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ECONOMIC ANALYSIS OF INDIAN AVIATION INDUSTRY: HIGH RISK LOW PROFITS

Aggarwal Akshit*, Choudhary Lekha*

Corresponding Author Email: akshitaggarwal22@gmail.com

ABSTRACT

Air transport is one of those industries that has made globalisation possible and has shaped a modern business world. Given the significance of Airline Industry, this paper aims at analysing profitability and factors responsible for higher risks associated with this sector via traditional ratio analysis of major Indian Airlines. It also discusses applicability of Porter's 5-Forces on Indian Airlines Industry by looking at the problems major Indian carriers are facing through the lens of these 5- forces. At the very end, the paper discusses success of Indigo, the only consistently profitable airline in India, and tries to comprehend the reasons that made it possible, especially its LCC Cost Structure.

KEYWORDS: Airline Industry, Profitability, Risk Analysis, Porter's 5-Forces, Low Cost Carriers (LCCs), Full Service Carriers (FSCs).

INTRODUCTION

Over the past several years, the Indian Airline Industry has been going through a tumultuous phase characterised by multiple hitches like high oil prices, limited pricing power [4]. High debt burden, losses accumulated over years and liquidity constraints are some of the immediate challenges that the airline operators are facing. The financial analysis has always been regarded as the key element in the analysis of the financial position of a company or industrial sector that involves conducting a quantitative analysis of the information presented in the financial statements of companies under review [1]. It is important to note that financial ratios are industry specific, that is, they differ from one industrial sector to another, according to their economic characteristics. For instance, airlines sector is characterised by its capital intensive nature due to high lease costs and aviation fuel costs which is reflected in its financial ratios subsequently.

Airlines industry is also highly vulnerable to changes in economic, financial and business conditions as it is subject to challenges including historically high fuel and labour costs that account to large operating expenses [1]. These uncertainties in the airline business have produced profound interest in analysing the behaviour of traditional financial ratios in this specific industry. This report aims at analysing risk and profitability of six major carriers of Indian Aviation Industry with the help of liquidity and solvency ratios over the last few years. Although at present IndiGo has the largest market share in aviation sector in India, it could not be included in the analysis due to unavailability of its financial statements. Despite being a private player in this capital intensive sector, IndiGo is the only consistently profitable airline in India. This paper discusses the reasons of this success in detail at the end. The paper thus has a two-fold approach where in on one end it analyses the Indian aviation sector to comprehend reasons for its low profitability and high risk, and tries to uncover reasons for the sole success of IndiGo.

LITERATURE REVIEW

Charles Horngren (2006) argues that interpretation and evaluation of financial ratios calculated is the important step for the analysis of the financial footing of a company which can be achieved by making three types of comparisons to determine if the ratios indicated good, fair or poor performance [1]. These comparisons are the time series analysis which implies that all financial relations calculated for a given year are compared with the historical financial ratios of the company, benchmark financial analysis compares performance with pre established standards, and cross industrial/sector comparison involves the analysis of the relationship financial company with its peers or industry averages. However, Larson and Miller (1995) argue that the financial reports of the concerned competitors should be considered as standard and comparisons with pre established benchmarks are not reliable as they cannot be applied equally to companies with different economic characteristics [1]. Therefore, it is important to identify the



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economic characteristics of an industry that is under review and be taken into account while assessing the financial ratios.

Airline sector has a highly competitive environment in India which is also one of the factors leading to consistent losses for almost all major carriers. Porter's 5-forces offer a framework for analysing the level of competition within aviation sector. IATA(International Air Transport Association) with the help of Harvard Professor Michael Porter, applied his Five Forces framework on Aviation Industry to highlight the reasons of poor profitability through the forces of rivalry, new entrants, customer and supplier bargaining power, and the threat of substitutes [3]. There are only few industries where all these five forces act so strongly to depress profitability and airline industry is one them. These finding were presented in Vision 2050 meeting in 2011.

METHODOLOGY

For performing the desired analysis, balance sheet and profit and loss statements of six major airlines were used to calculate key financial ratios over a period of 10 years. Some companies started operations in India post 2004, so their ratios have been calculated from their year of commencement. Kingfisher Airlines ceased operations in 2013, so its ratios have been calculated till the year up to which their financial statements were available. Analysis for IndiGo has been done separately as being a private airline, its financial statements are not publicly available which may be used for industrial comparison. Ratios illustrated in all the tables have been calculated from data taken from Ace Equity.

The six major airline used for analysis are:

- Air India Ltd.
- Go Airlines (India) Ltd.
- Jet Airways (India) Ltd.
- Jet Lite (India) Ltd.
- Kingfisher Airlines Ltd.
- Spicejet Ltd.

FINANCIAL ANALYSIS TRENDS VIA TRADITIONAL RATIO ANALYSIS

The subsequent sections present general trends of liquidity, solvency, efficiency and profitability ratios of the companies under review. These ratios reflect the unique characteristics of Airlines Industry in India.

Liquidity Ratios

Liquidity Ratios allow short term lenders to see if the company is able to meet its short term obligations when due. The results of calculations of selected liquidity ratios for six major airlines are illustrated in the Table 1.

All the airlines under review have been operating with negative or low working capital during the observed time period, which implies higher riskiness in terms of liquidity. The negative or positive but low working capital can be because airlines are having high leverage which requires periodic instalment payments of the current portion of long-term debt, which in turn is increasing their short term liabilities.



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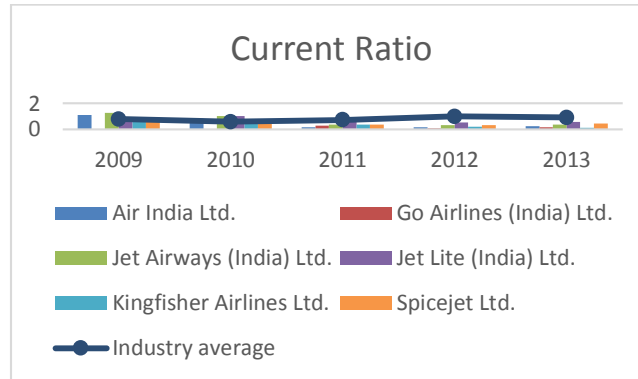


FIG 1 : Current ratio trend

The analysis of liquidity ratios also shows that the values of the current ratio have been less than 1 or slightly above it for all six airlines which indicates that the traditional rule of 2:1 for the current ratio is not applicable in Indian airline industry and was only achieved in year 2006 and 2007 by Air India Ltd. (2007), Jet Airways (2006), Kingfisher Airlines (2007). The rule of 1: 1 quick ratio has been reached only by Jet Airways in 2005 and 2006 and Kingfisher Airlines in 2004, 2005 and 2007. For the rest of the airlines, the values of the quick ratio have been less than 1 in all years. By examining average values for the current ratio and the quick ratio as well as differences between them, it can be concluded that none of the airlines invested in highly liquid assets including cash, short-term investments and accounts receivables which are readily cash convertible. Furthermore, if we eliminate accounts receivable, we arrive at a stricter ratio, cash ratio, which considers only cash, cash equivalents and short-term investments. The closer to 1 the cash ratio is, the better the company is positioned in terms of meeting its short-term obligations. For the selected airlines, the cash ratio is 0.54 on an average in 2006 and dropped to 0.06 in 2012 which is very less.

Lastly, the average values of the ratio of cash flows to current liabilities indicate that selected airlines do not generate high cash flows from their operations to cover a greater part of their current liabilities. In conclusion, the results may indicate that the selected Indian airlines are very much likely to face liquidity issues in the short run as this industry itself is highly vulnerable to adverse business, financial and economic conditions.

	Year	Working Capital	Current Ratio	Quick Ratio	Cash ratio	Operating cash flows to current liabilities	AR turnover	Days' sales uncollected
Air India Ltd.	2013	-17704.45	0.238	0.154	0.022	-0.287	7.903	46.184
	2012	-22770.83	0.1593	0.119	0.016	-0.327	7.957	45.870
	2011	-27924.88	0.131	0.106	0.013	-0.001	6.535	55.845
	2010	-1149.47	0.827	0.479	0.079	-0.100	4.948	73.763
	2009	518.32	1.099	0.701	0.217	-0.727	5.347	68.258
	2007	2479.116	2.199	0.857	0.147	-0.906	5.858	62.309
	2006	700.28	1.262	0.625	0.070	-0.379	6.099	59.847



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	Year	Working Capital	Current Ratio	Quick Ratio	Cash ratio	Operating cash flows to current liabilities	AR turnover	Days' sales uncollected
Go Airlines Ltd.	2014	-1199.55	0.229	0.043	0.014	-0.037	274.521	1.33
	2013							
	2012	-827.59	0.052	0.007	0.006	0.145	1913.291	0.191
	2011	-559.04	0.265	0.177	0.173	0.199	395.01	0.924

	Year	Working Capital	Current Ratio	Quick Ratio	Cash ratio	Operating cash flows to current liabilities	AR turnover	Days' sales uncollected
Jet Airways	2014	-9477.00	0.297	0.193	0.085	0.068	14.725	24.788
	2013	-7688.17	0.345	0.213	0.071	0.157	14.655	24.906
	2012	-7063.44	0.321	0.187	0.048	0.215	12.054	30.279
	2011	-5791.84	0.347	0.223	0.066	0.149	13.392	27.255
	2010	64.44	1.017	0.426	0.208	0.444	13.01	28.054
	2009	890.37	1.257	0.615	0.403	-0.109	15.802	23.098
	2008	-468.38	0.893	0.494	0.195	0.196	6.769	53.925
	2007	1263.67	1.602	0.809	0.522	0.327	11.764	31.028
	2006	2546.76	2.664	1.658	1.375	0.397	13.193	27.667
	2005	933.47	1.84	1.329	1.102	1.22	17.236	21.176
2004	317.94	1.39	0.742	0.454	1.297	14.705	24.822	
	Year	Working Capital	Current Ratio	Quick Ratio	Cash ratio	Operating cash flows to current liabilities	AR turnover	Days' sales uncollected
Jet Lite	2014	-245.22	0.624	0.29	0.094	-0.822	22.952	15.902
	2013	-483.49	0.543	0.263	0.082	-0.007	16.142	22.612
	2012	-391.56	0.532	0.291	0.091	0.317	21.086	17.31
	2011	-155.39	0.774	0.333	0.13	-0.635	29.755	12.267
	2010	4.03	1.005	0.149	0.067	-0.052	23.078	15.816
	2009	-85.45	0.869	0.225	0.11	0	21.266	17.163
	Year	Working Capital	Current Ratio	Quick Ratio	Cash ratio	Operating cash flows to current liabilities	AR turnover	Days' sales uncollected
Kingfisher Airlines	2013	-7947.35	0.098	0.013	0.002	-0.158	25.002	14.599
	2012	-6944.51	0.18	0.056	0.022	-0.105	29.284	12.464
	2011	-3113.27	0.36	0.184	0.052	0	14.15	25.795
	2010	-1063.04	0.7	0.158	0.058	-0.469	15.715	23.226
	2009	-1506.99	0.574	0.127	0.049	-0.182	19.104	19.106



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	2008	-6.92	0.99	0.608	0.414	-0.801	53.069	6.878
	2007	607.59	2.253	1.816	1.685	-1.139	46.028	7.93
	2006	118.85	1.269	0.862	0.581	-0.407	94.643	3.857
	2005	65.04	1.588	1.082	0.749	-0.01	36.22	10.077
	2004	21.28	1.799	1.055	0.6	-0.073	13.324	27.394
	Year	Working Capital	Current Ratio	Quick Ratio	Cash ratio	Operating cash flows to current liabilities	AR turnover	Days' sales uncollected
Spice jet Ltd.	2014	-2100.14	0.18	0.124	0.002	0.023	40.481	9.017
	2013	-945.28	0.454	0.348	0.125	-0.031	53.324	6.845
	2012	-938.97	0.316	0.235	0.172	-0.077	193.212	1.889
	2011	-481.45	0.369	0.102	0.018	-0.06	167.441	2.18
	2010	-295.80	0.668	0.556	0.507	0.143	115.036	3.173
	2009	-193.48	0.72	0.513	0.445	-0.483	136.323	2.677
	2008	3.76	1.005	0.795	0.767	-0.268	833.328	0.438
	2007	-207.22	0.698	0.536	0.511	-0.217	114.494	3.188
	2006	-23.67	0.857	0.375	0.321	0.192	124.598	2.929
	2005	19.19	1.238	0.415	0.359	-0.143	1.142	319.671
	2004	19.67	1.457	0.307	0.298	-0.226	0	0

Table 1 : Liquidity Ratios : Indian Aviation Industry

	Year	Net Income	EBITDA Margin	EBIT Margin	Profit Margin	ROA	ROE
Air India Ltd.	2013	-5490.16	-13.145	-23.753	-34.254	-6.813	34.445
	2012	-7559.74	-23.81	-34.663	-51.379	-25.119	45.975
	2011	-6865.17	-16.56	-28.579	-48.821	-41.294	67.779
	2010	-5552.44	-16.487	-27.369	-43.507	-9.192	123.894
	2009	-5548.26	-34.419	-43.689	-41.954	-12.468	-2662.952
	2007	-447.93	-12.234	-16.959	-5.308	-2.759	414.251
	2006	14.94	0.075	-4.523	0.169	2.494	4.397
	Year	Net Income	EBITDA Margin	EBIT Margin	Profit Margin	ROA	ROE
	2014	5.44	5.086	4.778	0.205	71.958	-1.384
Go Airlines Ltd.	2013	104.34	3.228	2.896	4.777	-369.223	-24.398
	2012	-133.72	-5.321	-5.77	-8.847	39.312	22.785



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	2011	60.05	9.832	9.444	4.763	-228.367	-13.25
	Year	Net Income	EBITDA Margin	EBIT Margin	Profit Margin	ROA	ROE
Jet Airways	2014	-3667.85	-8.338	-13.257	-20.6	-54.531	164.642
	2013	-485.50	5.201	-0.136	-2.797	9.029	141.739
	2012	-1236.10	1.477	-4.68	-8.097	-2.528	-104.678
	2011	9.69	13.084	6.043	0.075	9.588	0.372
	2010	-467.64	11.98	2.86	-4.433	3.177	-17.7
	2009	-402.34	-2.651	-10.427	-3.477	1.723	-12.745
	2008	-253.06	2.109	-6.638	-2.846	1.484	-5.56
	2007	27.94	5.097	-0.732	0.393	3.233	1.249
	2006	452.04	16.249	9.137	7.91	9.632	19.604
	2005	391.99	27.839	17.33	9.014	12.978	19.5
	2004	163.11	25.065	10.122	4.731	12.468	39.077
	Year	Net Income	EBITDA Margin	EBIT Margin	Profit Margin	ROA	ROE
Jet Lite	2014	-429.31	-22.345	-22.458	-23.992	256.558	20.034
	2013	-295.32	-11.198	-11.334	-14.41	62.643	17.234
	2012	-184.03	-13.605	-13.852	-9.563	132.862	12.976
	2011	-107.47	-4.025	-4.472	-6.055	-13.41	8.7
	2010	46.19	-6.311	-6.863	3.046	133.853	-4.095
	2009	-630.43	-34.917	-35.403	-39.379	-1638.339	53.697
	Year	Net Income	EBITDA Margin	EBIT Margin	Profit Margin	ROA	ROE
Kingfisher Airlines	2013	-4301.12	-560.103	-607.728	-857.851	47.737	33.291
	2012	-2328.01	-39.291	-45.514	-42.378	-163.281	45.805
	2011	-1027.40	-3.674	-7.54	-16.482	8.428	34.813
	2010	-1647.22	-19.693	-22.905	-32.503	-13.441	42.559
	2009	-2139.65	-39.752	-42.294	-40.841	-38.447	100.673
	2008	-188.14	-49.601	-50.869	-13.052	-9.729	-94.601
	2007	-419.58	-44.261	-45.35	-25.866	-27.446	-109.067
	2006	-340.55	-32.911	-33.99	-27.544	-45.663	-151.937
	2005	-16.79	-6.404	-7.405	-5.494	-2.205	-122.938
	2004	0.60	0.936	-0.838	0.946	7.52	2.435
	Year	Net Income	EBITDA Margin	EBIT Margin	Profit Margin	ROA	ROE



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Spice jet Ltd.	2014	-1003.24	-13.459	-15.81	-15.914	-232.044	98.408
	2013	-191.08	-3.484	-4.976	-3.412	-5.538	85.133
	2012	-605.77	-15.135	-15.921	-15.362	-92.408	411.438
	2011	101.16	2.056	1.747	3.516	32.474	31.502
	2010	61.45	1.184	0.834	2.817	75.775	-17.958
	2009	-352.57	-26.639	-27.069	-20.869	-566.952	82.097
	2008	-133.51	-19.547	-20.151	-10.309	-21.085	-477.134
	2007	-70.74	-25.494	-26.402	-10.988	-10.782	-38.327
	2006	-41.42	-14.382	-16.326	-9.87	-7.657	324.303
	2005	-28.71	-1435.96	-1461.895	-1431.671	-33.746	94.824
	2004	-3.10	NA	NA	NA	-13.349	17.174

Table 2 : Profitability Ratios : Indian Aviation Industry

Profitability Ratios

Profitability ratios are of interest to investors who seek high returns on their investment because of the risk associated with their investments. Soaring aviation fuel prices, high taxation from government and labour costs prevent airlines from generating significant amount of profits. The results of profitability analysis for selected Indian airlines are summarized in the Table 2 that includes profitability ratios. The values of selected profitability ratios, especially the profit margin and operating profit ratio, indicate low profitability in the airline industry mainly to very low passenger traffic in India, increasing operating expenses driven by rising Aviation fuel prices.

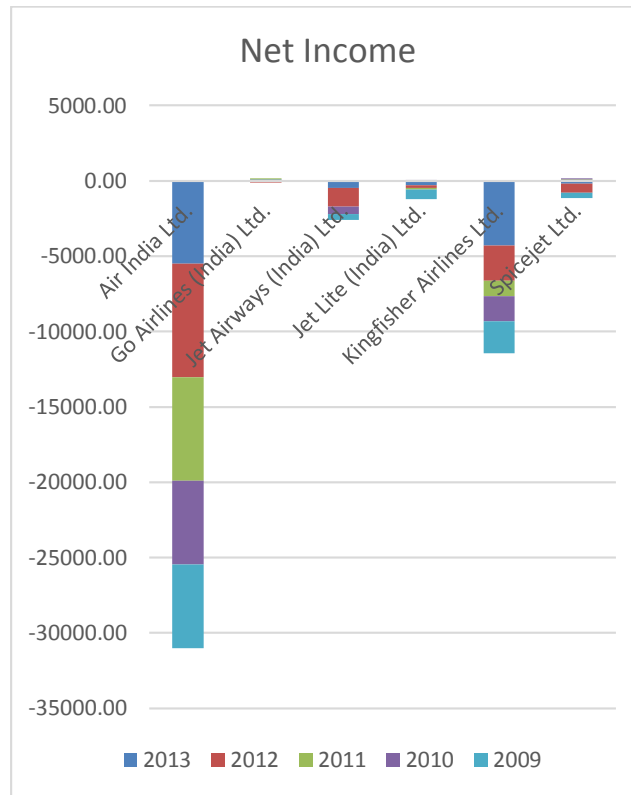


FIG 2 : Net Income of airlines under review

Net profit is negative for all airlines in past 3-4 years except GoAir for which EBIT margin on an average is 4-5% only. The reason for this is essentially the Low Cost Carrier (LCC) structure by GoAir.

Solvency Ratios

Solvency ratios allow long term lenders to see if the company is able to meet its long term obligations when due. Table 3 illustrates the results of debt and figure below shows the coverage ratio trends computed for six Indian airlines. The contemporary literature on financial statement analysis points out that the optimal value of the debt-to-equity ratio is approximately 1 which implies that liabilities equal equity and the maximum acceptable debt-to-equity ratio is considered to be 1.5 or 2. The average values of long-term debt-to-equity ratios calculated for selected six air carriers indicate that airlines have negative long-term debt to equity ratio except for Jet Airways for which it is in range 3-7. The negative ratio is obtained as a result of negative equity funds. The low or negative amounts of airline shareholders' equity have resulted from high accumulated financial losses incurred over years. These ratios indicate that the selected airlines are highly leveraged, that is, they have significantly high debts when compared with shareholders' equity thus placing them at very high long-term solvency risk.



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		2013	2012	2011	2010	2009
Air India Ltd.	Share Capital	9345	3345	2145	945	145
	Total Reserves	-25284	-19788.17	-12273.79	-5426.61	63.35
	Total Shareholder's Funds	-15939	-16443.17	-10128.79	-4481.61	208.35
Go Airlines Ltd.	Share Capital	70	70	70	NA	NA
	Total Reserves	-498.41	-656.89	-523.165	NA	NA
	Total Shareholder's Funds	-427.65	-586.89	-453.165	NA	NA
Jet Airways Ltd.	Share Capital	86.33	86.33	86.33	86.33	86.33
	Total Reserves	-428.86	1094.53	2518.01	2555.65	3070.62
	Total Shareholder's Funds	-342.53	1180.86	2604.34	2641.98	3156.95
Jet Lite Ltd.	Share Capital	796.12	796.12	796.12	796.12	796.12
	Total Reserves	-2509.7	-2214.38	-2031.45	-1923.98	-1970.17
	Total Shareholder's Funds	-1713.6	-1418.26	-1235.33	-1127.86	-1174.05
Kingfisher Airlines	Share Capital	1361.82	1130.7473	1050.8792	362.9089	362.9089
	Total Reserves	-14282	-6213.1483	-4005.0227	-4240.8544	-2496.3638
	Total Shareholder's Funds	-12920	-5082.401	-2951.1926	-3870.4638	-2125.3455
Spice jet Ltd.	Share Capital	484.35	441.45	405.378	241.883	241.02
	Total Reserves	-726.28	-593.075	-89.54	-600.403	-681.861
	Total Shareholder's Funds	-224.45	-147.232	321.105	-342.177	-429.449

Table 3 : Solvency Ratios : Indian Aviation Industry

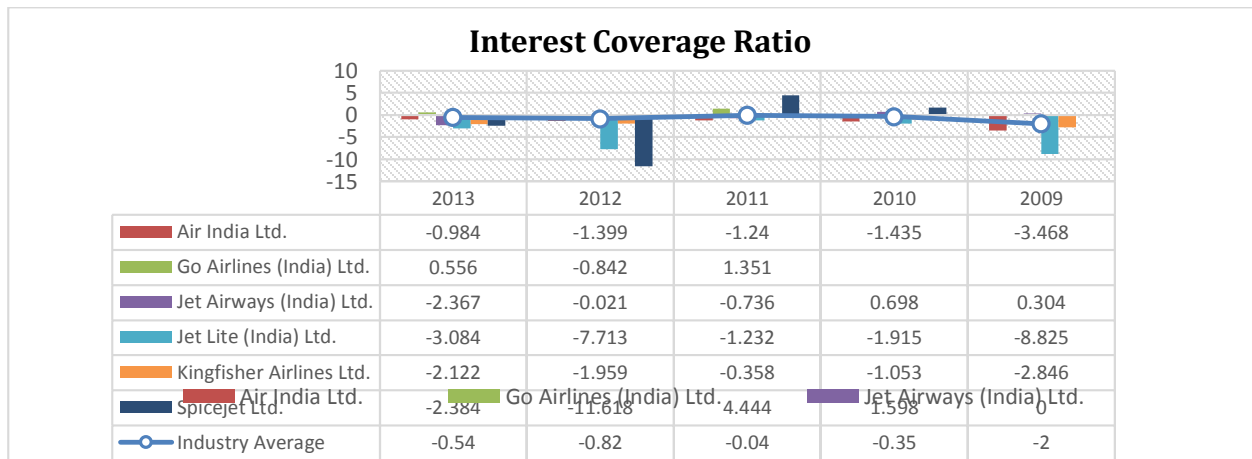


FIG 3 : Interest Coverage ratio for Airlines under review



Reasons for Above Observations

As observed from the above financial analysis, most of the airlines have losses accumulated over years. In this section, reasons are comprehended for the observed financial situation of Indian Airline Industry.

1.High Cost Environment

Despite many reforms over past several years, domestic airline industry continues to operate in a high operating cost environment due to high tax costs on Aviation Turbine Fuel (ATF), high airport charges, heavy taxation, inadequacy of experienced commercial pilots, rigid labour laws and inherently high capital costs [4].

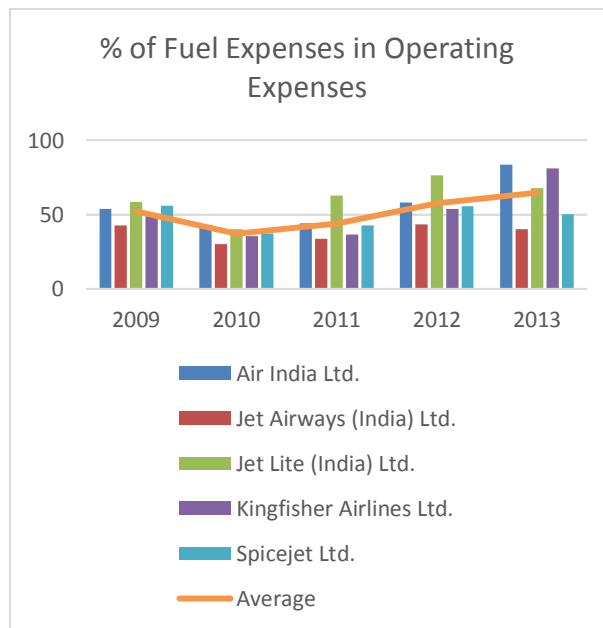


FIG 4 : Fuel forms major portion of operating expenses

Indian aviation sector is greatly overtaxed. The 12.36% Service Tax on air tickets and services that a airline purchases like landing and air navigation, contravenes global norms and handicaps the Indian Aviation industry. Even more damaging is India's equally unique tax burden on Aviation Turbine Fuel (ATF). Domestic fuel uplift is subject to an 8.24% excise duty and state taxes which are as high as 30% [16]. On an average around the international aviation industry, fuel accounts for 34% of an airlines sector's operating cost structure. In India, because of such high taxes, it accounts for 45% of total operating costs.

2.Low Passenger Traffic

Although there is a continuous rise in passenger traffic in Indian Airline industry, it is much lesser then its potential as only 14% (169 million) [17] of the total population travel by air in an year. India aviation industry has potential for huge growth due to large and growing middle class population, favouring demographics, fast economic growth, rising incomes, rising aspirations of the middle class, and overall low penetration levels (less than 3%) [4]. With the rising market share of LCCs passenger traffic growth which averaged 13% in early 2000s has increased drastically to 19% during 2006-2011 [4]. Despite this strong growth rate in passenger traffic, air travel penetration in India remains among the lowest in the world which is as low as 0.1 trips per person per year approximately which otherwise also indicates strong long term growth potential. A comparative statistic in United States, which is the world's largest domestic aviation market, stands at 2 trips per person per year [4].



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3.Intense Competition

Most of these factors are prevailing within the industry and thus are not under the direct control of airline operators, but key problems have compounded because of continuous increase in capacity much higher than the actual demand. Intense competitive pressure from low-cost carriers, who are more focused on maximizing load factors, and national carrier, who are keen to regain their long lost market share has constrained profitability from rising in synchronization with the increased cost base over years. In addition, both LCC and FSC (Full Service Carrier) have aggressively expanded fleet by addition of aircraft operating lease contracts in long term by LCC and purchase of new aircrafts by FSC via debt funding [4]. Both seeking to take advantage of the anticipated growth and support their International operations. This is having a significant impact on the capital structure of these airlines and has weakened the credit profile of most domestic airlines.

PORTER'S 5- FORCES

One way of looking at problems of Indian Airline Industry is through the lens of well known Porter's 5-Forces Model. This model can serve as an important tool in analysing the effect of external environment in which an industry runs its operations [8]. These forces are known to act strongly in Airline Industry.

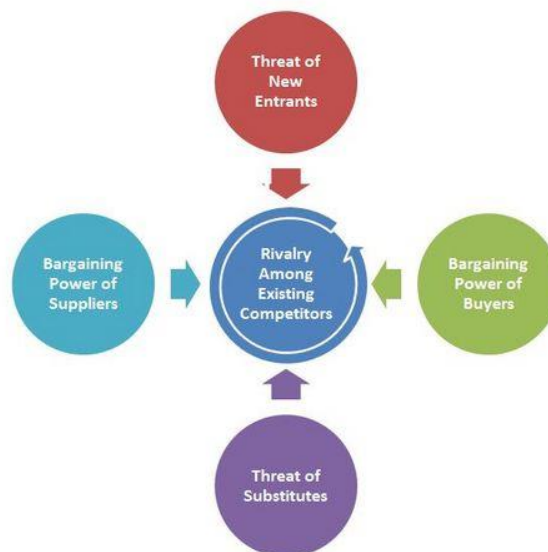


FIG 5 : PORTER'S 5-Forces

1.Bargaining Power of Buyers

This is the measure of pressure that customers can place on a business. If a single customer or set of customers have a large enough impact to affect the company's margins and volumes, then the customer holds substantial power. Aggregator websites like makemytrip.com, yatra.com are now dominating the sales channel, particularly for low price tickets. This allows easy comparison of prices across any number of airlines and has dramatically increased transparency of prices[3]. Some websites offer only search while others have started offering package flight itineraries, some even clubbing multiple airlines with lowest cost guarantee. Global distribution systems (GDS) like Amadeus India pull together seat availability and price data from various airlines and provide it to travel agencies and aggregator websites [3]. While they all trace their roots back to airlines, they are now independently owned. Individual customers are highly price sensitive and a large proportion of them have now started buying from aggregator websites. Business travellers are not that price sensitive but they hold preference for particular carriers. Air cargo customers also form an important set of buyers with low loyalty towards specific airlines and high price sensitivity.



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2. Bargaining Power of Suppliers

This is the measure of pressure that suppliers can place on a business. If a single supplier has a large enough impact to affect the company's margins and volumes, then the customer holds substantial power. Purchasing new aircraft frames and engines form a significant proportion of total operating costs for an airline. There is also significant delays between order and delivery as manufacturing cycles of aircraft parts can range from months to years. The airline supply business is primarily dominated by Boeing and Airbus due to which there isn't much competition among suppliers. Aviation Turbine Fuel (ATF) prices have been volatile and trending higher since a long time with a fall recorded only in recent months. Jet fuel presently accounts for more than 25% of total airline operating costs compared to less than 15% in 2000 [3]. Airport operators also charge highly for gate usage and for providing take-off and landing slots.

3. Threat of Potential Entrants

The threat of new entrants is high in this sector because of easy entry into many markets, easy access to distribution channels and limited advantages [2]. Over 1,300 new airlines have been set up in the past 40 years, that is, an average of over 30 each year in international airline industry [3].

4. Threat of Substitutes

Other modes of transportation like trains, buses, cars and ships are potential substitutes for this sector for both passenger and cargo carriers. Their impact tends to become more significant in cases when speed advantage of this mode of transport is not important. This high threat of substitutes will impact an airline's ability to set prices that it desires.

5. Competitive Rivalry

If there are many companies competing with each other within an industrial sector, the resulting competitive pressure from this rivalry will cause the prices, profits and strategy to be driven by it [13]. The entry of Low Cost Carriers like SpiceJet, GoAir and IndiGo in Indian Aviation market has taken this rivalry to another level. In fact, these are amongst the only airlines that have been able to report profits in years while Full Service Airlines like Jet Airways, Kingfisher Airlines are deep in red. Market share of LCCs has drastically increased over the last decade from 12% in 2000 to almost 59% in 2012 [14]. LCCs provide point to point connections, have no or less Business class seats and tend to focus on only one type of aircraft. Unlike airlines like Kingfisher, LCCs don't believe in on-board meals and entertainment or window blinds, they rather focus on decreasing cost and increasing load factor [15].

INDIGO'S SUCCESS

When almost every airline is covering for their years of accumulated losses, IndiGo reported sixth straight annual profit in the financial year ending on March 2014 and is preparing for an Initial Public Offering (IPO) which is likely to be launched in the current April-June quarter [12]. IndiGo's market share rose to 30% by the end of year 2013 and now it commands a 32.6% share which is the largest amongst its peers.

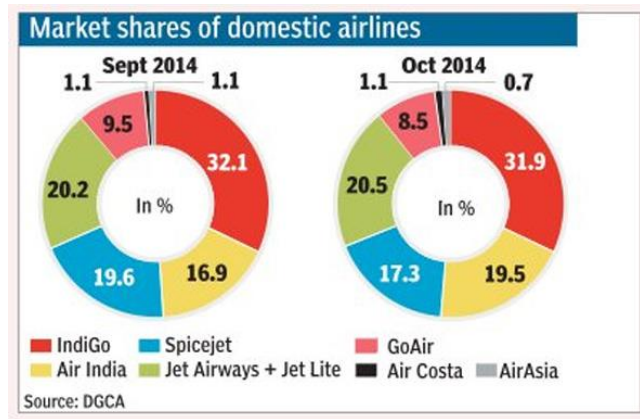


FIG 6 : Market Share of Indigo in 2014 was greater than 30% [19]

The year 2013 happened to be the worst in recent years due to sharp increase in fuel prices and weakening rupee against dollar. During this year, Kingfisher Airlines shut down operations and Indigo's competitors made losses of more than \$1 billion, Indigo is the only airline that made profits that year. Reasons for this success are presented in the following section.

1. Single Class Single Aircraft type

IndiGo has only one type aircraft, that is, A-320-232 in its fleet unlike Air India, Jet Airways, SpiceJet who have 10, 9 and 3 types of aircrafts respectively in their fleet [20]. This allows great flexibility as the same crew members from pilots to flight attendants can be used there by cutting costs related to hiring and training. Since it has only one class, that is, no economy class it need not spend time and man power on privilege passengers nor do they need to incur extra costs in maintaining lounges for them.

2. Fuel Saving

Fuel Taxes in India are as high as 30% with added 8.2% excise duty because of which fuel accounts for approximately 45% of total operating costs for airlines. IndiGo's aircrafts use a special software 'sharklet' [21] that optimises routes and altitudes and comes up with a minimum fuel burning flight planning. IndiGo is also involved in Fuel Hedging after government regulations made it legal in 2007.

3. Route Planning

IndiGo operates over lesser number of destinations but with higher frequency on these selective routes.



FIG 7 : IndiGo's Flight Network

This strategy is supported by S-curve analysis by McKinsey & Company in context with Airlines Industry [11] according to which airlines that have frequency advantage are able to fetch disproportionately high market share as compared to its peers. The network in the figure above shows that all destinations are connected with 3 or more other destinations that helps IndiGo in keeping its aircrafts in air for a longer period of time there by saving airport charges. This also restrains customers from looking at multiple airline connecting flight plans.

4. Cost Cutting Strategies

IndiGo has faster turnaround time of only 30 minutes which is time between landing and the next take off [23]. This reduces its cost due to airport charges. Due to this fast turnaround time, it has an average Stage Length (flight time per flight) of only 90 minutes which means that it is not obliged to serve hot meals on most of the flights. IndiGo has low employee aircraft ratio when compared to other airlines like Jet Airways which reduces further reduces its expenses

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CONCLUSION

From the analysis so far, it can be concluded that Indian Airline industry is beaten up by its high cost structure due to which it has lumps of losses accumulated over years. Ever rising fuel prices, high taxes and airport charges are the culprit here. India has huge potential for growth of Airline industry as it has a large and fast growing middle class. The coming year shows even more promise because of fall in crude oil prices in the past months. But older and conventional airlines like Air India and Jet Airways must accept that skies will be dominated by LCCs in the coming years which is why they must open up more for new strategies to increase their load factor. India has a larger portion of middle class who are ready to switch from travelling in a 3-tier AC Train to travelling by air if the costs are not very high.



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