# Economic Impact of Mergers; Its Motives and Consequences. A Case of Indian Aviation

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#### **Abstract**

The mergers and acquisitions are growing both in numbers and deal values at a rapid rate. Researches in the area of motives behind these mergers are limited, particularly in India. When various theories attempt to explain the logic of M&A transactions, many of them are not empirically tested. Here an attempt has been made to understand the motives behind the airlines M&As in India and their consequences. Results show that there is huge difference between the motives and consequences.

# **Keywords:**

Mergers and acquisition performance, M&A in Indian aviation, Motives of mergers, M&A theory.

#### Introduction

Corporate growth through mergers and acquisitions has become a common practice because of the several advantages associated with it. Most commonly cited benefits include gain in synergy, operational efficiency, market share and market entry, technological benefits etc. After liberalization the number and size of the acquisition deals are increasing day by day. Even India has witnessed some of the mega cross border deals in the past and future is waiting for many more. Even though M&A has become a very frequent activity and it has significant influence on stakeholders, corporate structure and the economy, our knowledge on the motives and effects of merger is limited and disagreement persists regarding what the existing evidence shows (Mohapatra, 2008). Mergers and Acquisitions have always remained a sort of an enigma in the "Theory of the Firm" (Muller, 1969).

Table 1
Some Top Acquisitions world-wide with Value

Year	Acquirer	Target	Transaction Value	
			(in bil. USD)	
1999	Vodafone AirTouch PLC	Mannesmann AG	202.8	
2000	America Online Inc	Time Warner	164.7	
2007	Sharcholders	Philip Morris Intl Inc	107.6	
2007	RFS Holdings BV	ABN-AMRO Holding NV	98.2	
1999	Pfizer Inc	Warner-Lambert Co	89.2	
1998	Exxon Corp	Mobil Corp	78.9	

2000	Glaxo Wellcome PLC	SmithKline Beecham PLC	76
2004	Royal Dutch Petroleum Co	Shell Transport & Trading Co	74.6
2006	AT&T Inc	BellSouth Corp	72.7
1998	Travelers Group Inc	Citicorp	72.6

Compiled from various sources.

Figure – 1

M&A announcement & Deal Value Worldwide



Source: Thompson Database Browsed from www.iima-institute.org.

# Background

Among the strategic choices for growth, external expansion over the internal expansion is preferred because of several benefits. It gives very quick growth to the firm and also reduces competition. There are other reasons too. Each merger or acquisition has a specific motive. Several theories explaining the logic behind mergers and acquisitions has been developed. Here therefore an attempt has been initiated to explore the major economic and behavioural motives of such business combinations and their consequences in the aviation sector mergers.

Merger theories can be classified into two categories; while most theories focus on shareholders interest, one group focuses on managers' interests and their deviations from shareholder value maximization (Halpern, 1983: Trautwein, 1990). The motives for mergers are manifold in the light of the fact that different acquiring firms may have different motives in different acquisitions. The field has brought forward a total of seven different theories (Trautwein, 1990) which fall broadly under the two major competing theories of the firm.

Figure – 2 ories of Merger Motives

Theories of Merger Violives				
		Net gains through synergies	Efficiency Theory	
Merger as rational choice	Merger benefits bidder's shareholders	Wealth transfers from customers	Monopoly Theory	
		Wealth transfers from target's shareholders	Raider Theory	
		Net gains through private information	Valuation Theory	
	Merger Benefits Managers		Empire-building Theory	
Merger as Process Out	Process Theory			
Merger as Macro- ecoi	Disturbance Theory			

Figure.1. Theories of Merger Motives

Source: Trautwein F., Merger motives & Merger Prescriptions, SMJ Vol. 11, 283-295, 1990

The neo classical theory of profit maximization believes that the managers of the firm will try to maximize the benefit to the shareholders. So mergers and acquisitions should be value enhancing to the bidder shareholders. At the same time the contingency conflict remains in larger organizations and the managers try to maximize their own benefit at the cost of the shareholders. Mergers and acquisitions are mostly cited and justified in a way which seems that it will create value for the shareholders and the amount paid to the target is justifiable. At the same time process theory and disturbance theory describes mergers as outcomes of macroeconomic factors.

### A review of Literature

Several studies have examined the motivation for mergers and acquisitions. The managers of the acquirer companies come up with statements showing strong logic and several benefits of the acquisitions. The various strategic fits they are going to achieve and ultimately increasing the bottom line benefits and growth and market share or reducing the cost or increasing efficiency or increasing the product line, innovation etc.. But empirical studies on the consequences mostly differ. Mergers are agreed to be value destroying for bidder shareholders. The optimistic promises which were made by the CEO and MD of the acquiring companies are partially realized. Even if growth is achieved it has not added to the shareholders wealth. To understand the true motives or intentions of the acquisition it is important to understand the consequences and can be traced back whether the stated motives were real or false. So an attempt has been made to understand the consequences of mergers.

Most of the mergers take place to attain synergy benefits and thereby enhancing the value of the firm and benefiting the shareholders. It has been found that acquirers generally loose after merger (Firth, 1976; Meeks, 1977; Utton, 1974, Kelly 1967; Reid

1968). This loss can be because of over payment or mode payment (Antoniou, Arbour and Zhao, 2008; Firth, 1979; Franks and Harris, 1989; Limmack, 1991; Kennedy and Limmack, 1996; Gregory, 1997) or overconfidence by the managers or prior acquisition experience (Hubbard 1999, Sudarsanam, 2004) or the acquirers' inability to integrate (Zainulbhai, 2006) with the target properly.

Mergers also lead to monopoly power (Gong & Firth, 2006) and generate more revenue by the way of charging more prices for the same product or service. Particularly in case of aviation it has been found that mergers lead to increased consolidation in the industry as they are mostly concentric in nature and witnessed higher prices for the same routes (Kim and Singal). There is mixed result of M&A performance in the Indian aviation industry. Mahesh R. & Daddikar Prasad (2012) report insignificant improvement in return on equity and earnings per share in the post-merger period, Joshi and Desai's (2012) has witnessed non uniform results. This gives us a reasonable doubt on the performance of M&A in the Indian Aviation sector and their motives.

#### Methodology

The Prowess database of centre for monitoring Indian economy (CMIE) has been used to identify the mergers and acquisitions in the Indian aviation industry. Only prominent mergers are taken where the deal size is high so that the motives and consequences can be prominently detectable and measurable. To know the direct motives the content analysis of the different reporting sources has been taken. To know whether these motives which are stated publicly are intended in true sense the verification has been done through pre and post merger profitability study. The event study methodology has been a prominently used as a tool to measure the performance of the mergers and acquisition (Ball and Brown, 1968; Fama et al. 1969)

Table - 2 M&A in Indian civil aviation

Announcement Date	Acquirer	Target	Volume	Percentage Acquisition
2 <sup>nd</sup> June 2007	Kingfisher Airlines	Air Deccan	2115 Cr	26
18 <sup>th</sup> Jan 2006	Jet Airways	Sahara Airlines	3020 Cr	100
15 <sup>th</sup> May 2007	Air India	Indian Airlines	NA	NA

Table – 3 The Cited Motives behind the mergers

The Cited Motives behind the mergers					
Jet Airways & Air Sahara	Kingfisher Airlines & Air	Air Indian & Indian			
	Deccan	Airlines			
<ol> <li>single operating permit</li> </ol>	1. Flying on international	enhance customer			
to improve efficiency	routes will be allowed as a	proposition			
<ol><li>transferring aircraft</li></ol>	result of merger as legal	Easy entry into one of			
from one fleet to	compliance is done.	the three global airline			
another with a view to	2. Deccan founder G R	alliances.			
improve efficiency	Gopinath said "one	<ol><li>optimal utilisation of</li></ol>			
<ol><li>In addition to prime</li></ol>	merged cooperative entity	existing resources			
landing and take -off	be created to get the best	through improvement			
slots at major airports	synergies and cost; and	in load factors &			
such as London	the greatest value for	yields on commonly			
Heathrow, New Delhi	customer in creating a	used routes & deplo y			

	and Mumbai. It would become the only privately owned Indian	great infrastructure airline in this country."		freed-up aircraft capacity on alternate ones.
	airline with permission to fly overseas		4.	facilitate leveraging of assets, capabilities and
4.	the allocation of			infrastructure and
	parking bays and the			create strong ground -
	arrival and departure			handling services &
	slots during the prime			improve maintenance,
	time in morning and			repair and overhaul
	evening in the four			businesses.
	metros — that would		5.	The merger would
	favor Jet Airways after			enable the merged
	the new, rebranded			entity to command
	entity comes into			better valuation,
	existence.			provide the flexibility
				to achieve some
				financial and capital
				restructuring.

Compiled from various news paper sources.

The daily stock market return for the bidders Jet and Kingfisher has been extracted from BSE archive. Air Indian is not listed in the stock market so to capture the benefits or loss the accounting study method has been used.

#### **Accounting Measures of Performance**

In the present study we employ three categories of financial ratios—profitability and leverage and liquidity ratios.

**Profitability Ratios:** 

# $RONW = (PAT \div Net Worth) \times 100$

Leverage Ratios

## Debt Equity Ratio = Total Debt ÷ Net Worth

Liquidity Ratio

#### Current Ratio = current assets ÷ current liability

We have calculated the ratios for three years pre merger and three years' post merger. The mean values are computed and comparison can be seen from table -4

Table -4

	Jet Airways		Air India		Kingfisher	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
	Merger	Merger	Merger	Merger	Merger	Merger
RONW	0.251794	-0.16135	-1.42968	-6.70812	-0.02722	-0.24056
Debt-						
Equity	1.897028	3.220467	23.66726	45.25244	3.525472	7.448576
CR	2.255424	0.714673	1.470433	1.410262	1.995684	0.790194

# Event study measure of performance

The first media announcement date for the merger or acquisition is taken as the event date. Normally estimation period is the unbiased and clean period which can be used to predict the normal return during the window period. We have taken -90 days to -30 days as the estimation period. To calculate the normal return we have used Single Index market model. The BSE Sensex return has been set to be the bench mark and regressed to calculate the normal expected return.

$$\mathbf{R}_{it} = \alpha + \beta \left( \mathbf{R}_{mt} \right) + \mathbf{e}$$

Where

R<sub>it</sub> = Expected normal return for the company in the absence of the

announcement of merger

 $R_{mt}$  = sensex return for day t

 $\alpha$  and  $\beta$  are regression co-efficients.

e = error term

Abnormal return for any day has been calculated by subtracting the actual return of that day for a particular stock on a particular day from the expected return of that day. Aggregating the return over the window period we get a cumulative abnormal retun (CAR) for the event over the window period. Various window periods has been taken in the study.

# **Data Analysis**

The regression co-efficients are calculated by regressing the daily

sensex price with the stock price of the companies. The details of the statistical parameters are given in table -5.

Table -5 Regression statistics

	Jet airways	Kingfisher Airlines
R Square	0.2855	0.153591
Adjusted R Square	0.267185	0.131888
Standard Error	0.017998	0.037064
F	15.58	7.07
Intercept (a)	-0.00165 (-0.55467)	-0.00183 (0.31374)
X Variable 1 (β)	0.960452 (3.947664)	0.88 (2.66)

The normal return for the window period is calculated using the coefficients of regression through the following formula.

Table 6 shows the CAR for both the companies over the window period.

Table 6
CAR for various window periods

	Jet	Kingfisher	Combined
CAR (-10 to 30)	-12.26*	4.97*	-3.41*
CAR (-10 to 0)	1.33	2.09	1.71
CAR (-10 to 1)	4.1*	4.9*	4.5*
CAR (-3 to 3)	-11.6*	6.64*	-2.48
CAR (0 to 10)	-23.1*	-6.28*	-14.69

<sup>\*</sup>significant at 90% level of significance.

#### **Results Discussion & Conclusion**

Pre merger gain is found to be positive for both the acquisitions. Mergers were anticipated in all cases even before it was announced. The market reacts positively to the merger. This seems market is more optimistic about the gains of the merger before announcement. But gradually the return fades out. In case of Jet airways the post announcement CAR starts falling sharply with occasional positive abnormal returns. This might be because of the fact that market feels the merger is not going to generate benefit as expected as it was a clear case of overpayment for the target. At the same time the deal structuring was also not visibly clear. Where as in case of kingfisher the cumulative return is positive which might be the case that market valued the merger to be synergistic and will add value as it can help kingfisher develop in the international operations. At the same time the immediate effect of merger announcement on Kingfisher was also seen to be negative as it might be because of the entirely different set of operations and organizational culture among the bidder and the target.

The combined effect is not value enhancing though it cannot be

generalized. The operating performance for all companies across the industry has significantly destroyed in the post merger period. Mergers have failed to realize the synergy benefits and could not develop on operational parameters to increase sales or profit.

One of the reasons which seem quite potent in these cases is the overpayment issue. Valuation of the target and calculation of the expected synergy benefits are crucial to the success of the merger. All the mergers were supported by the logic of cost reduction, operational efficiency and optimal utilization of resources which depends on the effective integration skill to achieve. Air India and Indian Airlines still have not integrated to the full extent. We conclude that the motives stated before the merger could not be achieved because of the overpayment, ineffective integration and ineffective utilization of resources.

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