Performance Evaluation of Selected International and Indian Airlines

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Abstract: Performance evaluation is one of the most important fields of any business or industry, which involves the continuous and rigorous process for any business or any industry. The airline industry continues to grow globally year by year, but continuous profitability is difficult to maintain. Measured by the revenue, the industry has been taken to a whole new level from the last decade, from US$369 billion in 2004 to an estimated $746 billion in 2018. For this study, data was collected from previous five years balance sheet of six airlines. The result shows that the International Airlines are doing much better than the Indian airlines, it may be depending on the expenses, the fleet size, the number of destinations and the number of passengers.

Keywords: Airlines, Evaluation, International, Indian

1. INTRODUCTION

Performance Evaluation is one of the most important fields of any business or industry, which involves the continuous and rigorous process for any business or any industry. Currently most of the businesses focus more on the field of analyzing the performance of the business as it is a very emerging part which reflects the entire position of the business. Finance manager have a very crucial role in the field for performance evaluation of any business. He must have entire knowledge in the area of accounting, the yearly financing of the business.

The Indian Airline Industry is one of the best in the world in terms of growth with private airlines covering almost 3/4th of the domestic and international aviation market.

The Indian aviation market has been the one of strongest and one of the largest in the world in the last five years (2012-2017). The airline industry in India have witnessed a consistent growth trend and domestic passenger growth rate of 22.3% for the last five years. The Indian Airline Industry is estimated to see an investment of US$25 billion in the next decade, and traffic growth of 13%.

Globally, the airline industry is a very challenging market, in the last two decades the airline industry has had a tremendous growth and exploring routes domestic and globally. The four airlines which initially started and are still existing are KLM which is from the Netherlands, Avianca airlines from Columbia, Qantas from Australia and Czech Airlines from Czech Republic.

1.1 Current Status of the Airline Industry

The airline industry continues to grow globally year by year, but consistent profitability is difficult to maintain. Measured by the revenue, the industry has been taken to a whole new level from the last decade, from US$369 billion in 2004 to an estimated US$746 billion in 2018, according to the International Air Transport Association (IATA).

A tremendous growth has been analyzed by the introduction of low cost carrier aircrafts (LCCs), which currently hold around 1/4th of the global market and which have a continuous growth in the global market and countries like India.

2. REVIEW OF LITERATURE

Profits are significant benchmark tools for every airline which broadly measures the sustainability of Aviation industry. Patel D.S (2014) has summarizes the growth in net profit to Rs.787 crore in Indigo for the financial year 2012-13. The other two top Indian Airlines, Jet Airways and Spice Jet made a loss of over Rs.671 crore combined also in the financial year 2012-13. This was IndiGo's fifth year of profit, while the Indian Airline industry had also lost Rs.46,000 crore in the same five years. IndiGo's profitability is a study in contrast compared to the sinking Aviation industry at that point of time. Further, Abdelrahman (2016) has mentioned the financial position of Emirates airlines and comparing the airline with the other two world class airlines Air France-KLM airlines and the Korean air. Ratio analysis was used to identify the financial position of the Emirates airlines. To conclude from the various ratios, Emirates Airlines is one of the most promising and most developing airlines in the world in such a short period, and it is performing higher standards than expected of the airlines industry, and in many areas it performed better than the other two airlines specially in regard of profitability, as it has higher profitability than the other two airlines mentioned in the article.

A few airlines come under the situation of debt or remain unprofitable or losing its market share, one article written by A.S. Almotairi (2011) stated after completing the ratio analysis the debt ratios shows that Qantas would need to bring in more money through issue of debt or equity instruments to fulfill its liability obligations. The debt coverage ratio is high and require at least 5-6 years before it can cover its current debt. Qantas' income statement shows that the company had performed poorly in the year 2010. In most of the aspects, the company went towards the downward trend. Another article written by Demydyuk Ganna (2011) states despite airline industry growth over recent decades, the majority of the airlines remain unprofitable. Also Windhoek (2009) focusses on airlines losing its market share, especially in the African region. Airlines must focus on Safety in terms of maintenance of the aircraft, Efficiency in terms of its on time performance, the ease of travel and Environmental performance and match investment with returns. The government should support liberalisation and growth, give tools to access markets and consolidate where it makes business sense and make aviation a business sense.

Airline become more profitable when there is a drop in the fuel prices, an article written by Davis A. (1989) stated that the recent sudden drop in the price of oil has affected Delta relative to some of its peers due to its active strategies, however should oil prices remain low, Delta will be able to fully take advantage of lower fuel costs by the second half of 2015.

Most of the airlines tend to reduce its costs by implementing its strategies, Eller et.al (2013) in their article states the main areas to reduce the costs for airlines which are route management and the type, characteristics and the quality of the aircraft, cost of labor and management quality.

In recent times, airlines prefer to go under the Low Cost Carrier (LCC) category which is very much in demand in countries like India. To predict the sustainability of low cost airlines and to identify the future growth options Sarker et.al (2012). The industry specialists believe that LCC's should formulate cost differentiation strategy for future growth and sustainability.

Gopichand et.al (2013) have proved that the aviation industry in India is one of the fastest growing industries in the world private airlines account holding most of the shares of the Indian aviation industry. Pricing, service quality and on time performance are the key factors that decide the brand equity of each player in the airline industry in any country. By 2021, airline distribution will evolve to a more flexible, dynamic, and passenger-centric environment which was said by Henry (2013). Most of earlier researchers have considered the significance of performance evaluation as benchmark measure for financial sustainability. The present research has attempted to evaluate the performance of selected six airlines (International and Indian) using ratio and trend analysis.

3. MATERIALS AND METHODOLOGY

The main aim of this study is to analyse the financial position of the airlines using ratio analysis and whether domestic airlines are better than international airlines or vice versa. This research will cover the liquidity, solvency and profitability ratios of six airlines which will include three Indian based and three international airlines and will also include trend analysis.

3.1 Objectives of the Study

a. To analyse the financial performance of the selected airlines

b. To evaluate whether the domestic airlines (India based airlines) are better or the International Airlines

3.2 Hypothesis

Based on the above objectives, following hypothesis was constructed.

H_0: Domestic airlines are in a better financial position than international airlines.

H_1: International airlines are in a better financial position than Domestic Airlines.

3.3 Scope of the Study

The scope of the research will be to analyse the performance of airlines of past years and also to forecast for the future. The findings would show the influence on how airlines generate profits or incur losses even after a fast changing environment. Different airlines will help to judge their movement in their market.

3.4 Data Collection methods

Secondary Data

- Coverage**:** The data will be covered from five years balance sheet of the airlines and income statement. Different airlines Balance Sheet and Income Statement will be measured according to their currencies.

- Data collection**:** The data will be collected through the internet from the respective websites of Indian markets such as NSE and Yahoo Finance and international market websites such as the Wall Street journal. The data collected will purely be of historical nature.

3.5 Data Analysis

Ratio analysis and Trend analysis was used to understand the financial position and growth pattern of the airline's assets and liabilities for the last five years

3.6 Limitations

- The secondary data used in this research is may not be out of data collection bias.
- Profit and Loss account, Balance sheet and other financial information can be found maximum of only five years.

4. ANALYSIS AND INTERPRETATION

4.1 Performance through Ratio Analysis

4.1.1 Liquidity Ratios

Table 4.1.1 (A)

Liquidity Ratios	Jet Airways					Indigo					SpiceJet				
Year	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Current Ratio	0.36	0.31	0.37	0.42	0.46	1.63	1.02	1.07	1.4	1.97	0.42	0.18	0.24	0.31	0.33
Quick Ratio	0.17	0.17	0.21	0.2	0.24	0.77	0.44	0.75	1	1.03	0.2	0.08	0.07	0.1	0.14
Absolute Liquid Ratio	0.07	0.085	0.14	0.09	0.12	0.71	0.38	0.67	0.93	0.96	0.11	0	0.01	0.05	0.08

	Lufthansa					Singapore Airlines					Qantas				
Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Current Ratio	1	0.87	0.73	0.71	0.92	1.35	1.35	1.1	1.04	0.9	0.74	0.66	0.67	0.49	0.43
Quick Ratio	0.97	0.86	0.72	0.7	0.89	0.4	0.45	0.4	0.38	0.38	0.69	0.59	0.56	0.44	0.41
Absolute liquid Ratio	0.14	0.14	0.08	0.08	0.11	0.06	0.1	0.14	0.14	0.15	0.42	0.39	0.38	0.28	0.25

(Source: Secondary Data)

Table 4.1.1 (A) shows the liquidity ratios (which is the current ratio, quick ratio and absolute liquid ratios) of the six airlines.

The current ratio is the ratio of an airlines ability to pay back its liabilities with its assets. The airlines which are below 1 of the current ratio are Jet Airways, Spice Jet, Lufthansa and Qantas. This indicates that airlines liabilities are greater than its assets and also the airlines would be unable to pay off its obligations if they came due at any point of time. The current Ratio below 1 shows the airline is not in its best financial position. The airlines which are above 1 of the current ratio are Indigo and Singapore Airlines. So higher the current ratio, the more capable the company is capable of paying its obligations

The quick ratio is the ratio of the airlines ability to meet its short-term obligations with its most used liquid assets. Under quick ratio, all the airlines are below 1 of the quick ratio. The quick ratio below would mean that the airlines are depending more on inventory or other assets to pay its short term liabilities.

The absolute liquid ratio is the relationship between the absolute liquid assets and current liabilities. Under absolute liquid ratio, all the airlines are below 1 of the absolute liquid ratio. This indicates the airlines day to day cash management is in not a good condition.

Under Liquidity ratios, overall the researcher can say that Indigo Airlines is in a much better financial position than rest of the other five airlines as indigo has a large customer base, they have a huge fleet size of over 130, also it introduces new destinations within India and sometimes even foreign destinations, so Indigo Airlines do their best to be the best in the industry and meet the demands of the customers. So overall looking at the liquidity ratios, the Indian Based Airlines are much better in terms of their asset and liability management and so the Null hypothesis is accepted in this case.

4.1.2 Solvency Ratios

Table 4.1.2 (A)

Solvency Ratios	Jet Airways					Indigo					SpiceJet				
Year	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Debt Equity Ratio	-11.04	-5.09	-3.7	-4.31	-3.98	14.04	20.6	24.3	6.09	3.02	-15	-3.87	-3.06	-5.28	-5.91
Total Debt to Total Assets Ratio	1.09	1.24	1.36	1.3	1.33	0.93	0.95	0.96	0.85	0.75	1.07	1.34	1.48	1.23	1.2
Proprietory Ratio	-0.09	-0.24	-0.36	-0.3	-0.33	0.06	0.04	0.03	0.14	0.24	-0.1	-0.34	-0.48	-0.48	-0.2
	Lufthansa					**Singapore Airlines**					**Qantas**				
Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Debt Equity Ratio	3.27	2.81	4.53	3.53	2.51	0.07	0.06	0.1	0.08	0.11	1.04	2.26	1.61	1.49	1.36
Total Debt to Total Assets Ratio	0.54	0.57	0.57	0.61	0.49	0.04	0.03	0.05	0.04	0.06	0.3	0.37	0.31	0.29	0.28
Proprietory Ratio	0.16	0.2	0.12	0.17	0.19	0.59	0.59	0.53	0.54	0.54	0.29	0.16	0.19	0.19	0.2

(Source: Secondary Data)

Table 4.1.2 (A) shows the solvency ratios (which is the Debt Equity Ratio, Total Debts to Total Assets Ratio and the proprietary Ratio) of the six airlines.

The debt equity ratio is the ratio where how much debt a company is using to finance its assets relative to the value of equity of shareholders. The two airlines where debt equity ratio is negative is Jet Airways and SpiceJet. This indicates that the airline has net cash which is cash at hand exceeds debt. The airlines which have a high debt equity ratio are Indigo and Lufthansa. This indicates that the airlines have been competitive in financing its growth with debt which may result in a high level of risk. The airlines which have relatively low risk are Singapore Airlines and Qantas.

The total debt to total assets ratio is a measure of total amount of debt relative to assets. The airlines where the total debt to total assets ratio is greater than one is Jet Airways and Spicejet. This indicates that a considerable portion of debt is funded by assets or the airlines have more liabilities than assets. A high ratio also indicates that the airlines may be putting itself at a risk on its loans if interest rates were to rise suddenly. The airlines where the total debt to total assets ratio is lesser than one is Indigo, Lufthansa, Singapore airlines and Qantas and which indicate that a greater portion of airlines assets is funded by equity.

The proprietary Ratio is the measure of shareholders equity to Total Assets. As in the table, the airlines which are at a negative proprietary ratio are Jet Airways and SpiceJet and which have a low proprietary ratio are Indigo, Lufthansa, Singapore Airlines and Qantas and indicates that the airlines may be making use of too much debt, rather than equity, to support their operations

Overall in liquidity Ratio, the international airlines is in a much better financial position as compared to domestic airlines. As seen in the three ratios, it was basically Jet Airways and SpiceJet who were on a higher debt as compared to the other airlines. So the null hypothesis is not accepted in this case and the alternative hypothesis is accepted.

4.1.3 Profitability Ratios

Table 4.1.3 (A)

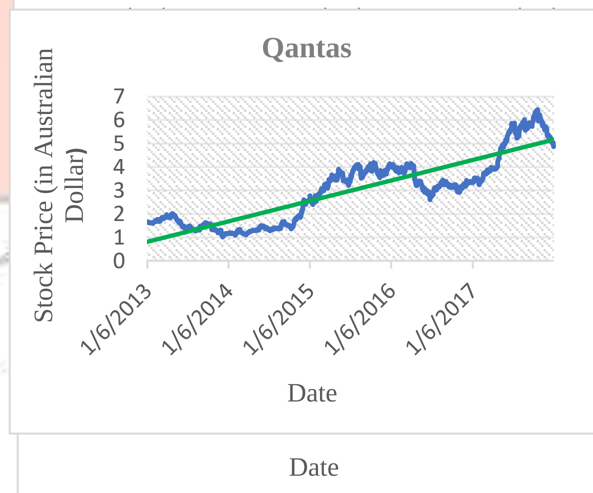
Profitability Ratios	Jet Airways					Indigo					SpiceJet				
Year	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Net Profit Ratio	-4.3	-23.4	-10.8	5.84	1.86	8.51	4.26	9.3	12.4	8.99	-3.44	-16.1	-14.5	6.84	7.05
Gross Profit Ratio	9.51	4.86	8.31	20.62	15.1	14.37	15.81	32.58	38.9	37.4	1.84	-7.9	-7.27	15.6	13.74
Operating Ratio	113.9	129.7	118.7	106.2	112	91.84	98.59	89.57	85.8	93.4	108	118.6	119	97.06	96.89
	Lufthansa					**Singapore Airlines**					**Qantas**				
Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Net Profit Ratio	3.95	1.04	0.18	5.29	5.6	2.51	2.36	2.36	5.27	2.42	0.006	-18.5	3.52	6.35	5.43
Gross Profit Ratio	12.74	11.87	13.67	15.56	18.1	8.93	8.77	10.33	11	9.83	13.1	8.44	18.5	20.46	17.93
Operating Ratio	29.1	29.45	26.6	26.4	25.9	23.34	28.28	18.41	19.9	21.5	29.13	31.72	28.8	30.24	31.79

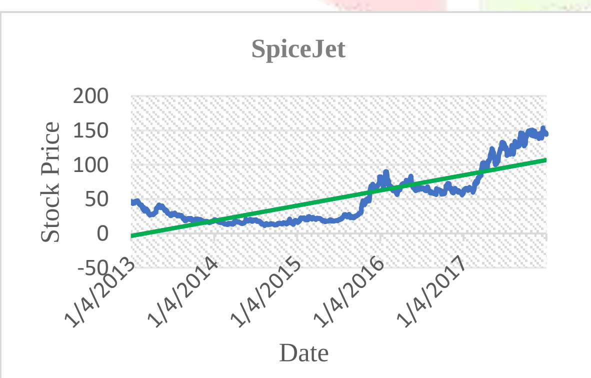
(Source: Secondary Data)

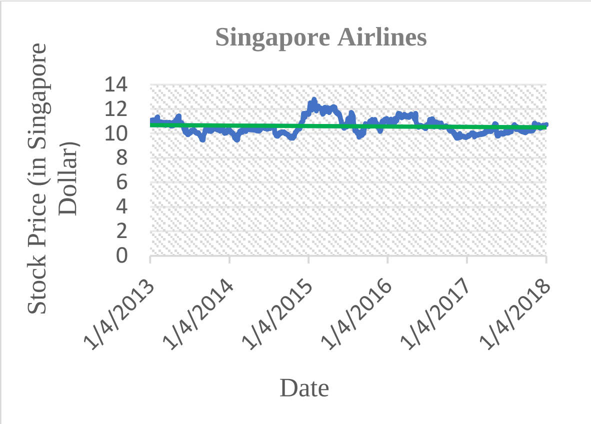
Table 4.1.3 (A) shows the profitability Ratios (that is Net Profit Ratio, Gross Profit Ratio and Operating Ratio)
The net profit ratio is the ratio of net profit to revenue or sales. The airlines which have a good net profit are Indigo, Lufthansa, SpiceJet and Qantas (taken according to the 2017 net profit) and the reason is the airlines are gaining profits from its discounts, airline facilities which affects the demand for the airline. The airlines which have a low net profit are Jet Airways and Singapore Airlines (taken according to the 2017 net profit).
The Gross Profit Ratio is the ratio to assess the company's financial position by knowing the proportion of money left over from the revenues. The airlines which the highest gross profit ratio is Lufthansa, Indigo and Qantas, so these airlines have a large proportion of money left from the revenues and the airlines with a little low gross profit ratio are SpiceJet, Jet airways and Singapore airlines. SpiceJet and Jet Airways is getting back into track during the years 2016 and 2017 but Singapore airlines is declining based on the money left over from the revenues.
The Operating Ratio is calculated by dividing operating expenses by sales. The Indian based airlines are all with the highest operating revenues where excess revenues and being used for operating expenses which also means the net profit percentage also will not be at a good rate as seen in the table leaving aside indigo airlines which has the highest net profit.
Looking at the profitability Ratios overall also the International Airlines are doing much better than the Indian airlines, it maybe depending on the expenses, the fleet size, the number of destinations and the number of passengers. So overall the Null Hypothesis is not accepted and the alternative hypothesis is accepted.

4.2 Trend Analysis

Table 4.2.1 (A, B, C, D, E, F)







(Source: Secondary Data)

In all the six airlines done under this study, there has been immense price fluctuations as seen in Table 4.2.1 (A, B, C, D, E, F). Few of the reasons for the price going upwards was the reduction in the fuel price, smaller aircrafts placed better for smaller routes and other types of services apart from their main business. Few of the reasons for the price going downwards was the competition among other airlines and delay of the new fleet which can cause losses for the airline.

5. SUMMARY OF FINDINGS

- Firstly, liquidity ratios into consideration, it was found that the Indian Based Airlines are much better in terms of their asset and liability management and so the Null hypothesis was accepted in this case.
- Secondly, taking solvency ratios into consideration, it was found that the international airlines are in a much better financial position as compared to domestic airlines. As seen in the three ratios, it was basically Jet Airways and SpiceJet who were on a higher debt as compared to the other airlines. So the null hypothesis is not accepted in this case and the alternative hypothesis is accepted.
- Last taking profitability ratios, the International Airlines are doing much better than the Indian airlines, it maybe depending on the expenses, the fleet size, the number of destinations and the number of passengers. So overall the Null Hypothesis is not accepted and the alternative hypothesis is accepted.
- Based on the secondary data trend analysis and ratio analysis, it is clear that overall the international airlines are in a much better financial position than international airlines as it all depends on the on the expenses, the fleet size, the number of destinations and the number of passengers and also according to an individuals perception, they want to travel in airlines which are the best with the best amenities available and also with a good passenger travel rating.

6. CONCLUSION

The ratio analysis was done of all the six airlines. After analysing it was found that in liquidity ratios, the Indian Based Airlines are much better in terms of their asset and liability management and so the Null hypothesis was accepted in this case. Second, taking solvency ratios into consideration, it was found that the international airlines are in a much better financial position as compared to domestic airlines. As seen in the three ratios, it was basically Jet Airways and SpiceJet who were on a higher debt as compared to the other airlines. So the null hypothesis is not accepted in this case and the alternative hypothesis is accepted. Last taking profitability ratios, the International Airlines are doing much better than the Indian airlines, it maybe depending on the expenses, the fleet size, the number of destinations and the number of passengers. So overall the Null Hypothesis is not accepted and the alternative hypothesis is accepted and the overall ratio analyses conclusion was that the international airlines are in a better financial position than the domestic airlines so the null hypothesis is not accepted and the alternative hypothesis is accepted. The future work can be to start going through the financials of the airlines after March 2018 so as to know the current financial performance of the airlines and forecast for the upcoming year.

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