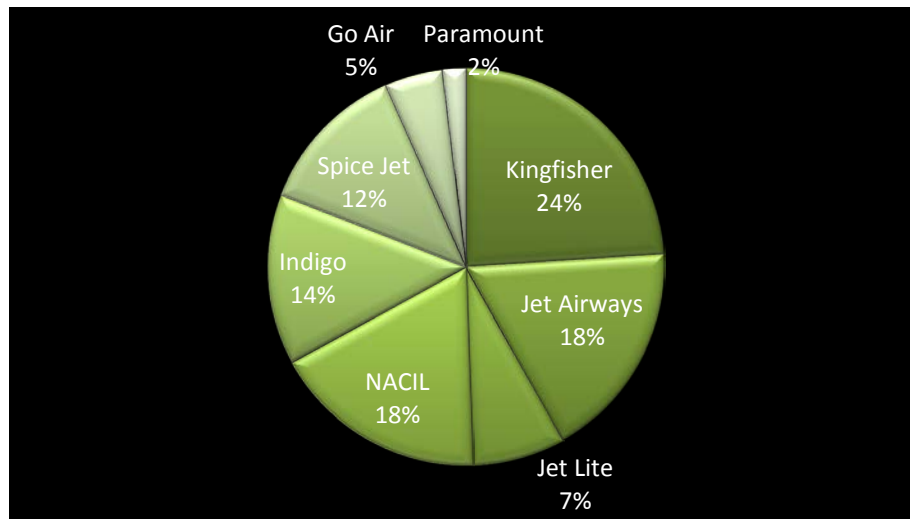
Chart 1-45: Domestic Pax (in mln), December 2008vs. December 2009



Source: ACEXC,2011

Comparison of passenger carried in 2009 vs. 2008 is reflected in above graph, showing increase in number of passengers from terrible year of 2008.

Chart 1-46:Airline-Wise Market Share in the Year 2009



Source: ACEXC,2011

In 2009, the market share data reflects 24% for Kingfisher, 18% for Jet Airways, 18% for NACIL, 12% for Spice Jet, 14 % for Indigo, 5% for Go Air, 7 % for Jet Lite and finally 2 % fro Paramount airlines.

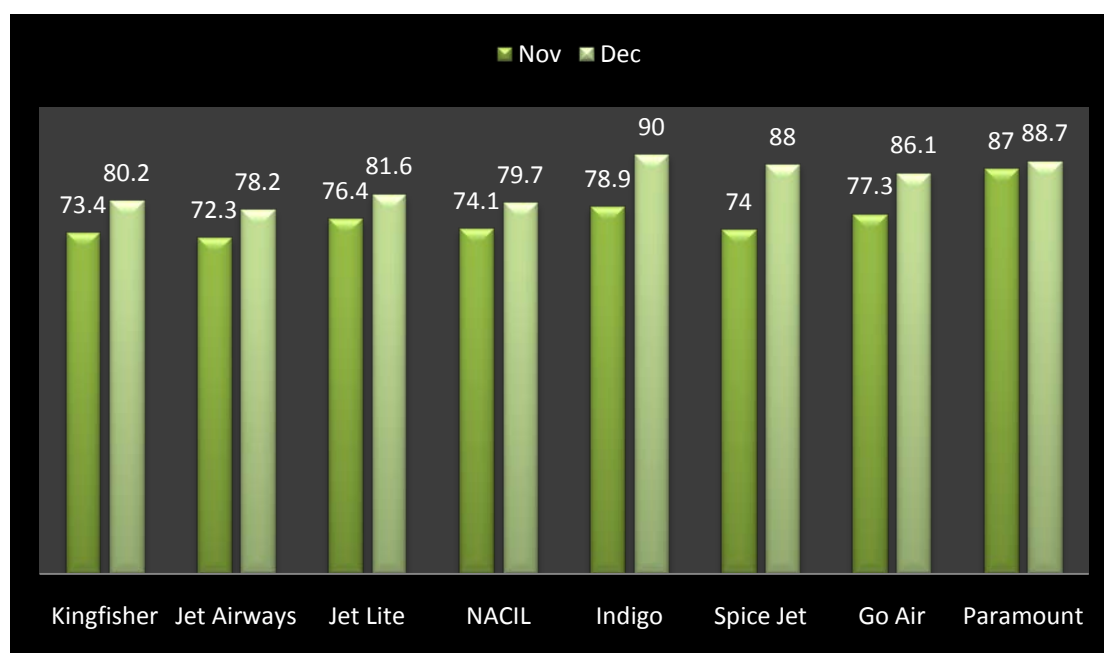
The following table shows the seat factor percentages for domestic airlines in Dec & Nov 2009.

Table 1-14: Seat Factor in 2009

Seat Factor (%)	Nov-09	Dec-09
Kingfisher	73.4	80.2
Jet Airways	72.3	78.2
Jet Lite	76.4	81.6
NACIL	74.1	79.7
Indigo	78.9	90.0
Spice Jet	74.0	88.0
Go Air	77.3	86.1
Paramount	87.0	88.7

Source: ACEXC,2011

Chart 1-47: Demonstration of Seat Factor in Two Last Months of 2009



Source: ACEXC,2011

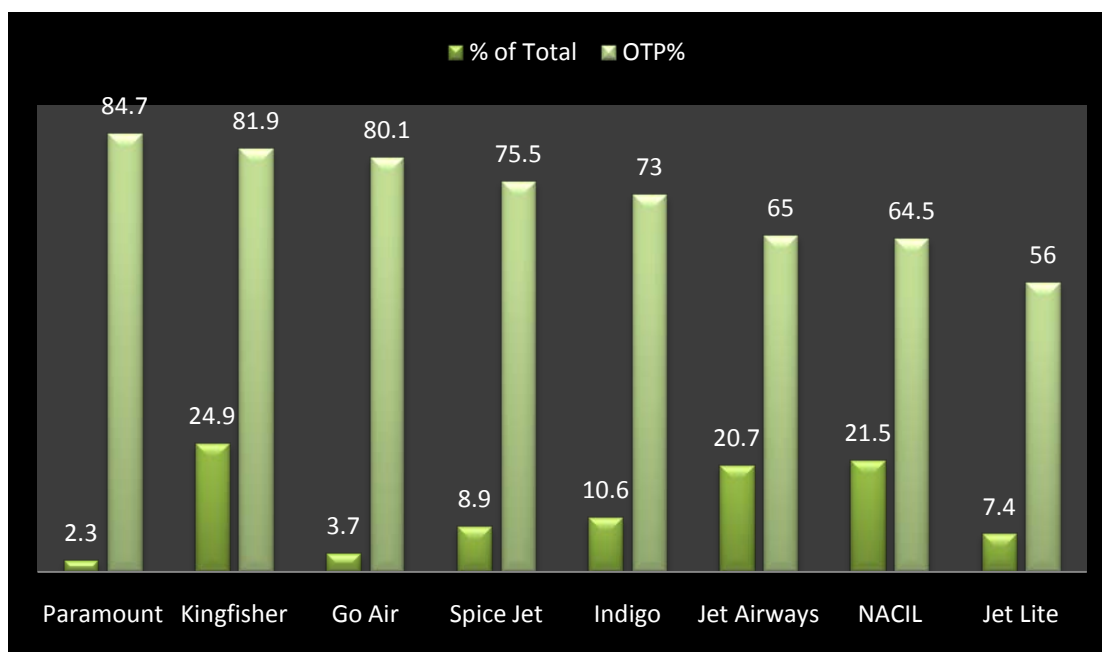
Table 1-15 shows the on-time performance of all domestic airlines in 2009. As reflected Paramount has 84.7% of OTP and Kingfisher has 81.9%.

Table1-15: On-Time Performance of Domestic Airlines in 2009

<b>On-time Performance in 2009</b>		
<b>Airline</b>	<b>% of Total</b>	<b>OTP %</b>
<b>Kingfisher</b>	24.9	81.9
<b>Jet Airways</b>	20.7	65
<b>Jet Lite</b>	7.4	56
<b>NACIL</b>	21.5	64.5
<b>Indigo</b>	10.6	73
<b>Spice Jet</b>	8.9	75.5
<b>Go Air</b>	3.7	80.1
<b>Paramount</b>	2.3	84.7

Source: ACEXC,2011

Chart 1-48: On-time Performance of Domestic Airlines in 2009



Source: ACEXC,2011

#### 1.12.4. In the year 2008

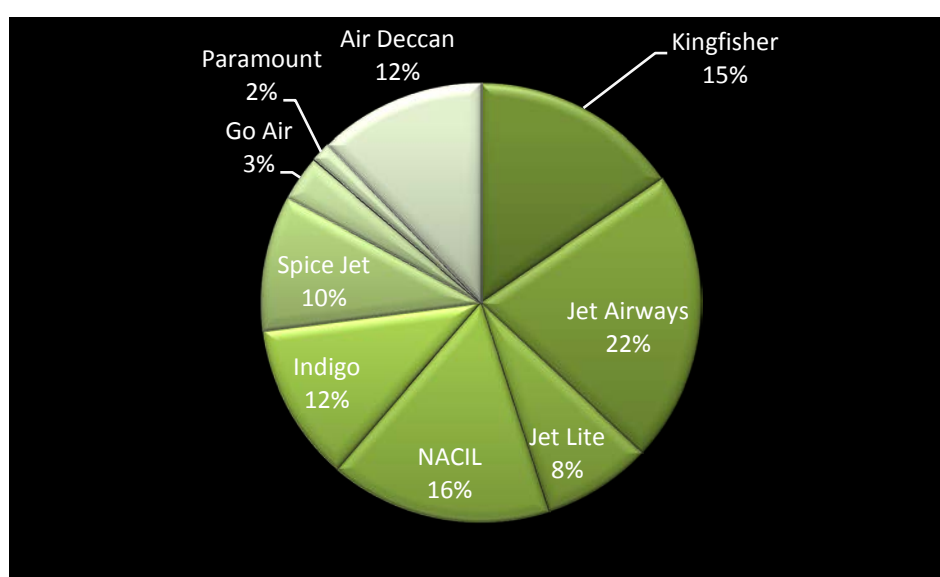
Table 1-16: Domestic Market Share in 2008

Airline –Wise break of Market Share in 2008	
Airline	% of Total
Kingfisher	15.4
Jet Airways	21.5
Jet Lite	8.0
NACIL	16.3
Indigo	11.6
Spice Jet	10.0
Go Air	3.3
Paramount	1.5
Air Deccan	12.2

Source: IATA, 2010

Chart 1-49 illustrates the market share of domestic airlines of India in 2008. Jet Airways with 21.5 % of market share stands as highest, followed by NACIL with 16.3% of the market share.

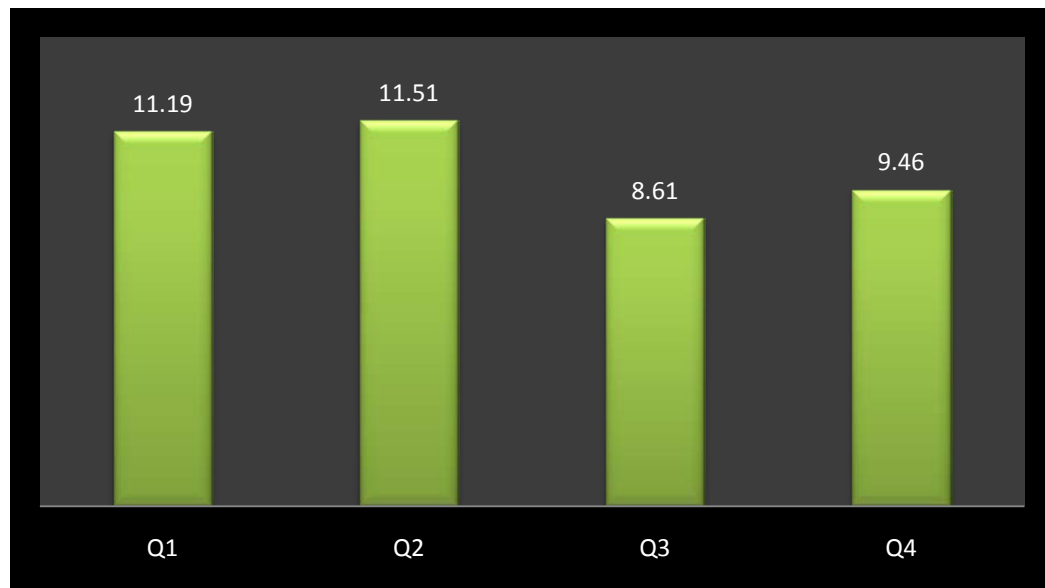
Chart 1-49: Domestic Market Share in 2008



Source: IATA, 2010

Chart 1-50 shows the market share of domestic airlines in 2008. And graph shows the total domestic passengers in 2008 separately in each quarter.

Chart 1-50: Total Number of Passengers Carried by Domestic Airlines in 4 Quarters of 2008 (in Millions)



Source; ACEXC, 2011

#### 1.12.5. Before 2008

The Industry continued to witness strong growths despite rising Aviation Turbine Fuel (ATF) prices, infrastructure bottlenecks, shortage of pilots and qualified manpower. Indian carriers continued placing sizeable aircraft orders and expanded their domestic and international networks. The first non-stop flights to the US by Air India and the first international flights to US and Canada by Jet Airways were a welcome connectivity to both the national traveler as well as the large Indian diasporas in North America. Carriers remained optimistic to turn profitable, with increased operational efficiencies, cost management and, for some, synergies that would be derived through consolidation. For the first 7 months of the fiscal year 2007-08, April - October 2007, the overall passenger traffic stood at 65.57 million, with Domestic at 49.35 million and International at 16.22 million respectively. The total cargo traffic recorded 989 thousand tones, with Domestic at 325 thousand tones

and International at 664 thousand tones in the same period. The total aircraft movement numbers were 736,703 with Domestic at 599,346 and International at 137,357 during the same period (43).

#### **1.12.5.1. Mergers in 2007**

The year marked three major mergers in Indian aviation history:

- Air India, the national carrier, and Indian (formerly Indian Airlines), the state owned domestic carrier, creating a unified, public-owned entity under the name National Aviation Company Ltd (NACIL).
- Private carriers: Jet airways and Air Sahara  
Jet Airways bought over its smaller rival, Air Sahara, for Indian Rupees 14.50 billion (\$363m), at a discount of 34% from the earlier agreed price of Indian Rupees 22.00 billion, after clearance by a three-member arbitration panel, ending months of animosity and legal dispute. Air Sahara was renamed to Jet Lite.
- Deccan, India's first low cost carrier, with Kingfisher airlines, the high profile airline promoted by the liquor baron, Vijay Mallya Kingfisher Airlines (a company of parent United Breweries Holdings Ltd) acquired 26% of Air Deccan parent, Deccan Aviation Ltd, and subsequently made an offer to acquire an additional 20% of Deccan priced at the same price of Indian Rupees 155 (\$3.82) per share. The combined fleet of 71 aircraft consisting of A320 family and ATR aircraft will operate 537 flights to 69 Indian cities (ACEXC, 2008).

#### **1.12.5.2. International Airlines**

Recognizing the potential of the Indian market, various international airlines, including Air Arabia, Qatar Airways, Continental Airlines, Oman Air, Emirates, Egypt Air, Silk AIR, Tiger Airways, China Eastern, Srilankan Airlines, Malaysian Airlines and Finnair, boosted and expanded their India operations. British Airways listed India as their second largest market next to US (ACEXC, 2008)

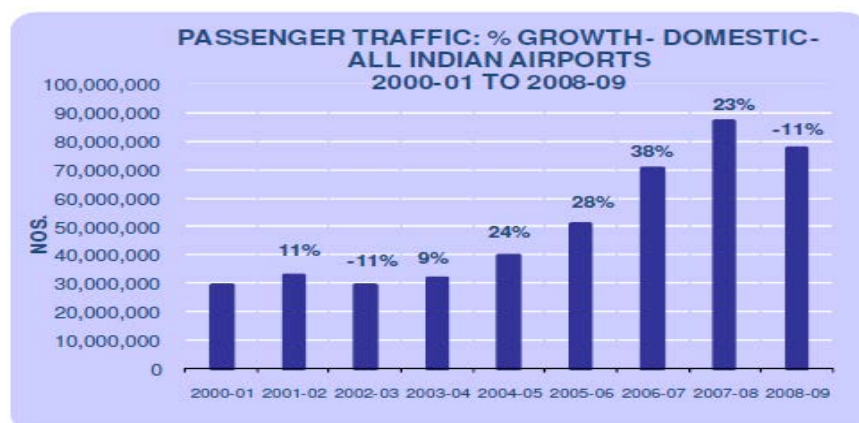
### 1.12.5.3. Fuel prices in 2007

Fuel prices continued to zoom to staggering heights in 2007. As per a report compiled by the Federation of Indian Airlines (FIA), 'Improving the financial health of India's airline industry through reduction in the cost of ATF', the estimated annual fuel bill for the industry, based on the September 2006 rates (Indian Rupees 43,989 per kilolitre) is around \$1.7 billion. The cost of ATF in India remains the highest in the Asia-Pacific region. According to a report released by ASSOCHAM, domestic aircraft operators pay over eight times more 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 fuel ATF in India. The largest component of operating expenses for airlines, ATF accounts for almost 35 to 40 per cent of the total operating costs.

### 1.12.5.4. Online Travel

The growing online travel is driven by easy access and convenience. The added benefit is that it is cheaper to book air tickets online. According to a media report, the online travel segment grew at a rate of 30 per cent and reached Indian Rupees 70 billion by the end of 2007-08. Online portals like makemytrip.com, yatra.com, ixigo.com, cleartrip.com and ezeego1.com, among others, all enjoyed strong, positive growths coupled with stiff competition, and enabled wider choice and quality of service to the increasing internet audience.

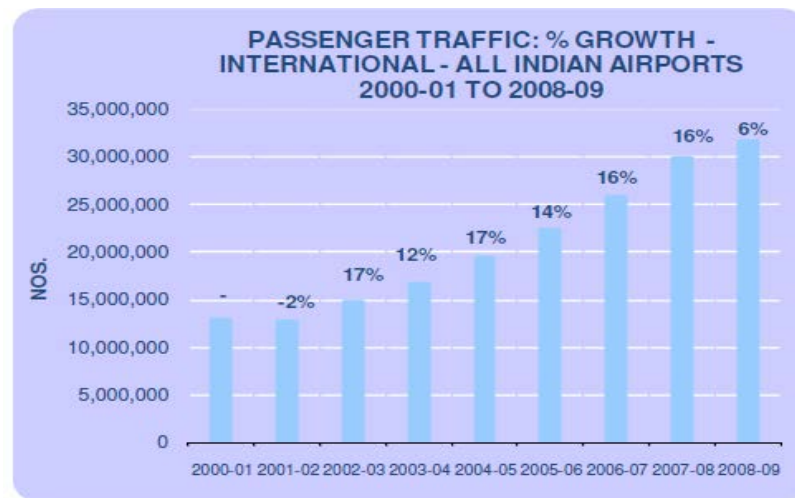
Chart 1-51: Passenger Traffic 2000-2009



Source: ACEXC, 2009

According to graph 1-51 there has been continuous passenger traffic growth till 2008 but in 2009 with 11% decrease the growth has declined.

Chart 1-52: International Traffic 2000-2009



Source: ACEXC, 2009

Unlike the domestic traffic growth which was stopped in 2009, the international passenger traffic growth continuously has experienced the growth with 6% in 2009. In 2008 with 16% increase in comparison to previous year it reached to 30000000 passengers.

Chart 1-53: International Traffic 2000-2009

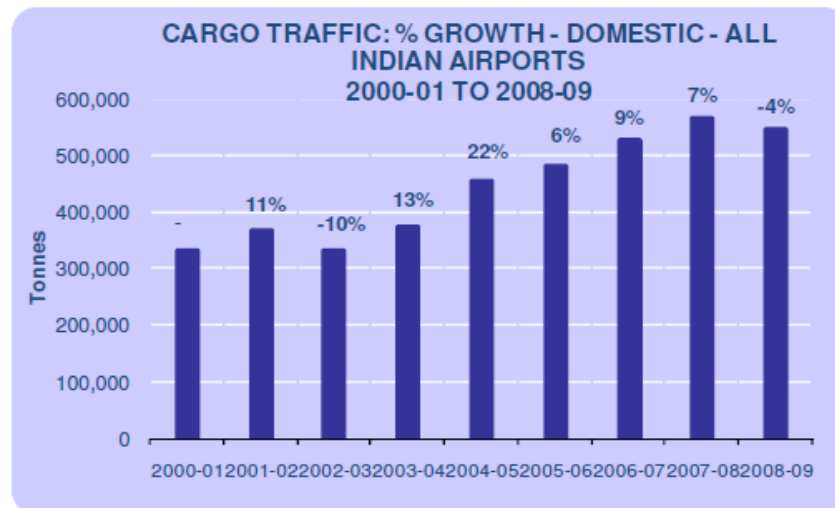


Source: ACEXC, 2009



Chart 1-53 shows domestic and international passenger growth simultaneously, from 200 to 2009.

Chart 1-54: Domestic Cargo Traffic 200-2009



Source: ACEXC, 2009

Chart 1-55: International Cargo Traffic 200-2009

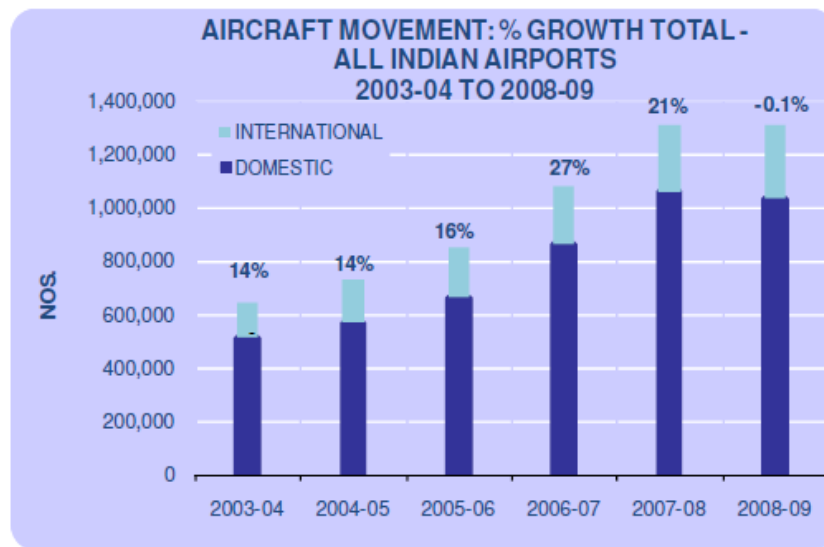


Source: ACEXC, 2009

Air traffic in India has been experiencing double digit growths since 2003-04 till 2007-08. 2004 -05 marked the entry of host of low-cost carriers, which gave rise to over capacity, cut-throat competition, aggressive expansion and high debts. The industry experienced growths till it was hit by high fuel prices, global economic crisis and falling demand. During the period April-March, 2008-09, international passenger

traffic recorded a growth of 6% and domestic passenger traffic declined by -11% , leading to an overall fall of - 7%. During the same period, international cargo traffic displayed a marginal increase of 0.2% and domestic cargo traffic fell by -4%, resulting in an overall fall by -1%.

Chart 1-56: Aircraft Movement Growth 2003-2009



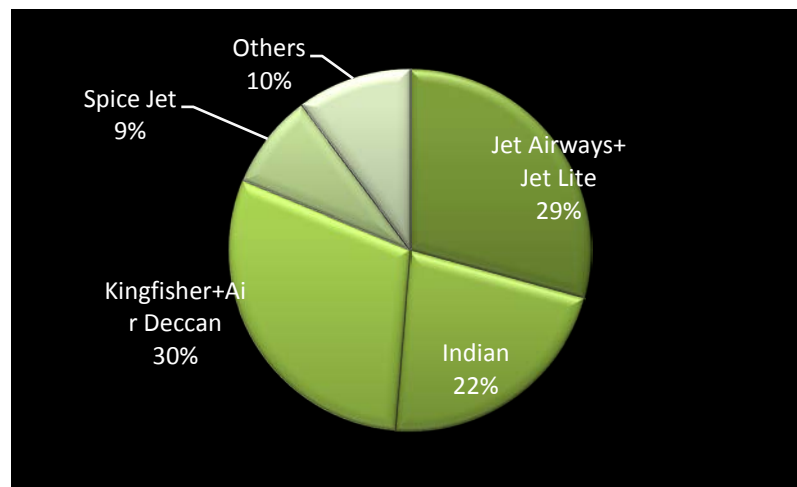
Source: ACEXC, 2009

Domestic Aircraft movements at airports fell by -2% and international aircraft movements increased by 9% at the airports, leading to an overall decrease by -0.1%. For the period April – March 2008-09, the overall passenger traffic stood at 108.88 million with Domestic at 77.30 million and International at 31.58 million respectively. The overall cargo traffic recorded 1,697.29 thousand tones with Domestic at 547.93 thousand tones and International at 1149.36 thousand tones in the same period. The total aircraft movement numbers was 1,307,629 with Domestic at 1,035,521 and International at 270,399 during the same period (43).

#### 1.12.5.5. Domestic Market Share in 2007

As shown in the Chart 1-57 in 2007, Kingfisher led the market with 30% market share and Jet Airways airlines followed it with 29% market share. Indian Airlines gained 22% market share and Spice Jet 9% as well.

Chart 1-57: Domestic Market Share in 2007



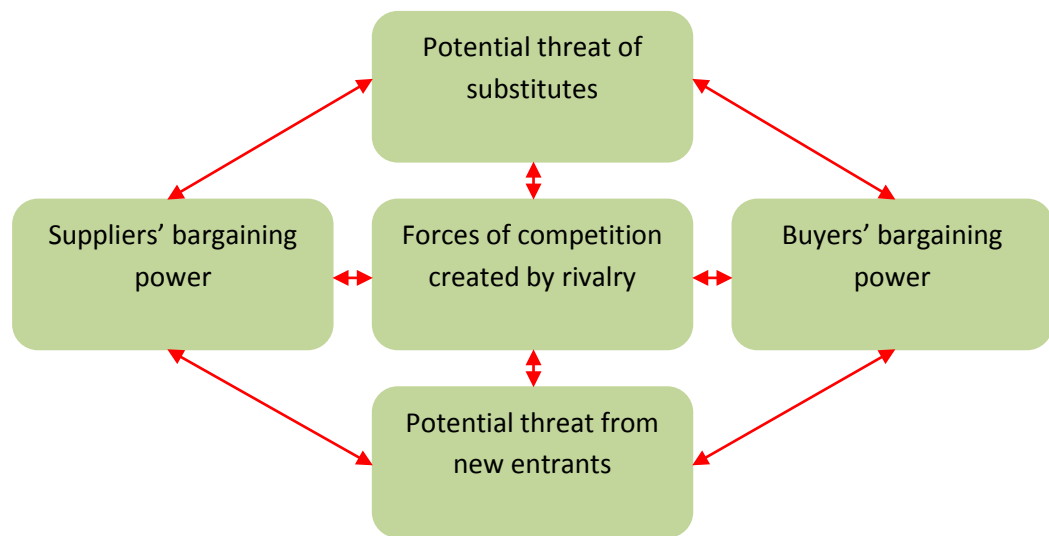
Source: ACEXC research, 2008

### 1. 13. Industry Analysis Based on Porter's Five Forces

Form other point of view; industry is defined as group of companies offering products or services that are close substitutes of each other. Close substitutes are those products or services that satisfy the same basic customer needs. Michael Porter has made immense contribution in the development of industry and competitor analysis and their relevance to the formulation of competitive advantage. He advocates that a structural analysis of industries be made so that a firm is in better position to identify its strength and weaknesses. A model has been proposed consisting of five competitive forces; *threat of new entrants*, *rivalry among competitors*, *bargaining power of suppliers*, *bargaining power of buyers* and *threat of substitute products or services* (44).

The following figure exhibits the five forces of Porter as mentioned above. Later in this chapter each force and relative analysis of each force in airline industry of India will be discussed.

Figure 1-1: Porter's Five Forces



Source: Kazmi (2009), Strategic Management & Business Policy

### 1.13.1. Threat of New Entrants

Naturally, the industry that is perceived as being profitable tends to attract new entrants. The new entrants are firms that are interested in investing in the industry to share the growth prospects. But, according to statistics shown in this chapter and in different sections, in Indian passenger's airline industry, currently there is no need for much worrisome regarding this threat, since the industry isn't doing well financially and firm's bottom lines declare that the industry isn't making profit necessary to attract investors to put the capital in such risky industry. As, seen recently Kingfisher Airlines left the industry because of same problems. The passenger's airline industry is capital intensive industry which needs a lot of capital to be invested for buying aircrafts, paying for fuels and maintenance, paying high salaries of employees mostly in dollars, and paying to the airports as well, to ensure that in financial crises the firm would be able to support the structure of the business.

Also, as mentioned earlier foreign direct investment (FDI) is not permitted in the Indian airlines industry, so in current volatile market situation it is difficult for the existing airline to raise money to overcome the costs. Of course, civil aviation ministry is going to give its nod for 24% FDI in domestic carriers. According to existing aviation standards, FDI is allowed up to 24%, other than airline companies.

The opportunity of new entrants to enter into any industry depends on two factors:










1. The entry barriers to an industry
2. Expected retaliation from expected firms

The higher the entry barriers in an industry, the less likely are new entrants to enter to a new industry. The entry barriers may arise as a result of some factors as discussed below (44) :

- *Capital requirements:* for the airline industry to be very high and in the current situation too risky that prevents new entrants to making investments.
- *Switching costs:* from the existing service offering to a new one might discourage the customers from making new commitments because of the costs incurred in retraining employees or establishing a new network of relationships. For the airline industry this would be very high, since the characteristics of industry is somehow in all aspects of operations, planning, employee affairs, technology , requirements and all other related fields the processes are completely different from any other kind of offerings.
- *Economies of scale:* in airline industry while the necessary initial expenditures have done, like; aircrafts are purchased, business operations formulized and the necessary administrative initiatives done based on new technologies, and while the customers are attracted to the business, next stages will be less costly and more profitable. But for new entrants it would be difficult to reach to this point, especially with the advent of current FFP and CRM strategies formulated by airlines, reaching to profit making point seems very hard.
- *Service offering differentiation:* existing airlines have differentiated their service offerings according to distinctiveness by the customers based on effective advertising, reputation as a service provider, brand loyalty of customers towards the current operating airlines, and application of hi-tech programs of customer analysis like CRM. So, for new entrants reaching to this point, and attracting customers, knowing them, and gathering necessary knowledge to analyze them, and consequently differentiate their offerings seems very difficult at the moment.

- *Access to different suppliers:* in the Indian airline industry according to their long existence in the market could be monopolized by existing companies on the basis of their long-term relationship with the suppliers, in context of product offerings, technology application in the airline industry and such issues.
- *Cost disadvantages independent of scale:* regarding the airlines industry in India, no doubt that one of the strategic decision airline face is rout decision, based on demand and requirement of market. Obviously, the main routes with high demands have been selected by current airlines most of them trying to have high rate of seat-factor. So, for new entrants selection of new routes might not be economical or even so costly with risky customer demand rate.
- *Government policies:* as discussed earlier, government of India doesn't support the foreign direct investments in domestic airlines of India. High rate of taxes, besides fluctuations in international oil prices which is almost always unfavorable for the airline industry demotivate the new entrants to the Indian domestic air travel market.

Table1-17: Threat of New Entrants for Indian Airline Industry in 2012

Threat of New Entrants	Favorable  Unfavorable 
Capital requirements	
Switching costs	
Economies of scale	
Service offering differentiation	
Access to different suppliers	
Cost disadvantages independent of scale	
Government policies	

### 1.13.2. Rivalry Among Competitors






The extent of rivalry among competitors in an industry influences the competition within that industry. There are several dimensions of rivalry among competitors which some of the major ones are discussed bellow according to Indian domestic airlines industry.

- *Competitive structure:* according to the number of competitors, their size and their diversity the structure is defined. Two main structures exist; *fragmented* and *consolidated*. In fragmented structure, there are many firms small and medium sized companies which none of them dominates the market. On the other hand in consolidated structure, a few large companies or just one huge company dominated the market. Indian domestic industry is almost fragmented, meaning that none of current players has dominated market. In this extent the industry is attractive for new entrants. *Diversity* among competitors means that different firms in an industry have different ideas on the bases of which they compete, different set of goals to achieve, or different organizational cultures. An industry with greater diversity poses more potential challenge to existing firms or new entrants for making competitive strategies. In this extent, Indian domestic industry has diversity among competitors and necessitates greater efforts of new entrants to challenge the market.
- *Demand conditions:* nature of the customer demand in the market makes the demand conditions. Higher rate of demand or growing demand results in moderate competition as every firm has enough of it and does not need to struggle for grabbing it from other firms. Stagnant or torpid demand might result in competitive strategies to grasp market shares from others. On the other hand, decreasing demand might result in companies' efforts to maintain the market share. Indian airline industry is facing growing demand rate since 2009 as demonstrated in charts in this chapter. Indian high population besides the growing demand trend could be motivating factor for new entrants. Domestic passenger traffic grew by 18.8% during 2010-11 over the previous year while cycling a stimulating 16.5% growth during the previous fiscal clearly representing strength in the demand side of the business. The supply side was however a story of 2 contrasting periods, the first half of the fiscal saw a supply-side growth of only 8% while the second half saw a 14% growth in capacity which was concentrated towards the second part of the year 2011. During 2009-10, the industry had experienced the demand supply gap reduction with capacity growing only at 4% while domestic demand grew by 16%. This movement continued during the first half of 2010-11 also with a

capacity growth of 8% while the demand grew by 17%. However, over the second half of the fiscal this trend began showing symbols of reversal. During the Oct-Dec 2010 quarter the industry saw an 11% capacity growth and a 19% demand growth and through the Jan-Mar quarter the capacity growth was nearly 16% while the demand growth was 21%. In conclusion this factor remains favorable for new entrants according and till to 2012 analysis.

- *Exit barriers*: these barriers restrict the firms from leaving the industry, even though the return shrinks or even sometimes negative. These barriers are economic, strategic or emotional preventing from moving out. In the airline industry high investments in business including purchase of airplanes and technologies prevent easy exit from industry.

Table1-18: Rivalry among Competitors for Indian Airline Industry in 2012







<b>Rivalry among Competitors</b>	Favorable  Unfavorable 
Competitive structure	
Demand conditions	
Exit barriers	

### 1.13.3. Bargaining Power of Buyers

This means the capability of buyers, individually or collectively, to force a reduction in price of products or services, demand a higher quality or better service or to ask for more value for their purchases. A high buyer bargaining power constitutes a negative feature for existing firms or new entrants of an industry (44). In passengers airline industry due to large number of customers and existence of demand, similar domestic prices in same class airlines, loyalty programs have created value for customers as well as FFP so makes barriers in front of switch, passengers need to reach to destination at the required date and time and this creates not so many choices for them and eventually bargaining power of buyers is weak.










Table1-19: Bargaining Power of Buyers for Indian Airline Industry in 2012

<b>Bargaining Power of Buyers</b>	Favorable  Unfavorable 
Loyalty Programs/FFP	
Similar prices in the same routes	
Huge number of buyers ; high demand	
Not so many choices exist for customers to select	

#### 1.13.4. Bargaining Power of Suppliers

The bargaining power of suppliers constitutes their ability, individually or collectively, to force an increase in the price of the product or service or make the buyer to accept lower quality of offered services or products. Regarding domestic airline industry of India the bargaining power of suppliers is high, because the number of players in domestic market is few airlines. Also, the substitute of service offered by the airline is first-class train service which the cost of using them is also comparatively high and concerning time and security elements airlines are better. However, personal cars usage for holiday trips has increased recently which can be the real threat to the domestic airlines. Besides mentioned factors demand is growing, and attraction of enough customers to increase the load factor seems easy for the airlines. The costs occur over industry like rising fuel costs, make the firms in industry to force higher prices all together.

Table1-20: Bargaining Power of Suppliers for Indian Airline Industry in 2012

<b>Bargaining Power of Suppliers</b>	Favorable  Unfavorable 
Few airlines	
First class trains as substitutes	
Switching cost for airlines is low	
Demand is growing	
Personal cars as substitutes	




### 1.13.5. Threat of Substitutes

Substitute products or services are those that apparently are different, but satisfy the same set of customer needs. The availability of close substitutes constitutes a negative competitive force in an industry. With the emergence of low-cost-carriers, the passengers who were traveling in first or second class AC through rail by train considered the new option of low-cost airlines because beneficial marginal cost differences as compared to the train journeys. Further more, Indian Railways revised the railway industry to compete with low-cost-carriers and subsequently to enhance its position and passenger base naturally in following ways;

- Application of faster trains in short to medium distances
- Enhancing connectivity and keeping on-time schedules
- Offering entertainment facilities
- Re-structuring the train fares
- Offering a reliable e-ticketing
- Enhancing the overall quality of services offered

So, according to mentioned issues such railway facility could be as substitute for LCC class of airlines. As discussed before, improving economy has influenced average Indian family lifestyle, resulting in application of personal cars for holiday trips as well. Therefore, this can be another substitute for the domestic airlines in short distances.

Table1-21: Analysis of Threat of Substitutes for Indian Airline Industry in 2012

Threat of Substitutes	Favorable 	Unfavorable 
First/Second class AC		
Personal cars in short distances	